







OWNER:  شرکت سست و سویی توپو ایرانیان (سهایی ناس)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	LOGIC DIAGRAMS-PROGRAM OF UCP - COMPRESSOR SHUTDOWN LOGIC DRAWING FOR EMERGENCY INSTRUMENT AIR COMPRESSOR								
MC :  شرکت سست و سویی توپو ایرانیان (سهایی ناس)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-32B	BU	20	VD	303	IN	DIG	0085	Rev.:	Page
								03	1 of 16

## LOGIC DIAGRAMS-PROGRAM OF UCP - COMPRESSOR SHUTDOWN LOGIC DRAWING FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

 شرکت سست و سویی توپو ایرانیان (سهایی ناس)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
<b>Document Review</b>		
Issue Purpose:	AFC	
Result Code: AP,AN,CM,RE,NC	AN	
Next Status : IFC,IFA,IFI,AFC,AB	AFN	
Responsible Department	MECHANICAL	
Commented Date	Jun /12/2022	
<b>Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.</b>		

03	17/05/2022	Approved for Construction	AZ	KP	JR	
<del>03</del>	<del>18/03/2022</del>	<del>Approved for Construction</del>	<del>AS</del>	<del>KP</del>	<del>JR</del>	
02	06/01/2022	Approved for Construction	AS	KP	JR	
01	30/11/2021	For approval	WZ	KP	JR	
00	24/11/2020	For approval	TJ	RB	JR	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P



SYMBOL	FUNCTION	DESCRIPTION
	AND	OUTPUT D EXISTS ONLY IF AND WHILE INPUTS A,B AND C EXIST.
	OR	OUTPUT D EXISTS ONLY IF AND WHILE ONE OR MORE OF INPUTS A,B OR C EXIST.
	XOR	OUTPUT D EXISTS ONLY IF AND WHILE ONE OF INPUTS A,B OR C EXIST.
	NOT	OUTPUT B EXISTS ONLY IF AND WHILE INPUT A DOES NOT EXIST.
	TIMER (DELAY INITIATION)	THE CONTINUOUS EXISTENCE OF INPUT A FOR TIME T CAUSES OUTPUT B TO EXIST WHEN THE TIME T EXPIRES. B TERMINATES IMMEDIATELY WHEN A TERMINATES.
	TIMER (DELAY TERMINATION)	THE EXISTENCE OF INPUT A CAUSES OUTPUT B TO EXIST IMMEDIATELY. B TERMINATES WHEN A HAS TERMINATED AND HAS NOT AGAIN EXISTED FOR TIME T.
	PULSE OUTPUT	THE EXISTENCE OF INPUT A CAUSES OUTPUT B TO EXIST IMMEDIATELY. B EXISTS FOR TIME T, REGARDLESS OF THE STATE OF A.
	FLIP-FLOP MEMORY (SET PRIORITY)	OUTPUT C EXISTS AS SOON AS A EXISTS. C CONTINUES TO EXIST, REGARDLESS OF THE SUBSEQUENT STATE OF A, UNTIL THE MEMORY IS RESET (I.E; TERMINATED BY B EXISTING) C REMAINS TERMINATED, REGARDLESS OF THE SUBSEQUENT STATE OF B, UNTIL A CAUSES THE MEMORY TO BE SET. IF A AND B EXIST SIMULTANEOUSLY, A OVERRIDES B.
	FLIP-FLOP MEMORY (RESET PRIORITY)	OUTPUT C EXISTS AS SOON AS A EXISTS. C CONTINUES TO EXIST, REGARDLESS OF THE SUBSEQUENT STATE OF A, UNTIL THE MEMORY IS RESET (I.E; TERMINATED BY B EXISTING) C REMAINS TERMINATED, REGARDLESS OF THE SUBSEQUENT STATE OF B, UNTIL A CAUSES THE MEMORY TO BE SET. IF A AND B EXIST SIMULTANEOUSLY, B OVERRIDES A.
		LOGIC CONNECTION
		NO CONNECTION
		SERIAL LINK / FOUNDATION FIELDBUS PROTOCOL

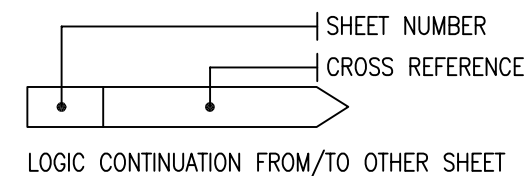
SYMBOL	DESCRIPTION
	EMERGENCY PUSHBUTTON, RED HEAD, STAY PUT.
	TOGGLE SWITCH
	PUSHBUTTON MOMENTARILY MAKE
	PUSHBUTTON MOMENTARILY BREAK
	CONTACT NORMALLY OPEN
	CONTACT NORMALLY CLOSED
	HARDWIRED INPUT/OUTPUT
	SOLENOID VALVE, 3-WAY
	DISTRIBUTED CONTROL SYSTEM
	PLC CONTROL SYSTEM
	DCS AUXILIARY CONSOLE
	LAMP
	HMI
	AUDIBLE ALARM
	RELAY COIL

### ABBREVIATIONS

DCS : DISTRIBUTED CONTROL SYSTEM  
UCP : UNIT CONTROL PANEL  
LCP : LOCAL CONTROL PANEL  
PLC : PROGRAMMABLE LOGIC CONTROLLER  
I/P : INPUT  
O/P : OUTPUT  
ESD : EMERGENCY SHUTDOWN  
MCC : MOTOR CONTROL CENTRE

### GENERAL NOTES

- SHUTDOWN CONDITION ;  
0 = SHUTDOWN 1 = OPERATING
- ALARM/TRIP CONDITION ;  
0 = ALARM 1=NORMAL  
0 = TRIP 1=NORMAL
- REMOTE/LOCAL CONDITION ;  
0 = LOCAL 1=REMOTE

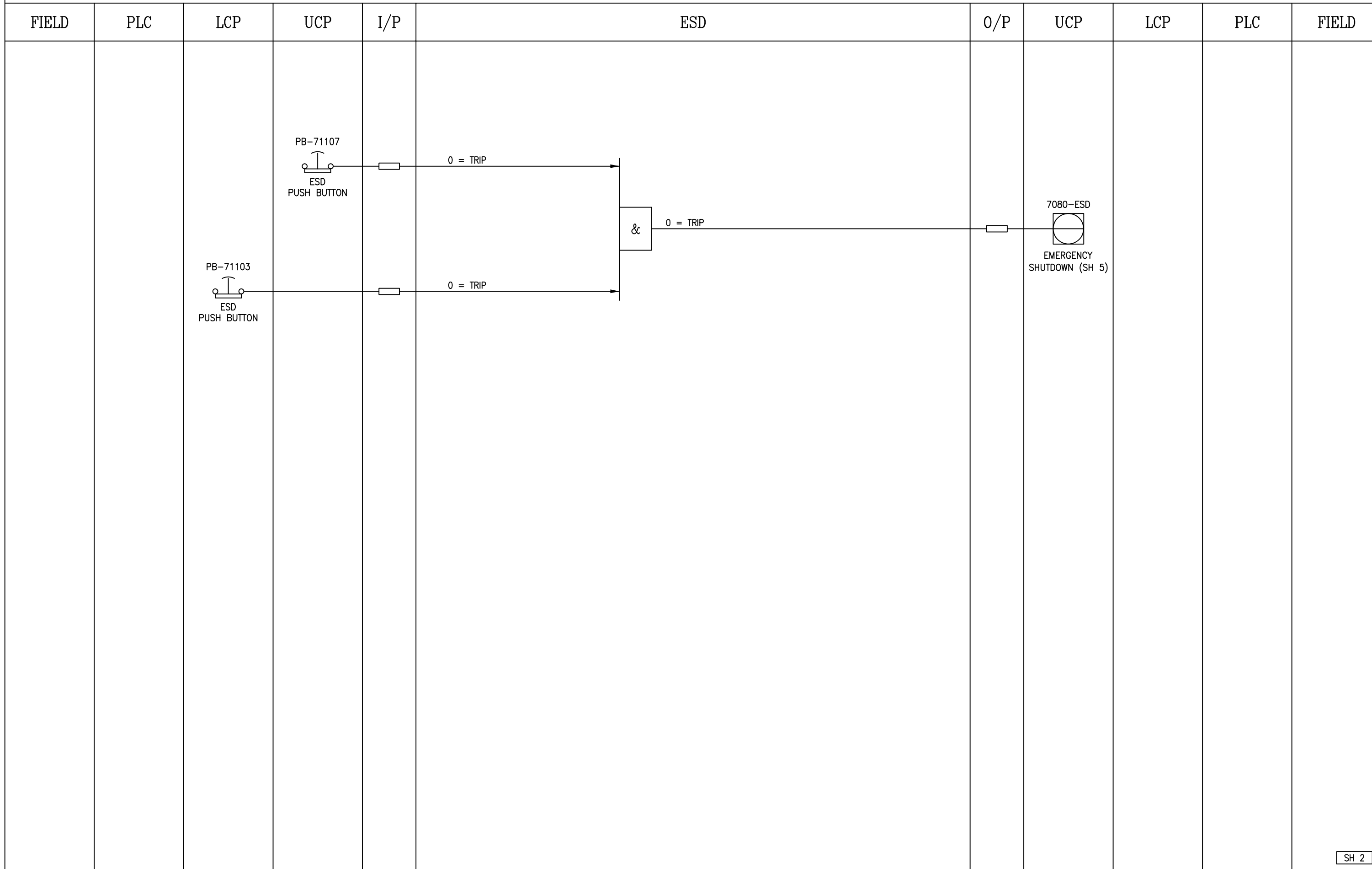


SH 1



SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR		DATE 20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION	REV 04	16-05-2022	WZ
CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION IRAN	DRAWN BY TJ		REV 03	18-03-2022	AS
CLIENT REF 20-C-7080	DRAWING NO. 17811-32B	CHECKED BY KP	REV 02	03-01-2022	AS	
AIRPACK REF 17811	SHEETNO. 01 /14		REV 01	29-11-2021	WZ	
			REV 00	20-11-2020	TJ	

LOGIC DIAGRAM

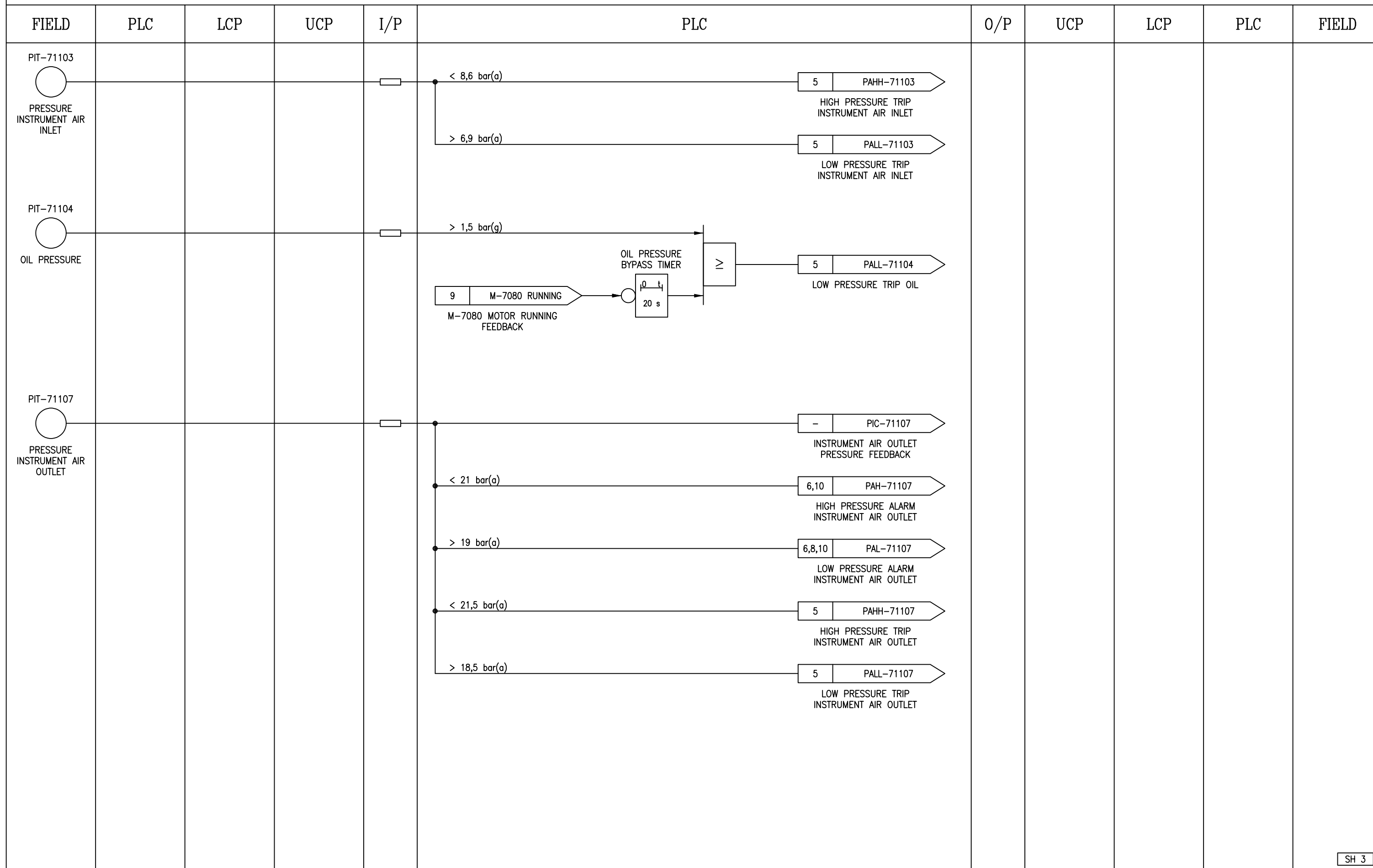


SH 2

NOTES:


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	CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION IRAN	DRAWN BY TJ	
	CLIENT REF 20-C-7080	DRAWING NO. 17811-32B	CHECKED BY KP	
	AIRPACK REF 17811	SHEETNO. 02 / 14		
				REV 04 16-05-2022 WZ REV 03 18-03-2022 AS REV 02 03-01-2022 AS REV 01 29-11-2021 WZ REV 00 20-11-2020 TJ

LOGIC DIAGRAM

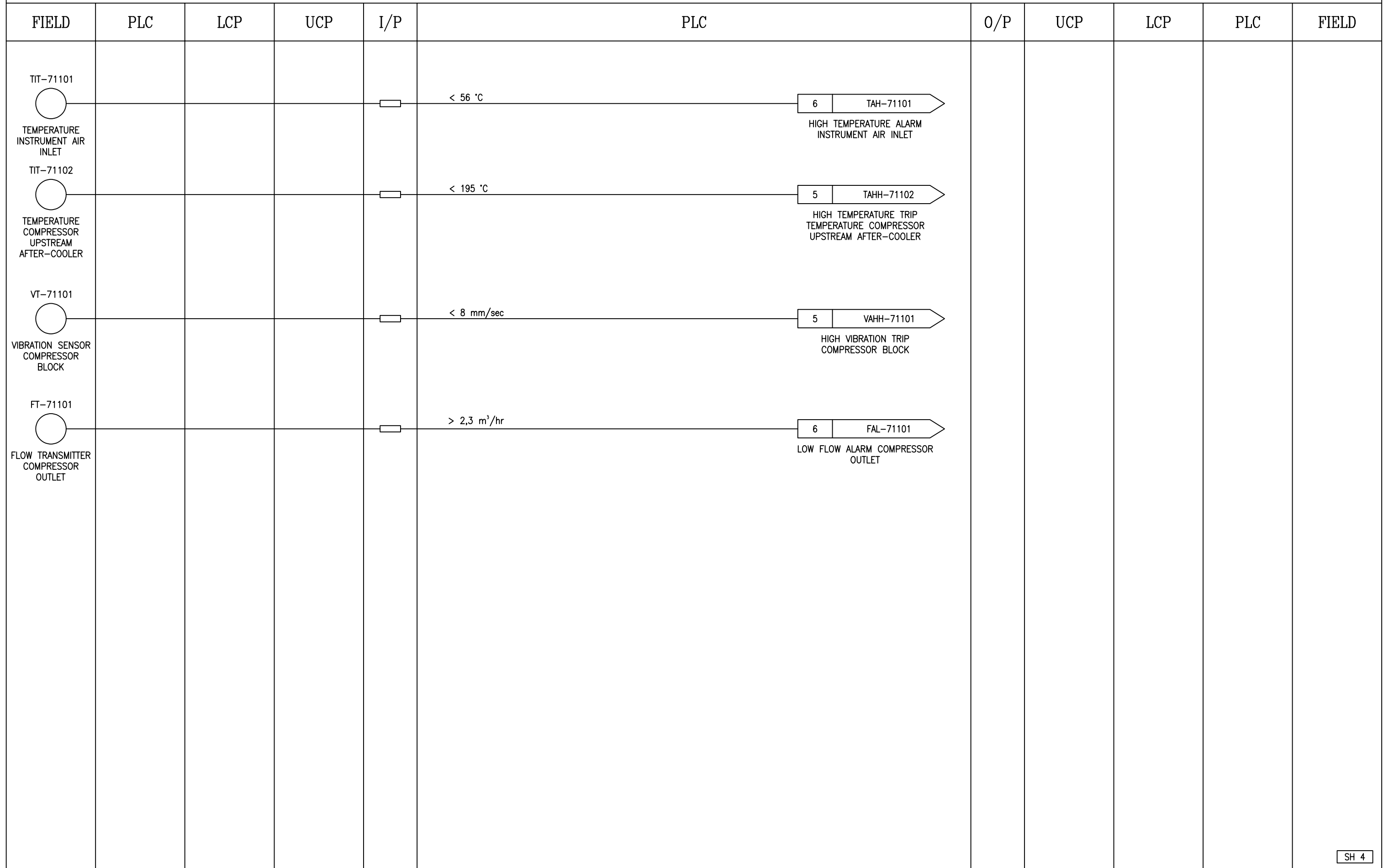


SH 3

NOTES:


	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR		DATE 20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION
	CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION IRAN	DRAWN BY TJ	
CLIENT REF 20-C-7080	DRAWING NO. 17811-32B	CHECKED BY KP	REV 04 16-05-2022 WZ	
AIRPACK REF 17811	SHEETNO. 03 / 14		REV 03 18-03-2022 AS	
			REV 02 03-01-2022 AS	
			REV 01 29-11-2021 WZ	
			REV 00 20-11-2020 TJ	

LOGIC DIAGRAM

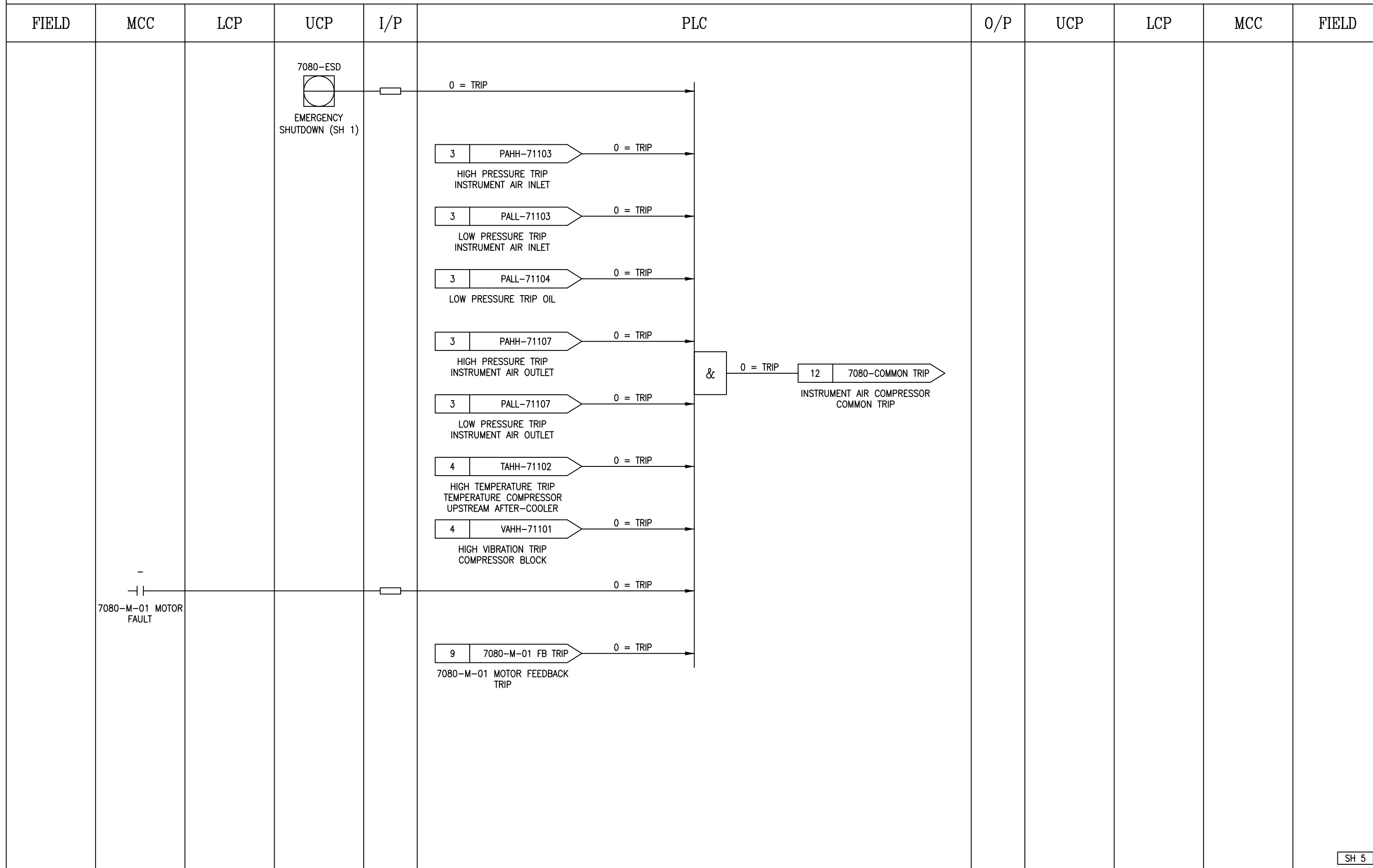


SH 4

NOTES:


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	CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION IRAN	DRAWN BY TJ																
	CLIENT REF 20-C-7080	DRAWING NO. 17811-32B	CHECKED BY KP																
	AIRPACK REF 17811	SHEETNO. 04 /14																	
				<table border="1" style="font-size: 8px;"> <tr> <td>REV 04</td> <td>16-05-2022</td> <td>WZ</td> </tr> <tr> <td>REV 03</td> <td>18-03-2022</td> <td>AS</td> </tr> <tr> <td>REV 02</td> <td>03-01-2022</td> <td>AS</td> </tr> <tr> <td>REV 01</td> <td>29-11-2021</td> <td>WZ</td> </tr> <tr> <td>REV 00</td> <td>20-11-2020</td> <td>TJ</td> </tr> </table>	REV 04	16-05-2022	WZ	REV 03	18-03-2022	AS	REV 02	03-01-2022	AS	REV 01	29-11-2021	WZ	REV 00	20-11-2020	TJ
REV 04	16-05-2022	WZ																	
REV 03	18-03-2022	AS																	
REV 02	03-01-2022	AS																	
REV 01	29-11-2021	WZ																	
REV 00	20-11-2020	TJ																	

LOGIC DIAGRAM

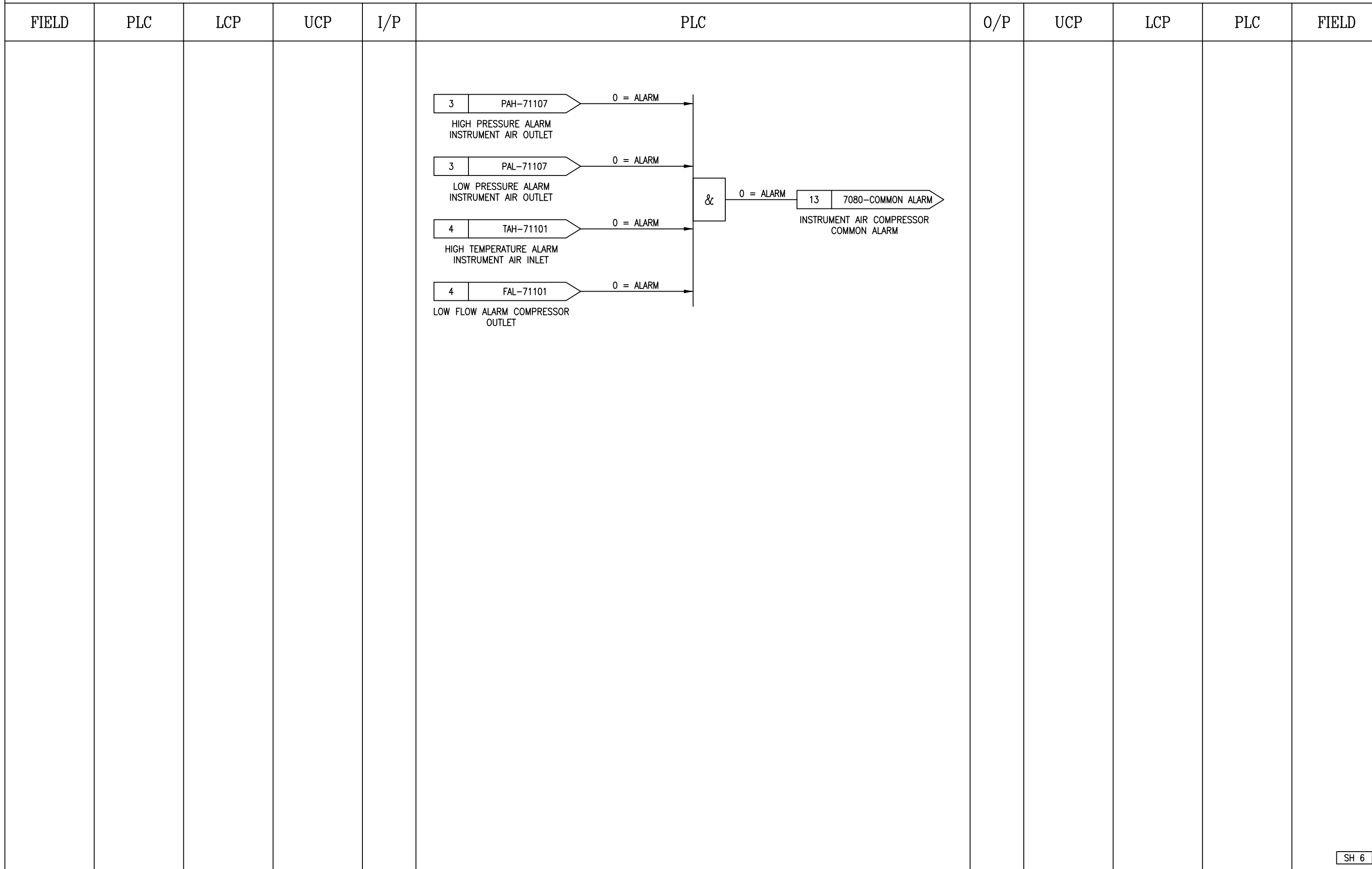


SH 5

NOTES:

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	CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	CLIENT REF 20-C-7080	DRAWING NO. 17811-32B	
AIRPACK REF 17811	PLANT LOCATION IRAN	SHEETNO. 05 /14	REV 04 16-05-2022 WZ REV 03 18-03-2022 AS REV 02 03-01-2022 AS REV 01 29-11-2021 WZ REV 00 20-11-2020 TJ	

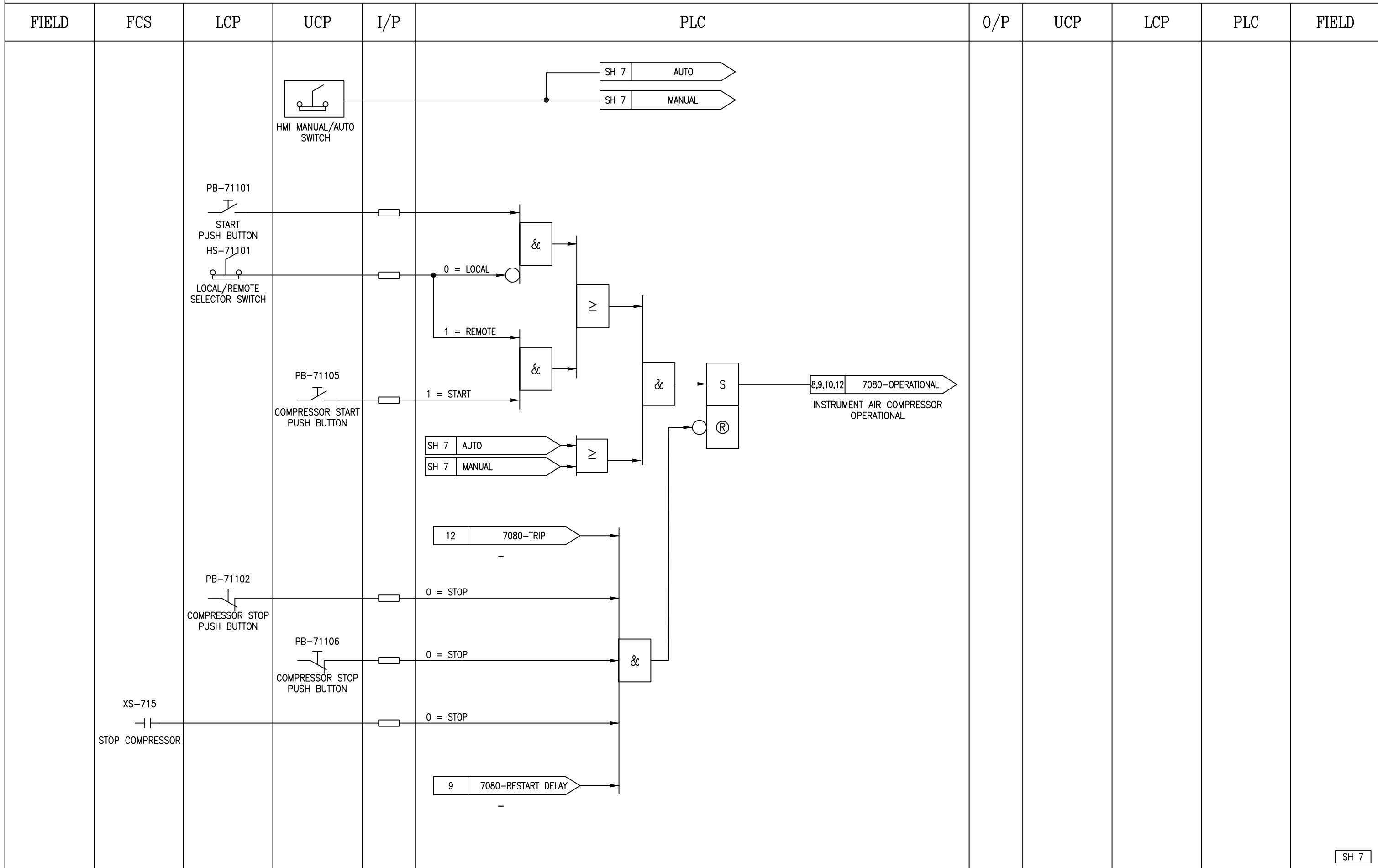
LOGIC DIAGRAM



NOTES:

	SUBJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR	DATE	20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION		
	CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)	DRAWN BY	TJ			
	CLIENT REF	20-C-7080	CHECKED BY	KP	REV 04	16-05-2022	WZ
	AIRPACK REF	17811	PLANT LOCATION	IRAN	REV 03	18-03-2022	AS
			DRAWING NO.	17811-32B	REV 02	03-01-2022	AS
			SHEETNO.	06 /14	REV 01	29-11-2021	WZ
					REV 00	20-11-2020	TJ

LOGIC DIAGRAM

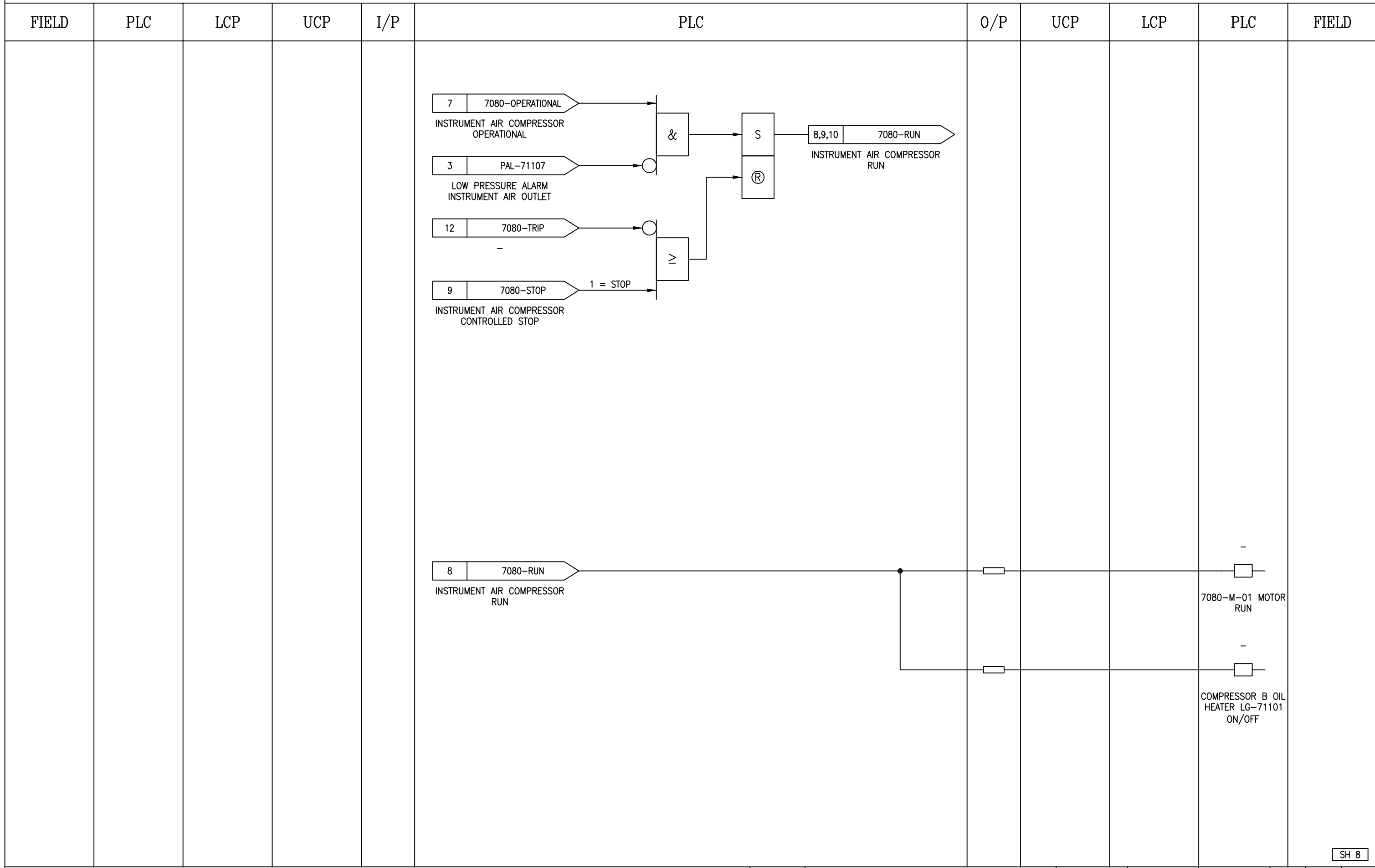


SH 7

NOTES:

	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR		DATE 20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION
	CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	CLIENT REF 20-C-7080	DRAWN BY TJ	
AIRPACK REF 17811	PLANT LOCATION IRAN	CHECKED BY KP	DRAWING NO. 17811-32B	REV 04 16-05-2022 WZ
	SHEETNO. 07 /14			REV 03 18-03-2022 AS
				REV 02 03-01-2022 AS
				REV 01 29-11-2021 WZ
				REV 00 20-11-2020 TJ

LOGIC DIAGRAM

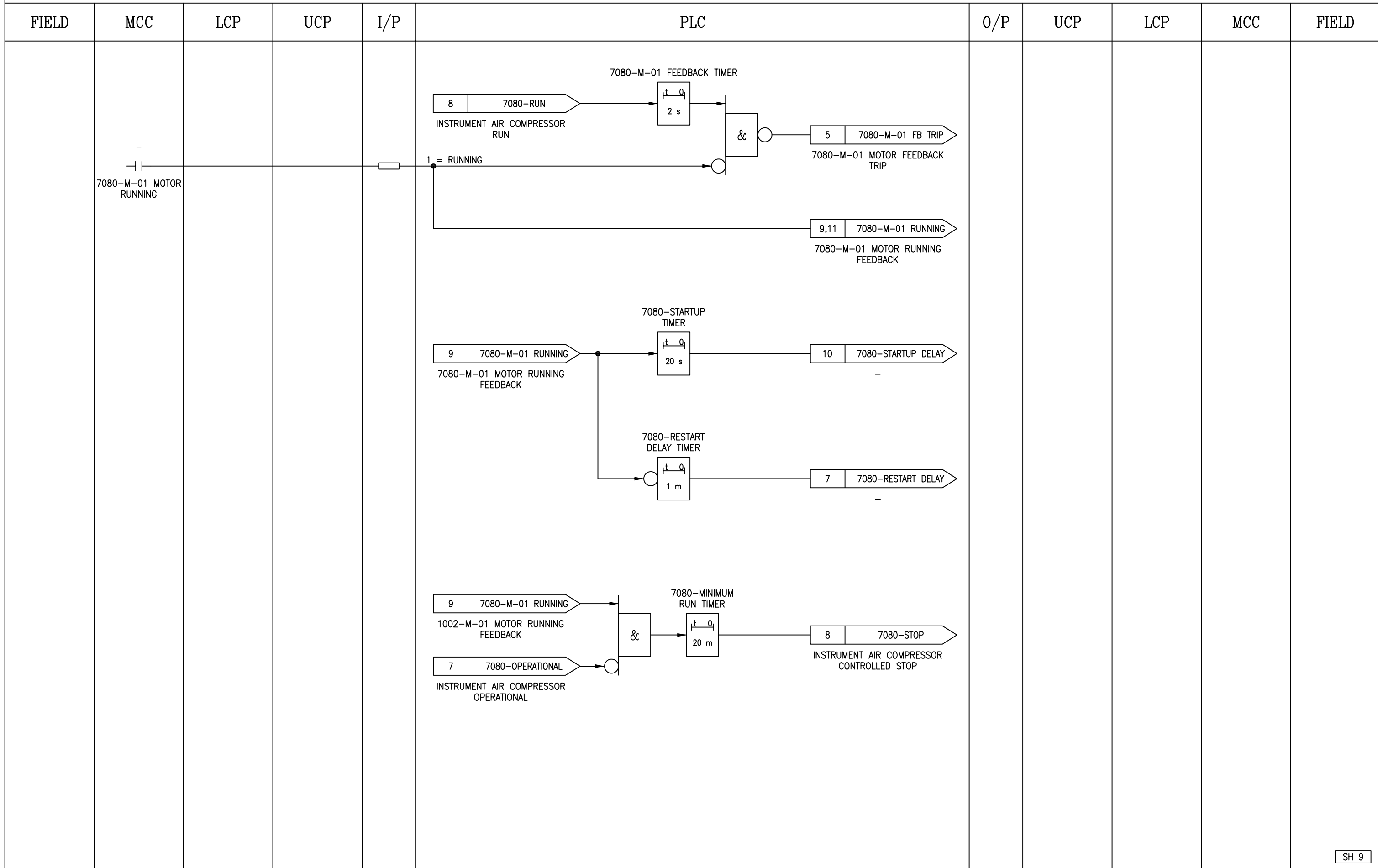


SH 8

NOTES:

	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR		DATE	20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION		
			DRAWN BY	TJ			
		CHECKED BY	KP		REV 04	16-05-2022	WZ
CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)		PLANT LOCATION	IRAN	REV 03	18-03-2022	AS
CLIENT REF	20-C-7080		DRAWING NO.	17811-32B	REV 02	03-01-2022	AS
AIRPACK REF	17811		SHEETNO.	08 / 14	REV 01	29-11-2021	WZ
					REV 00	20-11-2020	TJ

LOGIC DIAGRAM

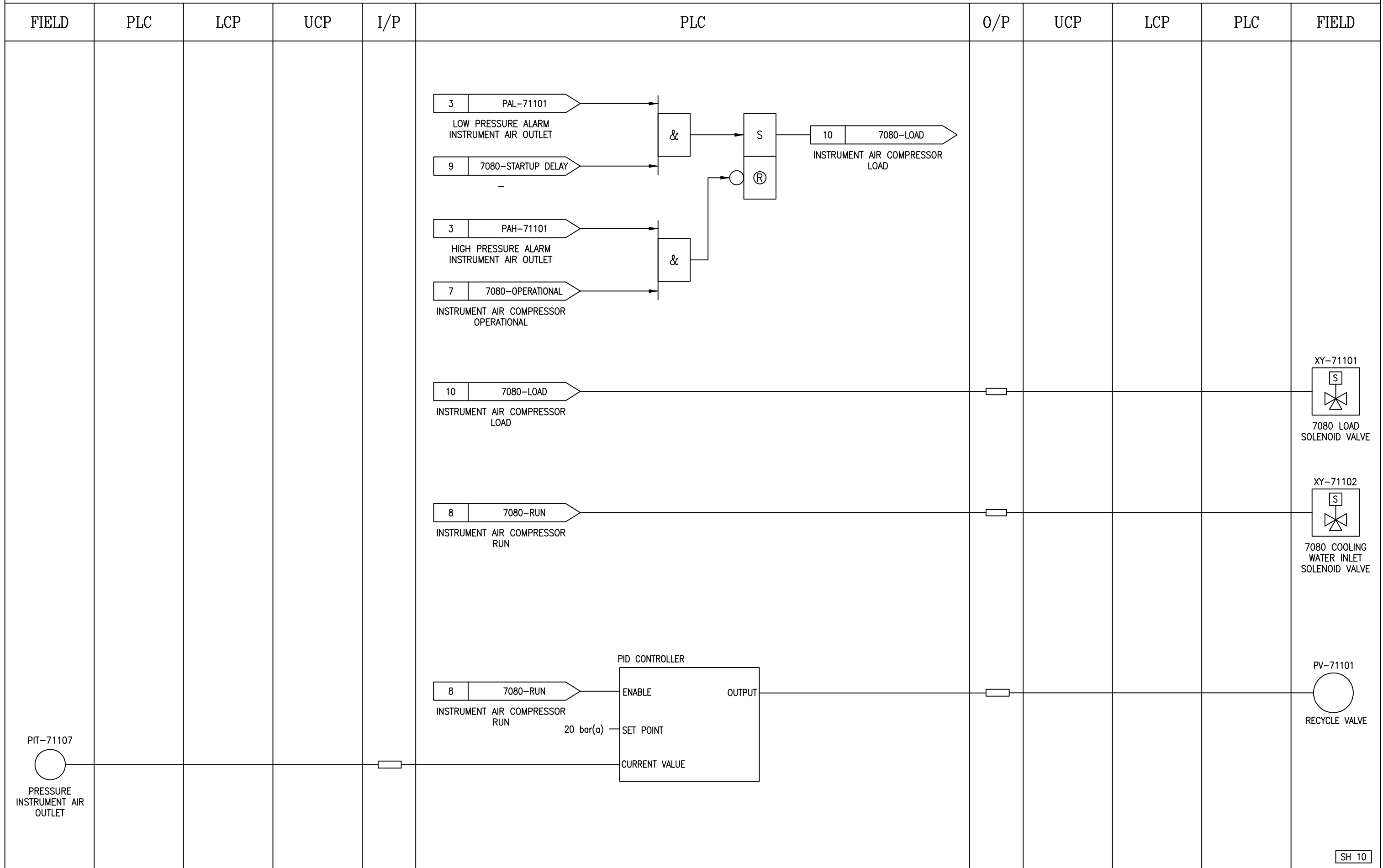


SH 9

NOTES:

	SUBJECT	DATE	20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION			
	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR	DRAWN BY	TJ	REV 04	16-05-2022	WZ	
		CHECKED BY	KP	REV 03	18-03-2022	AS	
	CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION	IRAN	REV 02	03-01-2022	AS
	CLIENT REF	20-C-7080	DRAWING NO.	17811-32B	REV 01	29-11-2021	WZ
	AIRPACK REF	17811	SHEETNO.	09 /14	REV 00	20-11-2020	TJ

# LOGIC DIAGRAM



SH 10

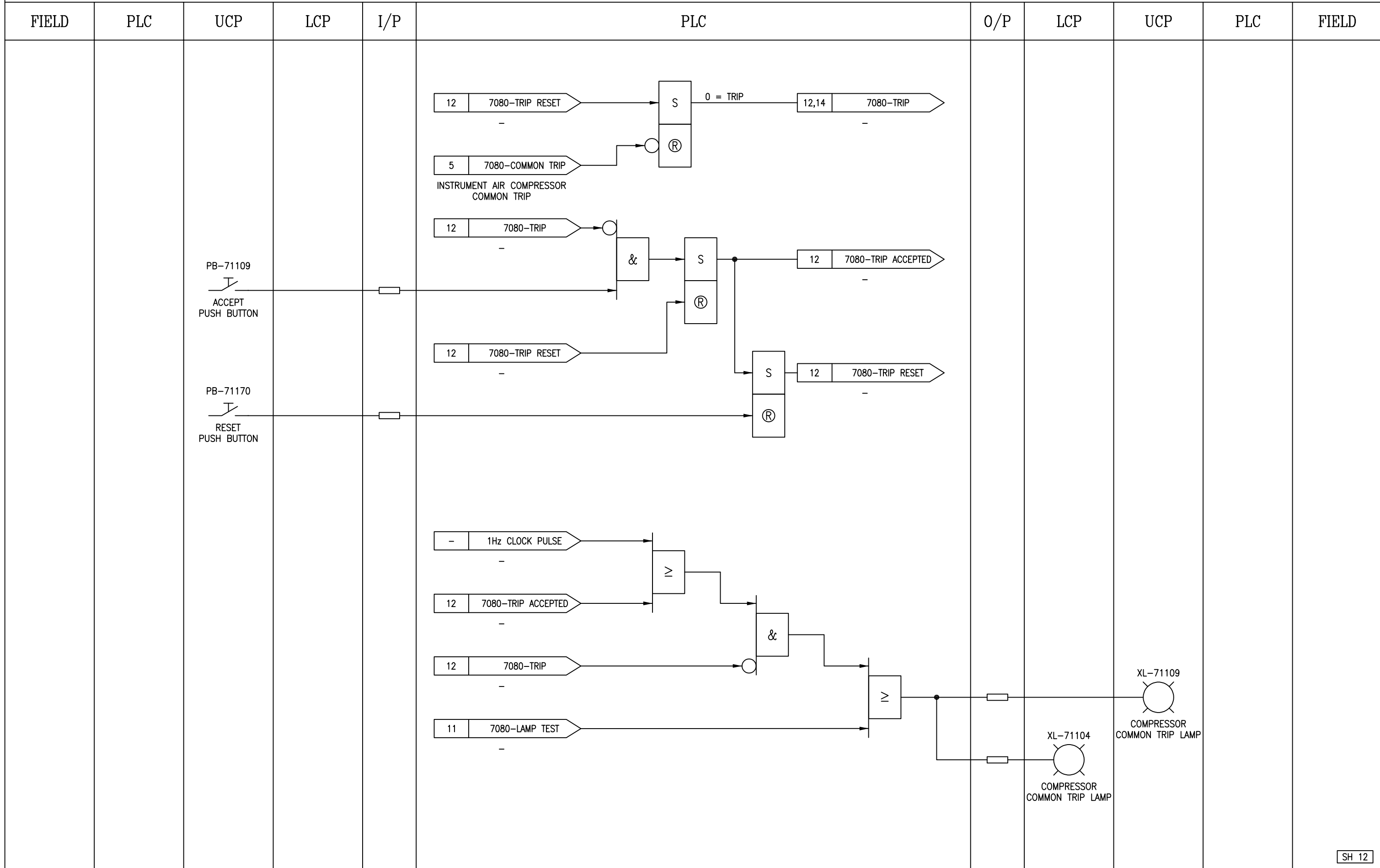
NOTES:



SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR		DATE 20-11-2020	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION
CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	DRAWN BY TJ	REV 04 16-05-2022 WZ	
CLIENT REF 20-C-7080	CHECKED BY KP	REV 03 18-03-2022 AS	
AIRPACK REF 17811	PLANT LOCATION IRAN	REV 02 03-01-2022 AS	
	DRAWING NO. 17811-32B	REV 01 29-11-2021 WZ	
	SHEETNO. 10 / 14	REV 00 20-11-2020 TJ	



LOGIC DIAGRAM



SH 12

NOTES:

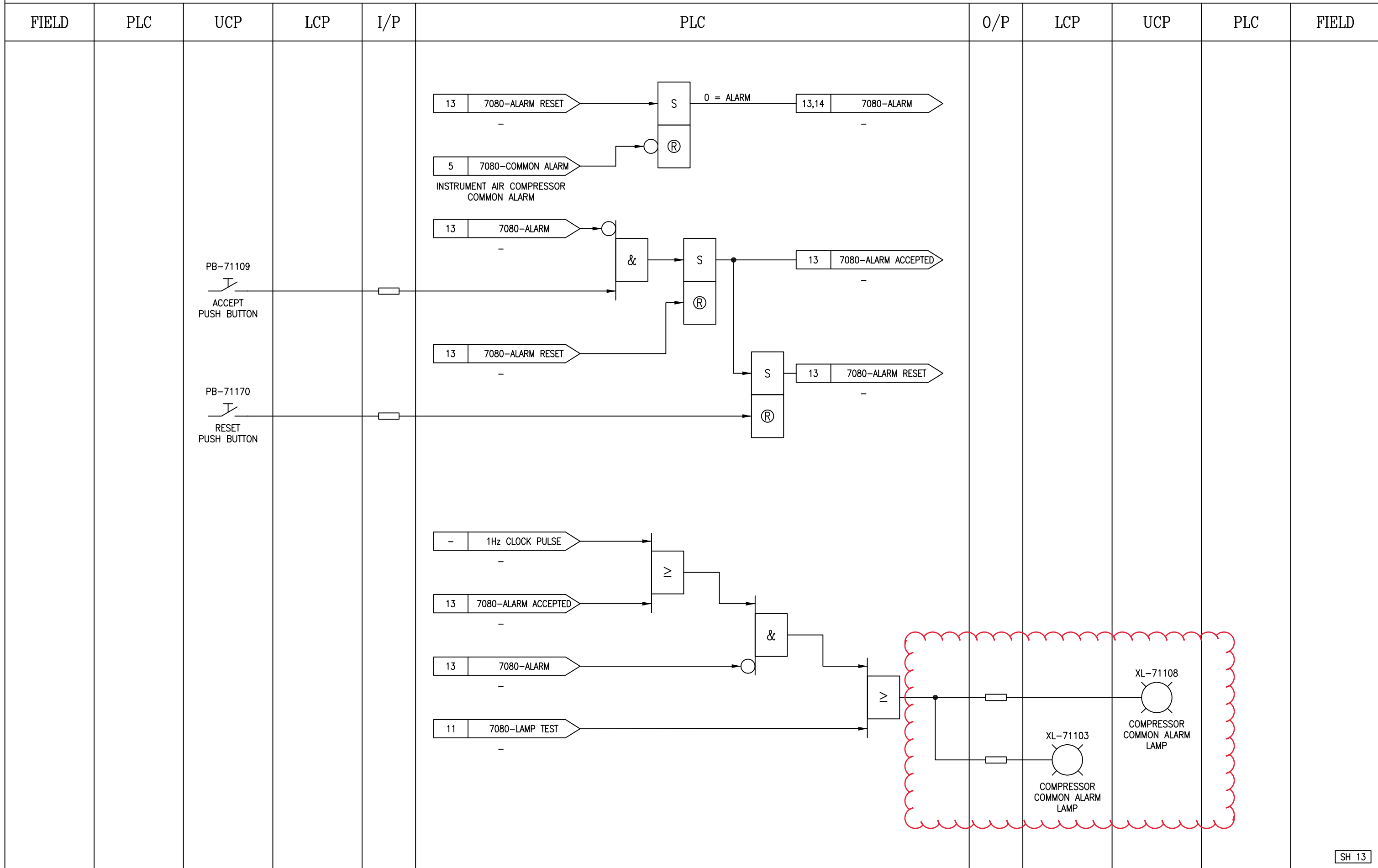


SUBJECT		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR	
CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION	IRAN
CLIENT REF	20-C-7080	DRAWING NO.	17811-32B
AIRPACK REF	17811	SHEETNO.	12 /14

DATE	20-11-2020
DRAWN BY	TJ
CHECKED BY	KP


THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION		
REV 04	16-05-2022	WZ
REV 03	18-03-2022	AS
REV 02	03-01-2022	AS
REV 01	29-11-2021	WZ
REV 00	20-11-2020	TJ

LOGIC DIAGRAM

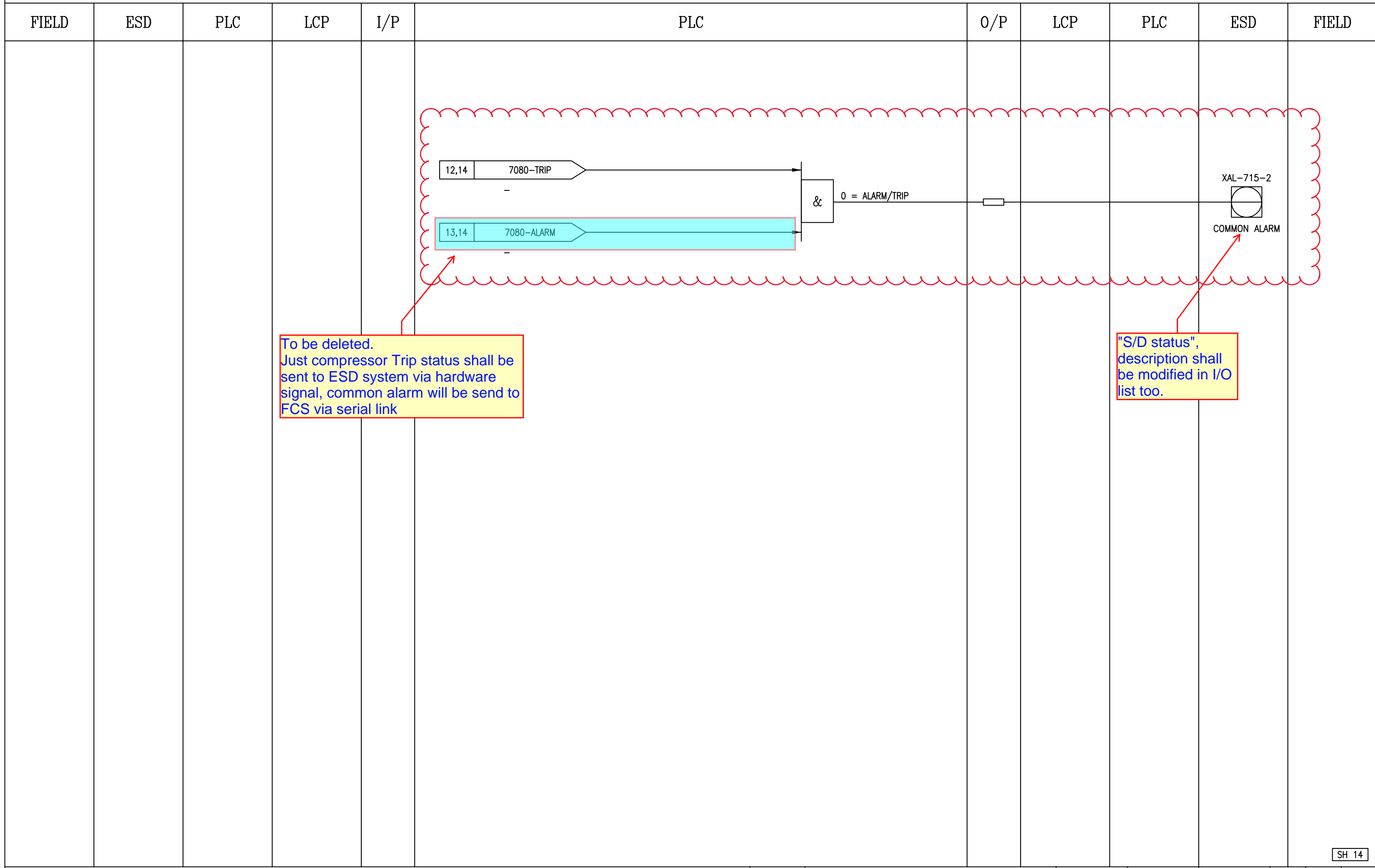


SH 13

NOTES:

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	CLIENT REF 20-C-7080	DRAWING NO. 17811-32B	CHECKED BY KP	
	AIRPACK REF 17811	SHEETNO. 13 /14		
				REV 04 16-05-2022 WZ REV 03 18-03-2022 AS REV 02 03-01-2022 AS REV 01 29-11-2021 WZ REV 00 20-11-2020 TJ

LOGIC DIAGRAM



To be deleted.  
Just compressor Trip status shall be sent to ESD system via hardware signal, common alarm will be send to FCS via serial link

"S/D status",  
description shall be modified in I/O list too.

NOTES:



SUBJECT		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT EMERGENCY INSTRUMENT AIR COMPRESSOR	
CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION	IRAN
CLIENT REF	20-C-7080	DRAWING NO.	17811-32B
AIRPACK REF	17811	SHEETNO.	14 /14

DATE	20-11-2020
DRAWN BY	TJ
CHECKED BY	KP

THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION		
REV 04	16-05-2022	WZ
REV 03	18-03-2022	AS
REV 02	03-01-2022	AS
REV 01	29-11-2021	WZ
REV 00	20-11-2020	TJ