



# 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-LST-0080  
Number

Airpack Document Number : 23383-06

Document Title : I/O List

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	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
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>150</b>	<b>88x RTD</b>

**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.



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
<b>Instruments</b>																											
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		



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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
<b>Instruments</b>																											
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									
<b>Instruments</b>																												
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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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	
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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	
12	44 TE - 80010 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 - 80010 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 - 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									
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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									
<b>Instruments</b>																												
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	



PROJECT NO. : 3944  
 MR NO. : 171  
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 DOC NO. : 3944-VD-0171-DYP-RE-400-LST-0080  
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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									
<b>Instruments</b>																												
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	



PROJECT NO. : 3944  
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 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									
<b>Instruments</b>																												
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	