









OWNER:  شرکت سست و سویی توهر ایرانیاان (سهامی خاص)	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>							EPC CONTRACTOR:  Chagalesh-Enerechimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
MC :  شرکت سست و سویی توهر ایرانیاان (سهامی خاص)	<b>MODBUS LIST FOR NITROGEN GAS BOOSTER</b>									
<b>Owner Document Number: 17811-56A</b>								<b>Project</b> BU	<b>Area</b> 20	<b>Phase</b> VD
									<b>Rev.:</b> 01	<b>Page</b> 1 of 4

# MODBUS LIST FOR NITROGEN GAS BOOSTER

01	19/10/2021	For approval			WZ	RB	KP	
00	16/04/2021	For approval			TJ	RB	KP	
<b>Rev.</b>	<b>Date</b>	<b>Purpose of Issue</b>			<b>Prepared</b>	<b>Checked</b>	<b>Approved</b>	<b>AC Code</b>
							<b>Class: 1</b>	<b>Phase: P</b>

<b>OWNER:</b>  شرکت ست و سوبی توپد ایرانین (سامی ناس)	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>						<b>EPC CONTRACTOR:</b>  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	<b>MODBUS LIST FOR NITROGEN GAS BOOSTER</b>						 Netherlands		
<b>MC :</b>  شرکت ست و سوبی توپد ایرانین (سامی ناس)	<b>Project</b>	<b>Area</b>	<b>Phase</b>	<b>Unit</b>	<b>Dis.</b>	<b>Doc.</b>	<b>Seq.</b>	<b>Contract No : 52-98/445</b>	
<b>Owner Document Number:</b> 17811-56A	<b>BU</b>	<b>20</b>	<b>VD</b>	<b>303</b>	<b>IN</b>	<b>LST</b>	<b>0057</b>	<b>Rev.:</b>	<b>Page</b>
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(17811-56A)- Modbus List



NO.	AIRPACK TAG NUMBER	SERVICE	HOLDING REGISTER	BIT NO.	SIGNAL TYPE	FUNCTION CODE	UNIT	SCALE		ALARM VALUE(S)	TRIP VALUE(S)	RAW LOW COUNT	RAW HIGH COUNT	ALARM / TRIP TYPE	STATE 0	STATE 1	REMARKS
								0%	100%								
1	XA-101	PLC condition healthy	40001	0	BOOL	3	-	-	-	-	-	-	-	-	Unhealthy	Healthy	-
2	XAL-115-2	Common alarm	40001	1	BOOL	3	-	-	-	-	-	-	-	-	Alarm	Healthy	-
3	XA-103	Common trip	40001	2	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
4	XA-104	Compressor operational	40001	3	BOOL	3	-	-	-	-	-	-	-	-	Stopped	Running	-
5	XA-105	Compressor running	40001	4	BOOL	3	-	-	-	-	-	-	-	-	Stopped	Running	-
6	-	Spare	40001	5	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
7	-	Spare	40001	6	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
8	-	Spare	40001	7	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
9	-	Spare	40001	8	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
10	-	Spare	40001	9	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
11	-	Spare	40001	10	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
12	-	Spare	40001	11	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
13	-	Spare	40001	12	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
14	-	Spare	40001	13	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
15	-	Spare	40001	14	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
16	-	Spare	40001	15	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
17	XS-201	Accept alarms / trips (from DCS)	40002	0	BOOL	6	-	-	-	-	-	-	-	-	-	Accept	-
18	XS-202	Reset alarms / trips (from DCS)	40002	1	BOOL	6	-	-	-	-	-	-	-	-	-	Reset	-
19	XS-203	Start compressor (from DCS)	40002	2	BOOL	6	-	-	-	-	-	-	-	-	-	Start	-
20	XS-204	Stop compressor (from DCS)	40002	3	BOOL	6	-	-	-	-	-	-	-	-	-	Stop	-
21	XCS-115	Time synchronisation (from DCS)	40002	4	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
22	-	Spare	40002	5	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
23	HS-115-SD-1	Emergency shutdown command (from ESD)	40002	6	BOOL	6	-	-	-	-	-	-	-	-	ESD	Healthy	-
24	-	Spare	40002	7	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
25	XS-115	Interlock switch stop compressor (from FCS)	40002	8	BOOL	6	-	-	-	-	-	-	-	-	Stop	Not_Stop	-
26	-	Spare	40002	9	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
27	-	Spare	40002	10	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
28	-	Spare	40002	11	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
29	-	Spare	40002	12	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
30	-	Spare	40002	13	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
31	-	Spare	40002	14	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
32	-	Spare	40002	15	BOOL	6	-	-	-	-	-	-	-	-	-	-	-
33	XA-301	Emergency shutdown relay	40003	0	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
34	XA-302	Main motor fault	40003	1	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
35	XA-303	PID controller alarm	40003	2	BOOL	3	-	-	-	-	-	-	-	-	Alarm	Healthy	-
36	XA-304	Oil heater fault	40003	3	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
37	XA-305	Main motor running	40003	4	BOOL	3	-	-	-	-	-	-	-	-	-	Running	-
38	XA-306	Oil heater running	40003	5	BOOL	3	-	-	-	-	-	-	-	-	-	Running	-
39	-	Spare	40003	6	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
40	-	Spare	40003	7	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
41	-	Spare	40003	8	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
42	-	Spare	40003	9	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
43	-	Spare	40003	10	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
44	-	Spare	40003	11	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
45	-	Spare	40003	12	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
46	-	Spare	40003	13	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
47	-	Spare	40003	14	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
48	-	Spare	40003	15	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
49	TAH-10001	TIT-10001 High Alarm	40004	0	BOOL	3	-	-	-	-	-	-	-	-	Alarm	Healthy	-
50	TAHH-10002	TIT-10002 High Trip	40004	1	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
51	TAHH-10003	TIT-10003 High Trip	40004	2	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
52	PALL-10003	PIT-10003 Low Trip	40004	3	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
53	PAHH-10003	PIT-10003 High Trip	40004	4	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
54	PALL-10004	PIT-10004 Low Trip	40004	5	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
55	PALL-10007	PIT-10007 Low Trip	40004	6	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
56	PAHH-10007	PIT-10007 High Trip	40004	7	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
57	VAHH-10001	VT-10001 High Trip	40004	8	BOOL	3	-	-	-	-	-	-	-	-	Trip	Healthy	-
58	FAL-10001	FT-10001 Low Alarm	40004	9	BOOL	3	-	-	-	-	-	-	-	-	Alarm	Healthy	-
59	-	Spare	40004	10	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
60	-	Spare	40004	11	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
61	-	Spare	40004	12	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
62	-	Spare	40004	13	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
63	-	Spare	40004	14	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
64	-	Spare	40004	15	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
65	XY-10001	Compressor inlet solenoid valve	40010	0	BOOL	3	-	-	-	-	-	-	-	-	Close	Open	-
66	XY-10002	Compressor cooling water inlet solenoid valve	40010	1	BOOL	3	-	-	-	-	-	-	-	-	Close	Open	-
67	-	Spare	40010	2	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
68	-	Spare	40010	3	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
69	19K4	Compressor main motor start/stop	40010	4	BOOL	3	-	-	-	-	-	-	-	-	Stop	Start	-
70	19K6	Compressor oil heater on/off	40010	5	BOOL	3	-	-	-	-	-	-	-	-	Off	On	-
71	19K12	Compressor PID control active	40010	6	BOOL	3	-	-	-	-	-	-	-	-	Deactivate	Activate	-
72	-	Spare	40010	7	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
73	-	Spare	40010	8	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
74	-	Spare	40010	9	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
75	-	Spare	40010	10	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
76	-	Spare	40010	11	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
77	-	Spare	40010	12	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
78	-	Spare	40010	13	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
79	-	Spare	40010	14	BOOL	3	-	-	-	-	-	-	-	-	-	-	-
80	-	Spare	40010	15	BOOL	3	-	-	-	-	-	-	-	-	-	-	-

(17811-56A)- Modbus List



NO.	AIRPACK TAG NUMBER	SERVICE	HOLDING REGISTER	BIT NO.	SIGNAL TYPE	FUNCTION CODE	UNIT	SCALE		ALARM VALUE(S)	TRIP VALUE(S)	RAW LOW COUNT	RAW HIGH COUNT	ALARM / TRIP TYPE	STATE 0	STATE 1	REMARKS
								0%	100%								
81	TIT-10001	Compressor Inlet Nitrogen Temperature Transmitter	40020	-	32Bit-floating	3	°C	0	80	H: 56	-	0	80	HIGH	-	-	-
82	TIT-10002	Compressor 1st Stage Nitrogen Temperature Transmitter	40022	-	32Bit-floating	3	°C	0	200	-	HH: 170	0	200	HIGH	-	-	-
83	TIT-10003	Compressor Upstream After-Cooler Nitrogen Temperature Transmitter	40024	-	32Bit-floating	3	°C	0	200	-	HH: 140	0	200	HIGH	-	-	-
84	PIT-10003	Compressor Inlet Pressure	40026	-	32Bit-floating	3	bar(a)	0	13,5	-	LL: 6,5 HH: 9,5	0	13,5	LOW & HIGH	-	-	-
85	PIT-10004	Compressor Oil Pressure	40028	-	32Bit-floating	3	bar(a)	-1	5	-	LL: 1,5	-1	5	LOW	-	-	-
86	PIT-10007	Compressor Outlet Pressure	40040	-	32Bit-floating	3	bar(a)	1	36	-	LL: 21 HH: 23,5	1	36	LOW & HIGH	-	-	-
87	VT-10001	Compressor Vibration Transmitter	40042	-	32Bit-floating	3	mm/s	0	to be advised	-	HH: 8	0	to be advised	HIGH	-	-	-
88	FIT-10001	Cooling Water Outlet Flow	40044	-	32Bit-floating	3	m3/hr	0	20	L:13	-	0	20	LOW	-	-	-
89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-