









OWNER:  شرکت مست و سویی توپدا ایرانیاان (سهایی نفااس)	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>						EPC CONTRACTOR:  Chagalesh-Enerehimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	<b>I/O LIST FOR NITROGEN GAS BOOSTER</b>								
MC :   شرکت مست و سویی توپدا ایرانیاان (سهایی نفااس)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: <b>17811-06A</b>	BU	20	VD	303	IN	LST	0034	Rev.:	Page
								01	1 of 3

- Revised P&ID shall be issued before this document, latest revision of P&ID (rev.1) is not conformity with I/O List.

This document shall be issued after issuing revised P&ID of nitrogen gas compressor. In case of conflict between both document AIRPACK is solely responsible for eliminating discrepancy

## I/O LIST FOR NITROGEN GAS BOOSTER

 شرکت مست و سویی توپدا ایرانیاان  شرکت مست و سویی توپدا ایرانیاان (سهایی نفااس)	 Chagalesh-Enerehimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>
<b>Document Review</b>		
Issue Purpose:	IFA	
Result Code: AP,AN,CM,RE,NC	AN	
Next Status : IFC,IFA,IFI,AFC,AB	AFC	
Responsible Department	MECHANICAL	
Commented Date	Dec/11/2021	
<b>Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.</b>		

01	24/11/2021	For approval	WZ	KP	JR	
00	14/10/2021	For approval	WZ	KP	JR	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P



- Signal for PY-10151 is missed  
 - Please add I/O summary table for each I/O type same as below :

SIGNAL TYPE	SIGNAL LEVEL	SCHEDULED total amount	USED total amount	SPARE total amount	SPARE %	NOTES
ANALOG INPUTS	24VDC	16	16	16	100	

TAG NUMBER	SERVICE DESCRIPTION	INSTRUMENT TYPE	LOCATION	CONTROL SYSTEM	I/O TYPE	SIGNAL TYPE	POWER SUPPLY	IS/NIS	CALIBRATED RANGE	ENG UNIT	STATE 0	STATE 1	SET POINT LL	SET POINT L	SET POINT H	SET POINT HH	P&ID NUMBER	PROTOCOL
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIT-10153	Compressor Inlet Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...13,5	bar(a)	-	-	6,5	-	-	6,9	BU-20-VD-303-PR-DWG-0013	HART
PIT-10154	Compressor Oil System Oil Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	-1...5	bar(g)	-	-	1,5	-	-	-	BU-20-VD-303-PR-DWG-0013	HART
PIT-10156	Compressor 1st Stage Downstream Intercooler Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	1...36	bar(a)	-	-	-	-	15	-	BU-20-VD-303-PR-DWG-0013	HART
PIT-10157	Compressor 1st Stage Downstream Intercooler Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	1...36	bar(a)	-	-	15,5	-	-	-	BU-20-VD-303-PR-DWG-0013	HART
PIT-10158	Compressor Outlet Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	1...36	bar(a)	-	-	-	22 ( Load/Start)	23 (Unload/Stop)	-	BU-20-VD-303-PR-DWG-0013	HART
PIT-10159	Compressor Outlet Nitrogen Pressure Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	1...36	bar(a)	-	-	21	-	-	23,5	BU-20-VD-303-PR-DWG-0013	HART
TIT-10151	Compressor Inlet Nitrogen Temperature Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...80	°C	-	-	-	-	56	-	BU-20-VD-303-PR-DWG-0013	HART
TIT-10152	Compressor 1st Stage Nitrogen Temperature	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...200	°C	-	-	-	-	160	-	BU-20-VD-303-PR-DWG-0013	HART
TIT-10153	Compressor 1st Stage Nitrogen Temperature	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...200	°C	-	-	-	-	-	170	BU-20-VD-303-PR-DWG-0013	HART
TIT-10154	Compressor 1st Stage Downstream Intercooler Nitrogen Temperature Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...80	°C	-	-	-	-	50	-	BU-20-VD-303-PR-DWG-0013	HART
TIT-10155	Compressor Upstream After-Cooler Nitrogen Temperature Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...200	°C	-	-	-	-	-	140	BU-20-VD-303-PR-DWG-0013	HART
FIT-10151	Compressor Cooling Water Outlet Water Flow Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...20	m3/hr	-	-	-	13	-	-	BU-20-VD-303-PR-DWG-0013	HART
VT-10151	Compressor Vibration Level Transmitter	TRANSMITTER	FIELD	PLC	AI 4-20 mA (redundant)	ANALOG	LOOP POWERED	IS	0...25	mm/s	-	-	-	-	-	8	BU-20-VD-303-PR-DWG-0013	HART
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XY-10151	Compressor Inlet Solenoid Valve	SOLENOID VALVE	FIELD	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Open	Closed	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XY-10152	Compressor Cooling Water Inlet Solenoid Valve	SOLENOID VALVE	FIELD	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Open	Closed	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PB-10151	Compressor Start Pushbutton	PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	Start	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10152	Compressor Stop Pushbutton	PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	-	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10153	Compressor Emergency Stop Button	ESD PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	-	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10154	Compressor Lamptest Pushbutton	PUSHBUTTON	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Lamptest	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10155	Compressor Start Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	Start	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10156	Compressor Stop Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	-	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10157	Compressor Emergency Stop Button	ESD PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Emergency Stop	Normal	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10158	Compressor Lamptest Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Lamptest	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10159	Compressor Accept Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not Accept	Accept	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
PB-10160	Compressor Reset Pushbutton	PUSHBUTTON	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not Reset	Reset	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
HS-10151	Compressor Local/Off/Remote Switch	SWITCH	LP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off/Local	Remote	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XL-10151	Compressor Operational Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Operational	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10152	Compressor Running Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Running	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10153	Compressor Common Alarm Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Alarm	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10154	Compressor Common Trip Lamp	LAMP	LP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Trip	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10156	Compressor Operational Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Operational	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10157	Compressor Running Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Running	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10158	Compressor Common Alarm Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Alarm	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-10159	Compressor Common Trip Lamp	LAMP	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Common Trip	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
HM-10151	Compressor Hourmeter	HOURLMETER	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	Hourmeter	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HS-101xx-R	Compressor Reset ESD Relay	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	Reset	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
HS-101xx-SD	Compressor Forced Shutdown	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Normal	Forced Shutdown	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XS-101xx-ST/SP	Compressor Main Motor Start/Stop	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Stop	Start	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XS-101xx-ST/SP	Compressor Oil Heater ON/OFF	INTERFACE RELAY	UCP	PLC	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Off	On	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XL-101xx	Compressor Main Motor Running	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not_Running	Running	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
YAL-101xx	Compressor Main Motor Fault	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Fault	Healthy	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XL-101xx	Heater Running	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Not_Running	Running	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
YAL-101xx	Heater Fault	CONTACT	UCP	PLC	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Fault	Healthy	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XCS-108	Time Synchronisation	CONTACT	UCP	FCS	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	-	-	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HS-108-SD-1	Emergency Shutdown Command	SIGNAL TO/FROM ESD	UCP	ESD	DI 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	ESD	Healthy	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
XAL-108-2	Common Alarm	SIGNAL TO/FROM ESD	UCP	ESD	DO 24VDC (redundant)	DIGITAL	24 VDC	NIS	-	-	Alarm	Healthy	-	-	-	-	BU-20-VD-303-PR-DWG-0013	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

State must be specified

Please fill xx as your sequence