



ASPC Project





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

Customer Document : 3944-VD-0171-DYP-RE-400-LST-0080
Number

Airpack Document Number : 23383-06

Document Title : I/O List

1. It's DYPNF comment, not ASPC comment. Please reflect the comment ASAP.
2. Native file shall be submitted.
3. Add the I/O related Motor.

Review Code and Status		Contractor Initials/Signature	Date signed
	Code 1 REJECTED - Vendor to revise and Resubmit. Work cannot proceed		11 Mar 2025
<input type="checkbox"/>	Code 2 Comments As Noted - Work May proceed, subject to compliance with and incorporation of comments		
<input type="checkbox"/>	Code 3 No Comments - Work may proceed.		
<input type="checkbox"/>	Code 4 Information only - Review not required.		

00	Issued for Approval	10-03-2025	MS	SC	JJ
Rev. No.	Description	Date	Prepared by	Checked by	Approved by

I/O SUMMARY for POWDER Transfer Package

PROJECT : 300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)

DESCRIPTION	DI	DO	AI	AO	SUM	REMARK
44C-40001A	0	0	14	0	14	8x RTD
44C-40001B	0	0	14	0	14	8x RTD
44C-80001A	0	0	14	0	14	8x RTD
44C-80001B	0	0	14	0	14	8x RTD
44C-80002A	0	0	12	0	12	8x RTD
44C-80002B	0	0	12	0	12	8x RTD
44C-80004A	0	0	14	0	14	8x RTD
44C-80004B	0	0	14	0	14	8x RTD
44C-80005A	0	0	14	0	14	8x RTD
44C-80005B	0	0	14	0	14	8x RTD
44C-80005C	0	0	14	0	14	8x RTD
TOTAL	0	0	150	0	150	88x RTD

Note.

* It's actual I/O points.

The DCS/ESD System has to have 20% spare points.

DESCRIPTION and USER'S GUIDE for IO LIST

1. General Notes

- 1) This list applies to measurements and devices to be monitored and controlled by the DCS.
- 2) For preparing the measurement List, the following format and description are to be used as guide-lines.

2. Format and guide-lines to fill out

NO	TAG NO	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	CONT -ACT	FUNCTION						INST TYPE	IS/NIS	VALVE ACTION	LOOP TAG NO	JUNCTION BOX	P & ID	LOGIC / LOOP NO	REMARK
						LL	L	H	HH					C	I	R	A	Z	SOE								
(1)	(2)	(3)	(4)	(5)	(6)	(7)				(8)	(9)	(10)	(11)	(12)						(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)

(1) NO : Serial Number

(2) ID NO : Identification Number (20 digits with dash mark)

(3) SERVICE DESCRIPTION

Service description of instrument or device is specified.

(4) FROM/TO (5 digits)

"FROM" means the source of DCS input signal and "TO" means the destination of DCS output signal as follows ;

FLD : FIELD (OR LOCAL)	BC : BATTERY CHARGER
MCC : MOTOR CONTROL CENTER	DG : DIESEL GENERATOR
SG : SWITCHGEAR	PRP : PROTECTION RELAY PANEL
LC : LOAD CENTER	TDP : TRANSDUCER PANEL
CCB : CENTRAL CONTROL BUILDING	TPP : T/L PROTECTION PANEL
LCP : LOCAL CONTROL PANEL	BFP : BREAKER FAILURE PANEL
EPLC : ELECTRIC PROGRAMMABLE LOGIC CONTROLLER	
BPP : BUS PROTECTION PANEL	DP : DISTRIBUTION PANEL
UPS : UNINTERRUPTIBLE POWER SYSTEM	VR : VOLTAGE REGULATOR SYSTEM
ANN : PLANT ANNUNCIATOR SYSTEM	COAL : COAL HANDLING SYSEM
ELE : ELECTRICAL AUX RELAY	DCS : DISTRIBUTED CONTROL SYSTEM
VMS : VIBRATION MONITORING SYSTEM	ESD : EMERGENCY SHUTDOWN
ECMS : ELECTICAL CONTROL AND MONITORING SYSTEM	
PTC : PULSE TIMER CONTROLLER	MCC-VFD : Variable frequency drive located in substation
LCS : LOCAL CONTROL STATION	RLY : INTERPOSING RELAY CABINET

DESCRIPTION and USER'S GUIDE for IO LIST

(5) RANGE (20 digits)

Process variable range is specified.(for example 300 ~ 10,000)

(6) UNIT (8 digits)

The engineering units used in this list are as follows ;

<u>ORIGINAL UNIT</u>	<u>DESCRIPTION USED</u>	<u>ORIGINAL UNIT</u>	<u>DESCRIPTION USED</u>
bar gage	bar.g (mbar.g)	Megawatt	MW
Vacuum	mbar.a	Hertz	Hz, KHz
°C (Degree C)	°C	Percent	%
millimeter, inch	MM, IN	micro mho/Cm	UMHO
Meter	M	kcal/hour	KC/H
part(s) per million	PPM	revolution per minute	RPM
part(s) per billion	PPB	Ton/Hour	T/H
pH	PH	kg/hour	KG/H
Volt	V	liter/minute	L/M
Kilovolt	KV		
Ampere	A		

(7) SET POINT

This column shows the software threshold value in analog input for alarm or interlock purpose.

- HH : High-High Alarming
- H : High Alarming
- L : Low Alarming
- LL : Low-Low Alarming

(8) SIGNAL TYPE (6 digits)

The type of input/output signal is specified as follows ;

- 4~20mA : 4-20 mA with HART protocol
- NAMUR : NAMUR for proximity switches
- 24V DC : 24V DC binary signals
- VFC : Volt Free Contact

(9) PWR SRC : Power source (1 digit)

The power source of signal is specified as follows ;

- . I : INTERNAL POWER SUPPLIED FROM DCS
- . E : EXTERNAL POWER SUPPLIED FROM OUTSIDE OF DCS

(10) I/O TYPE (2 digits)

The signal type of input or output is specified as follows :

- . AI : ANALOG INPUT
- . AO : ANALOG OUTPUT
- . DI : DIGITAL INPUT
- . DO : DIGITAL OUTPUT

(11) CONTACT : Contact type (2 digits)

The status of digital contact is specified when the equipment is de-energized, closed or stopped etc.

- . NO : NORMALLY OPEN CONTACT
- . NC : NORMALLY CLOSED CONTACT

DESCRIPTION and USER'S GUIDE for IO LIST

(12) FUNCTION

The function of I/O Signal is marked in appropriate column. This column shows variable function displayed on LED of DCS.

The Function on this column refers as follows;

- C : Controlling
- I : Indicating
- R : Recording or Trending
- A : Alarm
- Z : Plant Protection
- SOE : Sequence of Event

(13) INST TYPE

The description of Tag No.

(14) IS/NIS

The Ex. Protection types

(15) VALVE ACTION

Valve action(Fail Position) is specified.

(16) LOOP TAG NO.

Loop tag number is specified.

(17) JUNCTION BOX NO.

Junction box number is specified.

(18) P & ID NO.

P&ID drawing number is specified.

(19) LOGIC / LOOP NO.

Logic/Loop drawing number is specified.

(20) REMARK

Additional information is described.

All tag nos should be filled without any space "44PT-4001003"

PROJECT NO. : 3944
 MR NO. : 171
 DOC TITLE : IO LIST (POWDER)
 DOC NO. : 3944-VD-0171-DYP-RE-400-LST-0080
 REV : 01

(General)
 Since there is a separated document for "Alarm and Setpoints list" these columns could be deleted from I/O List.

IO LIST FOR POWDER TRANSFER PAC

(General)
 It shall be filled according to the Project Numbering Procedure.

(General)
 REVISION HISTORY column will be added.



NO	TAG NO.	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET-POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	-ACT	C	I	R	A	Z	SOE	INST TYPE	IS / NIS	VALVE ACTION	LOOP TAG NO.	JUNCTION BOX NO.	P&ID NO.	LOGIC NO. (3944-VD-0171-DYP-RE-400-DIA-0083 Sh.NNN)	REMARK
						LL	L	H	HH																		
Instruments																											
1	44 PT - 40010 03	INLET PRESSURE	FLD / DCS	X-Y	bar.g	-	X	-	-	4-20mA	I	AI	-		O		O			PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 TT - 40010 56	OIL TEMPERATURE	FLD / DCS	X-Y	°C	-	-	-	X	4-20mA	I	AI	-		O		O			TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 PT - 40010 54	OIL PRESSURE	FLD / DCS	X-Y	bar.g	-	-	-	X	4-20mA	I	AI	-		O		O			PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 40010 11	DISCHARGE PRESSURE	FLD / DCS	X-Y	bar.g	-	X	-	-	4-20mA	I	AI	-		O		O			PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 TT - 40010 57	DISCHARGE TEMPERATURE	FLD / DCS	X-Y	°C	-	-	-	X	4-20mA	I	AI	-		O		O			TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 40010 01	ENCLOSURE TEMPERATURE	FLD / DCS	X-Y	°C	-	-	-	-	4-20mA	I	AI	-		O					TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 40010 61 A	WINDING RTD PHASE A SLOT 1	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 40010 61 B	WINDING RTD PHASE A SLOT 2	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 40010 62 A	WINDING RTD PHASE B SLOT 1	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
10	44 TE - 40010 62 B	WINDING RTD PHASE B SLOT 2	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
11	44 TE - 40010 63 A	WINDING RTD PHASE C SLOT 1	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
12	44 TE - 40010 63 B	WINDING RTD PHASE C SLOT 2	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
13	44 TE - 40010 64 A	DRIVE END BEARING TEMPERATURE	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	
14	44 TE - 40010 64 B	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-							RTD	NIS	-	by other	by other	40001	LATER	

(General)
 It seems that the Junction Box should be provided separately into IS/NIS 2 types.
 Please recheck and clarify.



PROJECT NO. : 3944
 MR NO. : 171
 DOC TITLE : IO LIST (POWDER)
 DOC NO. : 3944-VD-0171-DYP-RE-400-LST-0080
 REV : 01

IO LIST FOR POWDER TRANSFER PACKAGE



NO	TAG NO.	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET-POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	CONT -ACT	FUNCTION					INST TYPE	IS / NIS	VALVE ACTION	LOOP TAG NO.	JUNCTION BOX NO.	P&ID NO.	LOGIC NO. (3944-VD-0171-DYP-RE-400-DIA-0083 Sh.NNN)	REMARK	
						LL	L	H	HH					C	I	R	A	Z									SOE
Instruments																											
1	44 PT - 40020 03	INLET PRESSURE	FLD / DCS	X-Y	bar.g	-	X	-	-	4-20mA	I	AI	-		O	O			PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER		
2	44 TT - 40020 56	OIL TEMPERATURE	FLD / DCS	X-Y	°C	-	-	-	X	4-20mA	I	AI	-		O		O		TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER		
3	44 PT - 40020 05	OIL PRESSURE	FLD / DCS	X-Y	bar.g	-	-	-	X	4-20mA	I	AI	-		O		O		PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER		
4	44 PT - 40020 01	DISCHARGE PRESSURE	FLD / DCS	X-Y	bar.g	-	X	-	-	4-20mA	I	AI	-		O	O			PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER		
5	44 TT - 40020 57	DISCHARGE TEMPERATURE	FLD / DCS	X-Y	°C	-	-	-	X	4-20mA	I	AI	-		O		O		TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER		
6	44 TT - 40020 01	ENCLOSURE TEMPERATURE	FLD / DCS	X-Y	°C	-	-	-	-	4-20mA	I	AI	-		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER		
7	44 TE - 40020 61 A	WINDING RTD PHASE A SLOT 1	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
8	44 TE - 40020 61 B	WINDING RTD PHASE A SLOT 2	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
9	44 TE - 40020 62 A	WINDING RTD PHASE B SLOT 1	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
10	44 TE - 40020 62 B	WINDING RTD PHASE B SLOT 2	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
11	44 TE - 40020 63 A	WINDING RTD PHASE C SLOT 1	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
12	44 TE - 40020 63 B	WINDING RTD PHASE C SLOT 2	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
13	44 TE - 40020 64 A	DRIVE END BEARING TEMPERATURE	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		
14	44 TE - 40020 64 B	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X-Y	°C	-	-	-	-	RTD	E	AI	-						RTD	NIS	-	by other	by other	40001	LATER		



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NO	TAG NO.	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET-POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	CONT -ACT	FUNCTION						INST TYPE	IS / NIS	VALVE ACTION	LOOP TAG NO.	JUNCTION BOX NO.	P&ID NO.	LOGIC NO. (3944-VD-0171-DYP-RE-400-DIA-0083 Sh.NNN)	REMARK	
						LL	L	H	HH					C	I	R	A	Z	SOE									
Instruments																												
1	44 PDT - 80010 01 A	INLET DIFFERENTIAL PRESSURE	FLD / DCS	X~Y	bar	-	-	X	-	4~20mA	I	AI	-		O	O					DIFFERENTIAL PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 PT - 80040 01	INLET PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 TT - 80010 56 A	OIL TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 80010 54 A	OIL PRESSURE	FLD / DCS	X~Y	bar.g	-	-	-	X	4~20mA	I	AI	-		O		O				PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 PT - 80040 02	DISCHARGE PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 80040 01	DISCHARGE TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 80010 61 A	WINDING RTD PHASE A SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 80010 62 A	WINDING RTD PHASE A SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 80010 63 A	WINDING RTD PHASE B SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
10	44 TE - 80010 64 A	WINDING RTD PHASE B SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
11	44 TE - 80010 65 A	WINDING RTD PHASE C SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
12	44 TE - 80010 66 A	WINDING RTD PHASE C SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
13	44 TE - 80010 67 A	DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
14	44 TE - 80010 68 A	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	



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Instruments																												
1	44 PDT - 80010 01 B	INLET DIFFERENTIAL PRESSURE	FLD / DCS	X~Y	bar	-	-	X	-	4~20mA	I	AI	-		O	O					DIFFERENTIAL PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 PT - 80040 03	INLET PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 TT - 80010 56 B	OIL TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 80010 54 B	OIL PRESSURE	FLD / DCS	X~Y	bar.g	-	-	-	X	4~20mA	I	AI	-		O		O				PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 PT - 80040 04	DISCHARGE PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 80040 03	DISCHARGE TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 80010 61 B	WINDING RTD PHASE A SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 80010 62 B	WINDING RTD PHASE A SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 80010 63 B	WINDING RTD PHASE B SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
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11	44 TE - 80010 65 B	WINDING RTD PHASE C SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
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14	44 TE - 80010 68 B	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	



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						LL	L	H	HH					C	I	R	A	Z	SOE									
Instruments																												
1	44 PDT - 80040 01 A	INLET DIFFERENTIAL PRESSURE	FLD / DCS	X~Y	bar	-	-	X	-	4~20mA	I	AI	-		O	O					DIFFERENTIAL PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 PT - 80041 01	INLET PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 TT - 80040 56 A	OIL TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 80040 54 A	OIL PRESSURE	FLD / DCS	X~Y	bar.g	-	-	-	X	4~20mA	I	AI	-		O		O				PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 PT - 80041 02	DISCHARGE PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 80041 01	DISCHARGE TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 80040 61 A	WINDING RTD PHASE A SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 80040 62 A	WINDING RTD PHASE A SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 80040 63 A	WINDING RTD PHASE B SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
10	44 TE - 80040 64 A	WINDING RTD PHASE B SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
11	44 TE - 80040 65 A	WINDING RTD PHASE C SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
12	44 TE - 80040 66 A	WINDING RTD PHASE C SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
13	44 TE - 80040 67 A	DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
14	44 TE - 80040 68 A	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	



PROJECT NO. : 3944
 MR NO. : 171
 DOC TITLE : IO LIST (POWDER)
 DOC NO. : 3944-VD-0171-DYP-RE-400-LST-0080
 REV : 01

IO LIST FOR POWDER TRANSFER PACKAGE



NO	TAG NO.	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET-POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	CONT -ACT	FUNCTION						INST TYPE	IS / NIS	VALVE ACTION	LOOP TAG NO.	JUNCTION BOX NO.	P&ID NO.	LOGIC NO. (3944-VD-0171-DYP-RE-400-DIA-0083 Sh.NNN)	REMARK	
						LL	L	H	HH					C	I	R	A	Z	SOE									
Instruments																												
1	44 PDT - 80050 01 A	INLET DIFFERENTIAL PRESSURE	FLD / DCS	X~Y	bar	-	-	X	-	4~20mA	I	AI	-		O	O					DIFFERENTIAL PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 PT - 80041 07	INLET PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 TT - 80050 56 A	OIL TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 80050 54 A	OIL PRESSURE	FLD / DCS	X~Y	bar.g	-	-	-	X	4~20mA	I	AI	-		O		O				PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 PT - 80041 08	DISCHARGE PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 80041 05	DISCHARGE TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 80050 61 A	WINDING RTD PHASE A SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 80050 62 A	WINDING RTD PHASE A SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 80050 63 A	WINDING RTD PHASE B SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
10	44 TE - 80050 64 A	WINDING RTD PHASE B SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
11	44 TE - 80050 65 A	WINDING RTD PHASE C SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
12	44 TE - 80050 66 A	WINDING RTD PHASE C SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
13	44 TE - 80050 67 A	DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
14	44 TE - 80050 68 A	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	



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IO LIST FOR POWDER TRANSFER PACKAGE



NO	TAG NO.	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET-POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	CONT -ACT	FUNCTION						INST TYPE	IS / NIS	VALVE ACTION	LOOP TAG NO.	JUNCTION BOX NO.	P&ID NO.	LOGIC NO. (3944-VD-0171-DYP-RE-400-DIA-0083 Sh.NNN)	REMARK	
						LL	L	H	HH					C	I	R	A	Z	SOE									
Instruments																												
1	44 PDT - 80050 01 B	INLET DIFFERENTIAL PRESSURE	FLD / DCS	X~Y	bar	-	-	X	-	4~20mA	I	AI	-		O	O					DIFFERENTIAL PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 PT - 80041 13	INLET PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 TT - 80050 56 B	OIL TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 80050 54 B	OIL PRESSURE	FLD / DCS	X~Y	bar.g	-	-	-	X	4~20mA	I	AI	-		O		O				PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 PT - 80041 14	DISCHARGE PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 80041 08	DISCHARGE TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 80050 61 B	WINDING RTD PHASE A SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 80050 62 B	WINDING RTD PHASE A SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 80050 63 B	WINDING RTD PHASE B SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
10	44 TE - 80050 64 B	WINDING RTD PHASE B SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
11	44 TE - 80050 65 B	WINDING RTD PHASE C SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
12	44 TE - 80050 66 B	WINDING RTD PHASE C SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
13	44 TE - 80050 67 B	DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
14	44 TE - 80050 68 B	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	



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IO LIST FOR POWDER TRANSFER PACKAGE



NO	TAG NO.	SERVICE DESCRIPTION	FROM /TO	RANGE	UNIT	SET-POINT				SIGNAL TYPE	PWR SRC	I/O TYPE	CONT -ACT	FUNCTION						INST TYPE	IS / NIS	VALVE ACTION	LOOP TAG NO.	JUNCTION BOX NO.	P&ID NO.	LOGIC NO. (3944-VD-0171-DYP-RE-400-DIA-0083 Sh.NNN)	REMARK	
						LL	L	H	HH					C	I	R	A	Z	SOE									
Instruments																												
1	44 PDT - 80050 01 C	INLET DIFFERENTIAL PRESSURE	FLD / DCS	X~Y	bar	-	-	X	-	4~20mA	I	AI	-		O	O					DIFFERENTIAL PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
2	44 PT - 80041 11	INLET PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
3	44 TT - 80050 56 C	OIL TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
4	44 PT - 80050 54 C	OIL PRESSURE	FLD / DCS	X~Y	bar.g	-	-	-	X	4~20mA	I	AI	-		O		O				PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
5	44 PT - 80041 12	DISCHARGE PRESSURE	FLD / DCS	X~Y	bar.g	-	X	-	-	4~20mA	I	AI	-		O	O					PRESSURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
6	44 TT - 80041 07	DISCHARGE TEMPERATURE	FLD / DCS	X~Y	°C	-	-	-	X	4~20mA	I	AI	-		O		O				TEMPERATURE TRANSMITTER	IS	-	by other	by other	40001	LATER	
7	44 TE - 80050 61 C	WINDING RTD PHASE A SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
8	44 TE - 80050 62 C	WINDING RTD PHASE A SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
9	44 TE - 80050 63 C	WINDING RTD PHASE B SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
10	44 TE - 80050 64 C	WINDING RTD PHASE B SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
11	44 TE - 80050 65 C	WINDING RTD PHASE C SLOT 1	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
12	44 TE - 80050 66 C	WINDING RTD PHASE C SLOT 2	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
13	44 TE - 80050 67 C	DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	
14	44 TE - 80050 68 C	NON-DRIVE END BEARING TEMPERATURE	FLD / MCC	X~Y	°C	-	-	-	-	RTD	E	AI	-								RTD	NIS	-	by other	by other	40001	LATER	