





OWNER:  شرکت سست و سویی توهمه ایرانیان (سهامی عامه)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	INSTRUMENT INDEX FOR NITROGEN GAS BOOSTER								
MC :  شرکت سست و سویی توهمه ایرانیان (سهامی عامه)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-72A	BU	20	VD	303	IN	INX	0032	Rev.:	Page
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INSTRUMENT INDEX FOR NITROGEN GAS BOOSTER

Rev	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
02	16/11/2021	For approval	WZ	KP	LdM	
01	23/09/2021	For approval	WZ	KP	LdM	
00	24/11/2020	For approval	TvT	KP	LdM	
Class: 1	Phase: P					

TAG NUMBER	SERVICE DESCRIPTION	INSTRUMENT TYPE	LOCATION	P&ID NUMBER	SYSTEM TYPE	I/O TYPE	SIGNAL TYPE	IS/NIS	CALIBRATED RANGE	ENGINEERING UNIT	STATE 0	STATE 1	SET POINT L	SET POINT LL	SET POINT H	SET POINT HH	PROCESS CONNECTION	INSTRUMENT CONNECTION	R&B	TYPE R&B	TW	ISOLATION VALVE	PROTOCOL	WIRING DRAWING NUMBER	DATASHEET NUMBER	HOOD/LIP DRAWING NUMBER	MANUFACTURER & MODEL NO.	PANEL OR LOCAL		
PG-10151	Compressor Inlet Strainer Differential Pressure Transmitter	DIFFERENTIAL PRESSURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	100-100	mmHg	-	-	-	-	-	-	1/2"NPT-F	-	YES	3-WAY	-	YES	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PG-10152	Compressor Inlet Nitrogen Pressure Gauge	PRESSURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	0-16	bar(a)	-	-	-	-	-	-	1/2"NPT-M	-	YES	2-WAY	-	YES	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PG-10155	Compressor Upstream Inter-cooler Nitrogen Pressure Gauge	PRESSURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	0-25	bar(a)	-	-	-	-	-	-	1/2"NPT-M	-	YES	2-WAY	-	YES	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PG-10160	Compressor Cooling Water Inlet Water Pressure Gauge	PRESSURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	0-6	bar(a)	-	-	-	-	-	-	1/2"NPT-M	-	YES	2-WAY	-	YES	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PG-10161	Compressor Outlet Nitrogen Pressure Gauge	PRESSURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	1-40	bar(a)	-	-	-	-	-	-	1/2"NPT-M	-	YES	2-WAY	-	YES	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TG-10156	Compressor Outlet Nitrogen Temperature Gauge	TEMPERATURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	0-60	°C	-	-	-	-	-	-	1/2"NPT-M	-	YES	2-WAY	-	YES	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TW-10156	Compressor Outlet Nitrogen Temperature Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	-	-	-	-	NO	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TG-10157	Compressor Cooling Water Inlet Water Temperature Gauge	TEMPERATURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	0-60	°C	-	-	-	-	-	-	1 1/2" NPT-M	-	-	YES	NO	-	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TW-10157	Compressor Cooling Water Inlet Water Temperature Gauge Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	-	-	NO	-	-	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TG-10158	Compressor Cooling Water Outlet Water Temperature Gauge	TEMPERATURE GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	0-60	°C	-	-	-	-	-	-	1 1/2" NPT-M	-	-	YES	NO	-	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TW-10158	Compressor Cooling Water Outlet Water Temperature Gauge Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	-	-	NO	-	-	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
LG-10151	Compressor Oil Sump Oil Level Gauge	LEVEL GAUGE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	will be stated later	-	-	-	-	-	-	1/2"NPT	-	-	-	-	NO	-	-	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PT-10153	Compressor Inlet Nitrogen Pressure Transmitter	PRESSURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-13.5	bar(a)	-	-	-	6.5	-	9.5	1/2"NPT-M	-	YES	3-WAY	-	YES	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PT-10154	Compressor Oil System Oil Pressure Transmitter	PRESSURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	1-5	bar(g)	-	-	-	1.5	-	-	1/2"NPT-M	-	YES	3-WAY	-	YES	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PT-10156	Compressor 1st downstream inter-cooler Nitrogen Pressure Transmitter	PRESSURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	1-36	bar(a)	-	-	-	-	-	-	1/2"NPT-M	-	YES	3-WAY	-	YES	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PT-10157	Compressor 1st downstream inter-cooler Nitrogen Pressure Transmitter	PRESSURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	1-36	bar(a)	-	-	-	15.5	-	-	1/2"NPT-M	-	YES	3-WAY	-	YES	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PT-10158	Compressor Outlet Nitrogen Pressure Transmitter	PRESSURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	1-36	bar(a)	-	-	22 (Load/Start)	21	23 (Unload/Start)	23.5	1/2"NPT-M	-	YES	3-WAY	-	YES	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
PT-10159	Compressor Outlet Nitrogen Pressure Transmitter	PRESSURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	1-36	bar(a)	-	-	-	21	-	23.5	1/2"NPT-M	-	YES	3-WAY	-	YES	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TIT-10151	Compressor Inlet Nitrogen Temperature Transmitter	TEMPERATURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-80	°C	-	-	-	-	-	86	1/2"NPT-F	-	YES	NO	-	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
TW-10151	Compressor Inlet Nitrogen Temperature Transmitter Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	1/2"NPT-F	-	-	-	NO	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
TIT-10152	Compressor 1st Stage Nitrogen Temperature Transmitter	TEMPERATURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-200	°C	-	-	-	-	-	160	1/2" 300F RF	1/2"NPT-F	-	YES	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL			
TW-10152	Compressor 1st Stage Nitrogen Temperature Transmitter Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	1/2"NPT-F	-	-	-	NO	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
TIT-10153	Compressor Upstream After-cooler Nitrogen Temperature Transmitter	TEMPERATURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-200	°C	-	-	-	-	-	170	1 1/2" 300F RF	1/2"NPT-F	-	YES	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL			
TW-10153	Compressor Upstream After-cooler Nitrogen Temperature Transmitter Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	1/2"NPT-F	-	-	-	NO	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
TIT-10154	Compressor 1st downstream inter-cooler Nitrogen Temperature Transmitter	TEMPERATURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-80	°C	-	-	-	-	-	50	1/2" 300F RF	1/2"NPT-F	-	YES	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL			
TW-10154	Compressor 1st downstream inter-cooler Nitrogen Temperature Transmitter Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	1/2"NPT-F	-	-	-	NO	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
TIT-10155	Compressor 2nd upstream inter-cooler Nitrogen Temperature Transmitter	TEMPERATURE TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-200	°C	-	-	-	-	-	140	1 1/2" 300F RF	1/2"NPT-F	-	YES	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL			
TW-10155	Compressor 2nd upstream inter-cooler Nitrogen Temperature Transmitter Thermowell	THERMOWELL	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 300F RF	1/2"NPT-F	-	-	-	NO	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
FIT-10151	Compressor Cooling Water Outlet Water Flow Transmitter	FLOW TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	0-20	m3/hr	-	-	-	13	-	-	to be advised	-	-	-	-	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
VT-10151	Compressor Vibration Level Transmitter	VIBRATION TRANSMITTER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AI 4-20 mA (redundant)	ANALOG	IS	to be advised	mm/s	-	-	-	-	-	8	to be advised	-	-	-	-	NO	HART	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL		
XV-10151	Compressor Inlet Solenoid Valve	SOLENOID VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	DO 24VDC	DIGITAL	NIS	-	-	Open	Closed	-	-	-	-	1/4"NPT-F	-	-	-	-	-	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
XV-10152	Compressor Cooling Water Inlet Solenoid Valve	SOLENOID VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	DO 24VDC	DIGITAL	NIS	-	-	Open	Closed	-	-	-	-	1/2"NPT-F	-	-	-	-	-	-	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0040	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL
XV-10152	Compressor Cooling Water Inlet Ball Valve	BALL VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1 1/2" 150F RF	-	-	-	-	-	-	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0041	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL
PSV-10151	Compressor Upstream After-cooler Pressure Safety Valve	PRESSURE SAFETY VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1" 300F RF	-	-	-	-	-	-	-	-	BU-20-VD-303-IN-DSH-0015	-	TBA	LOCAL	
PSV-10152	Compressor Upstream After-cooler Pressure Safety Valve	PRESSURE SAFETY VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1" 300F RF	-	-	-	-	-	-	-	-	BU-20-VD-303-IN-DSH-0015	-	TBA	LOCAL	
PSV-10153	Compressor Cooling water outlet Pressure Safety Valve	PRESSURE SAFETY VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1" 150F RF	-	-	-	-	-	-	-	-	BU-20-VD-303-IN-DSH-0015	-	TBA	LOCAL	
PSV-10151	Compressor bypass Recycle valve	CONTROL VALVE	FIELD	BU-20-VD-303-PR-DWG-0013	-	-	-	-	-	-	-	-	-	-	-	-	1" 300F RF	-	-	-	-	-	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0041	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
PS-10151	Compressor bypass Recycle valve I/P Transducer	I/P TRANSDUCER	FIELD	BU-20-VD-303-PR-DWG-0013	PLC	AO 4-20 mA (redundant)	ANALOG	IS	0-100	%	-	-	-	-	-	-	1/4"NPT-F	-	-	-	-	-	-	-	BU-20-VD-303-IN-DIG-0043	BU-20-VD-303-IN-DSH-0041	BU-20-VD-303-IN-DWG-0033	TBA	LOCAL	
HS-115-SD-1	Emergency Shutdown Command	SIGNAL TO/FROM ESD	UCP	BU-20-VD-303-PR-DWG-0013	PLC	DI 24VDC	DIGITAL	-	-	-	ESD	Healthy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
KAL-115-2	Common Alarm	SIGNAL TO/FROM ESD	UCP	BU-20-VD-303-PR-DWG-0013	PLC	DI 24VDC	DIGITAL	-	-	-	Alarm	Healthy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MCS-115	Time Synchronisation	SIGNAL TO/FROM PES	UCP	BU-20-VD-303-PR-DWG-0013	PLC	DI 24VDC	DIGITAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	Motor Running	SIGNAL TO/FROM DB	UCP	BU-20-VD-303-PR-DWG-0013																										