





OWNER:  شرکت سست و سویی توهر ایرانیاان (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	P&ID FOR EMERGENCY INSTRUMENT AIR COMPRESSOR						 Netherlands		
MC :  شرکت سست و سویی توهر ایرانیاان (سهامی خاص)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-03B	BU	20	VD	303	PR	DWG	0066	Rev.:	Page
								07	1 of 4

P&ID FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

07	05/12/2023	As Built	TT	KP	JR	
06	31/10/2023	As Built	KP	JR	PW	
05	31/01/2022	Approved for Construction	KP	KP	PW	
04	07/01/2022	Approved for Construction	KP	KP	PW	
03	10/12/2021	Approved for Construction	KP	KP	PW	
02	04/11/2021	For approval	KP	KP	PW	
01	11/06/2021	For approval	KP	KP	PW	
00	30/10/2020	For approval	KP	KP	PW	
Rev	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: DE

COMPRESSOR	MAIN MOTOR	PULSATION DAMPER INLET	PULSATION DAMPER OUTLET	AFTER COOLER
Tagnumber: 20-C-7080 Type: 1-stage oilfree piston Compressor capacity: 173 Nm ³ /hr Operating pressure: 21 bar(a) Design Pressure: 26 bar(g) Speed: 400 rpm Discharge temperature: 180°C	Tagnumber: 20-C-7080-M Rated power: 15 kW Speed: 1475 rpm Power supply: 400 V/ 50 Hz/ 3 ph Rated current: 28.5 Ingress protection: IP 55 Hazardous area class: Ex II 3G IIB T3, Exd/tf	Tagnumber: 20-DC-7080-1 Volume: 30L OP / DP: 7 to 8.5 bar(a) / 13.5 bar(a) OT / DT: 5 to 55°C / 0 to 80°C Design: AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-DC-7080-2 Volume: 30L OP / DP: 21 bar(a) / 25 bar(a) OT / DT: 180 °C / 0 to 210°C Design: AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-AEC-7080-1 Flow air side: 173 Nm ³ /hr Flow water side: 1.4 m ³ /hr OP / DP(shell): 21 bar(a) / 25 bar(g) OP / DP(tubes): 4.5 bar(a) / 10 bar(g) OT / DT(shell): 180°C / 0 to 210°C OT / DT(tubes): 35 °C / 0 to 95°C Design: TEMA C, AMSE VIII. Div. 1 Material: Carbon steel

GENERAL NOTES

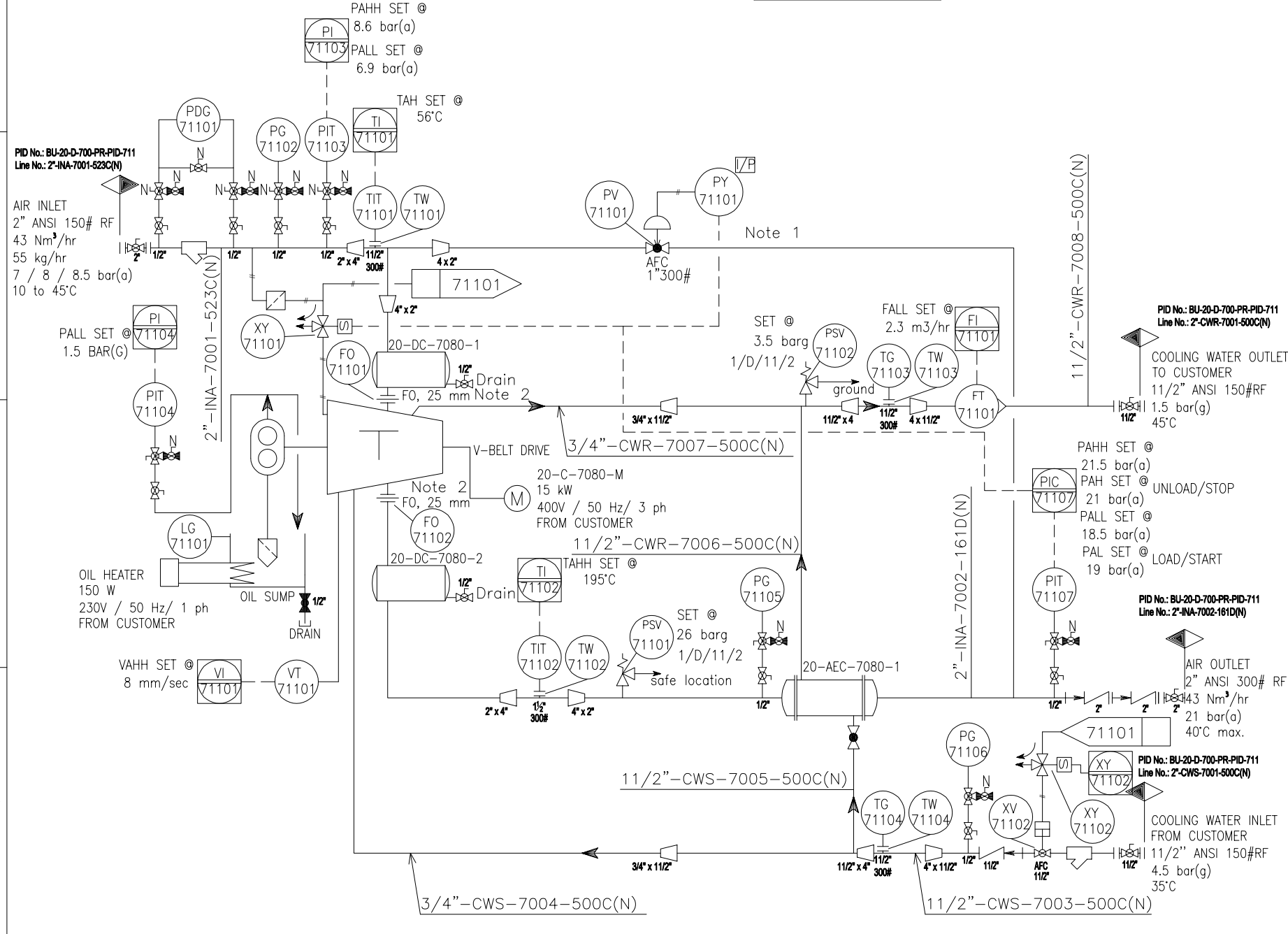
- This line is to recycle the flow that is not required to go into the system any additional flow is recycled to the inlet based on pressure setting on PIT-71107
- FO (orifice) have been added based on preliminary pulsation study
- Compressor starts by means of PIT-71107 low pressure and stops by means on PIT-71107 high pressure

HOLDS:

- Deleted

Tie-In-Point :

TP-1: Instrument air compressor inlet
 TP-2: Instrument air compressor outlet
 TP-3: Main cooling water supply
 TP-4: Main cooling water return



REFERENCE DRAWINGS	DWG.No.
xxxxxxx	xxxxxxx

REV	DATE	PURPOSE OF ISSUE (P.O.I)	PREP	CHKD	APPR	AC
01	04/12/23	As built	KP	CS	KP	JL
02	18/09/23	As built	KP	CS	KP	JL
03	13/01/24	Approved For construction	KP	CS	KP	JL
04	07/01/24	Approved For construction	KP	CS	KP	JL
05	09/12/21	For approval	KP	CS	KP	JL
06	04/12/20	For approval	KP	CS	KP	JL
07	04/12/20	For approval	KP	CS	KP	JL
08	20/10/20	For approval	KP	CS	KP	JL

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MEG PLANT

DRAWING TITLE: P&ID FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

CONTRACT NO.	SCALE	SIZE	CLASS	PHASE
52-98/445	XX	A0	1	P

DOCUMENT NO.	PROJECT	AREA	PHASE	MRO No.	DIS.	DOC.	SEQ.	SHEET	REV.
0066	BU	20	VO	303	PK	0066	0066	1 OF 2	07

OWNER DOC. NO.: BU 20 VO 303 PK 0066 1 OF 2 07

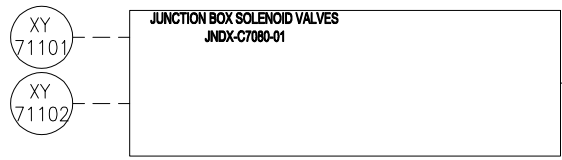
A

B

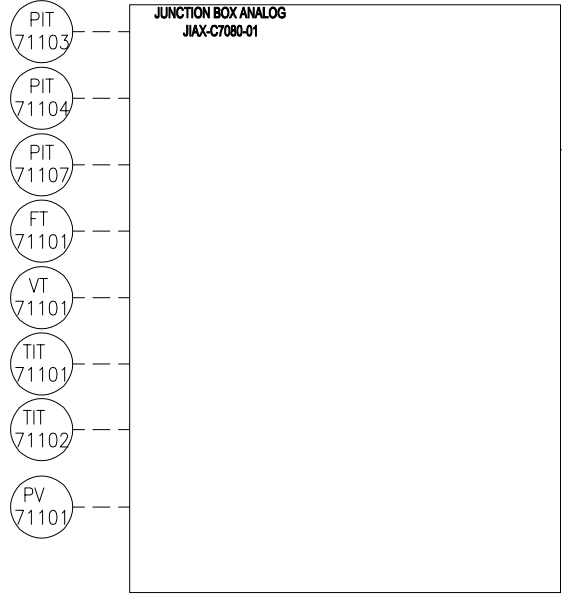
C

D

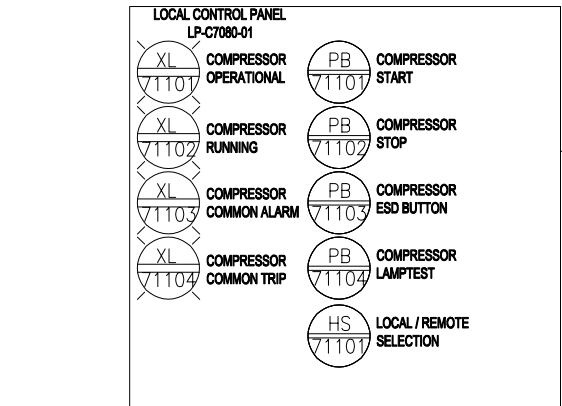
GENERAL NOTES



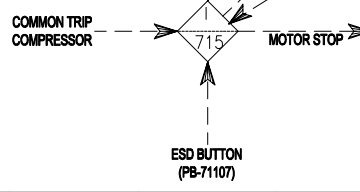
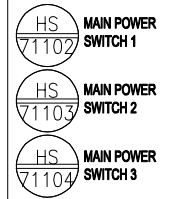
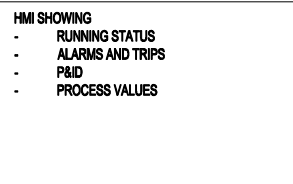
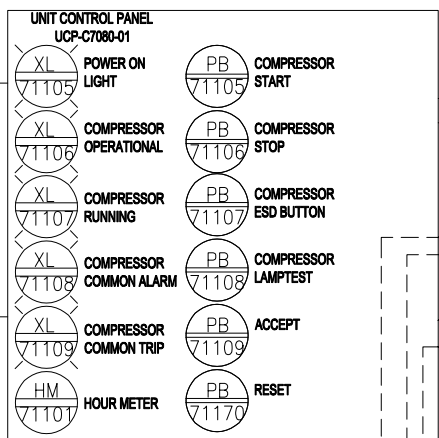
MULTICORE CABLE BY CLIENT



MULTICORE CABLE BY CLIENT



MULTICORE CABLE BY CLIENT



110 VAC, 1PH, 50HZ UPS POWER SUPPLY

110 VAC, 1PH, 50HZ UPS POWER SUPPLY

230VAC, 1PH, 50HZ POWER SUPPLY

REDUNDANT ETHERNET
MODBUS TCP/IP TO FCS

signals to / from ESD (H/WC)

HS-715-SD-1(Emergency Shutdown Command)

XAL-715-2(Common Alarm)

signals to / from FCS

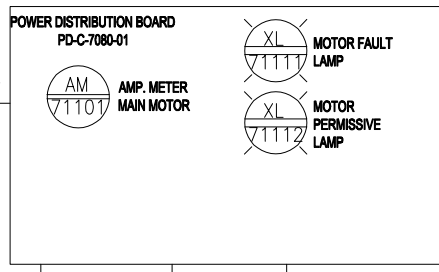
XCS-715(Time Synchronisation)

XS-715(Stop compressor)

MULTICORE CABLE BY CLIENT

SIGNALS TO/FROM DB

- MOTOR RUNNING
- MOTOR FAULT
- MOTOR START / STOP
- HEATER ON/OFF
- HEATER FAULT
- HEATER ON



400VAC, 3PH, 50HZ POWER SUPPLY

400VAC, 3PH, 50HZ TO MAIN MOTOR

230VAC, 1PH, 50HZ TO HEATER

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 DOCUMENT NO. PROJECT AREA PHASE IRG No. DIS. DOC. SEQ. SHEET NO. REV.
 OWNER DOC. NO.: BU 20 10 303 PR DWG 0066 2 OF 2 27