







OWNER:  شرکت سست و سویی توپو ایران (سهامی خاص)	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 NITROGEN GAS BOOSTER								
MC :  شرکت سست و سویی توپو ایران (سهامی خاص)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-32A	BU	20	VD	303	IN	DIG	0035	Rev.:	Page
								03	1 of 15

LOGIC DIAGRAMS-PROGRAM OF UCP - COMPRESSOR SHUTDOWN LOGIC DRAWING FOR NITROGEN GAS BOOSTER

 شرکت سست و سویی توپو ایران (سهامی خاص)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
Document Review		
Issue Purpose:	AFC	
Result Code: AP,AN,CM,RE,NC	AN	
Next Status : IFC,IFA,IFI,AFC,AB	AFC	
Responsible Department	MECHANICAL	
Commented Date	4/10/2022	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		

03	18/03/2022	Approved for Construction	AS	KP	JR	
02	06/01/2022	Approved for Construction	WZ	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

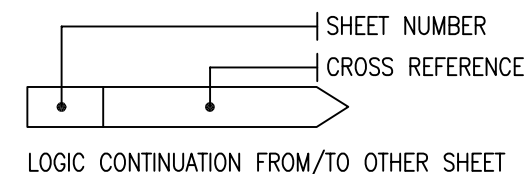
SYMBOL	DESCRIPTION
	EMERGENCY PUSHBUTTON, RED HEAD, STAY PUT.
	TOGGLE SWITCH
	PUSHBUTTON MOMENTARILY MAKE
	PUSHBUTTON MOMENTARILY BREAK
	CONTACT NORMALLY OPEN
	CONTACT NORMALLY CLOSED
	HARDWIRED INPUT/OUTPUT
	SOLENOID VALVE, 3-WAY
	DISTRIBUTED CONTROL SYSTEM
	PLC CONTROL SYSTEM
	DCS AUXILIARY CONSOLE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

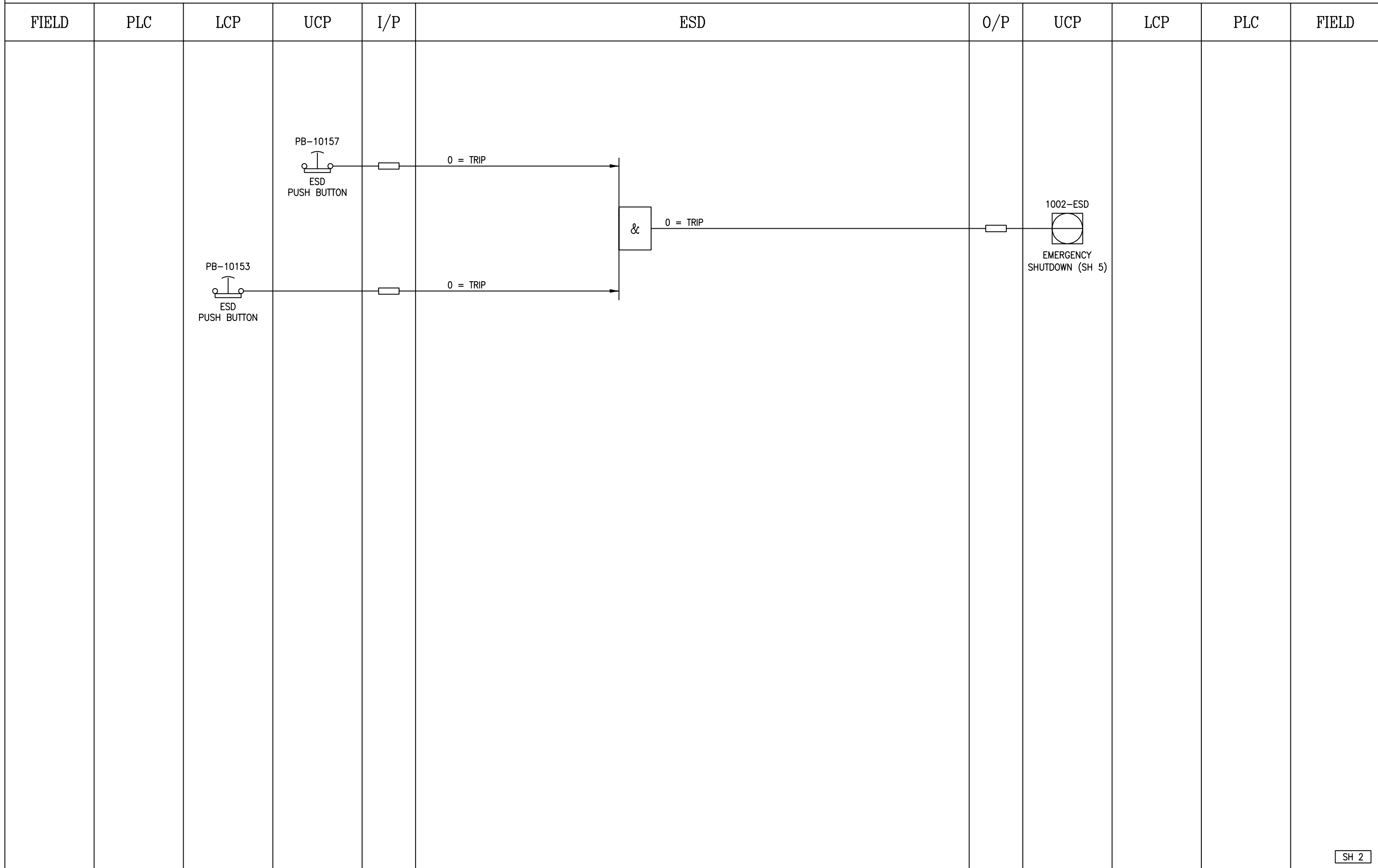
GENERAL NOTES

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



SUBJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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 03	18-03-2022	AS
CLIENT REF	20-C-1002	CHECKED BY	KP	PLANT LOCATION	IRAN	REV 02	03-01-2022	AS
AIRPACK REF	17811	DRAWING NO.	17811-32A	SHEETNO.	01 /13	REV 01	29-11-2021	WZ
						REV 00	20-11-2020	TJ

LOGIC DIAGRAM



SH 2

NOTES:

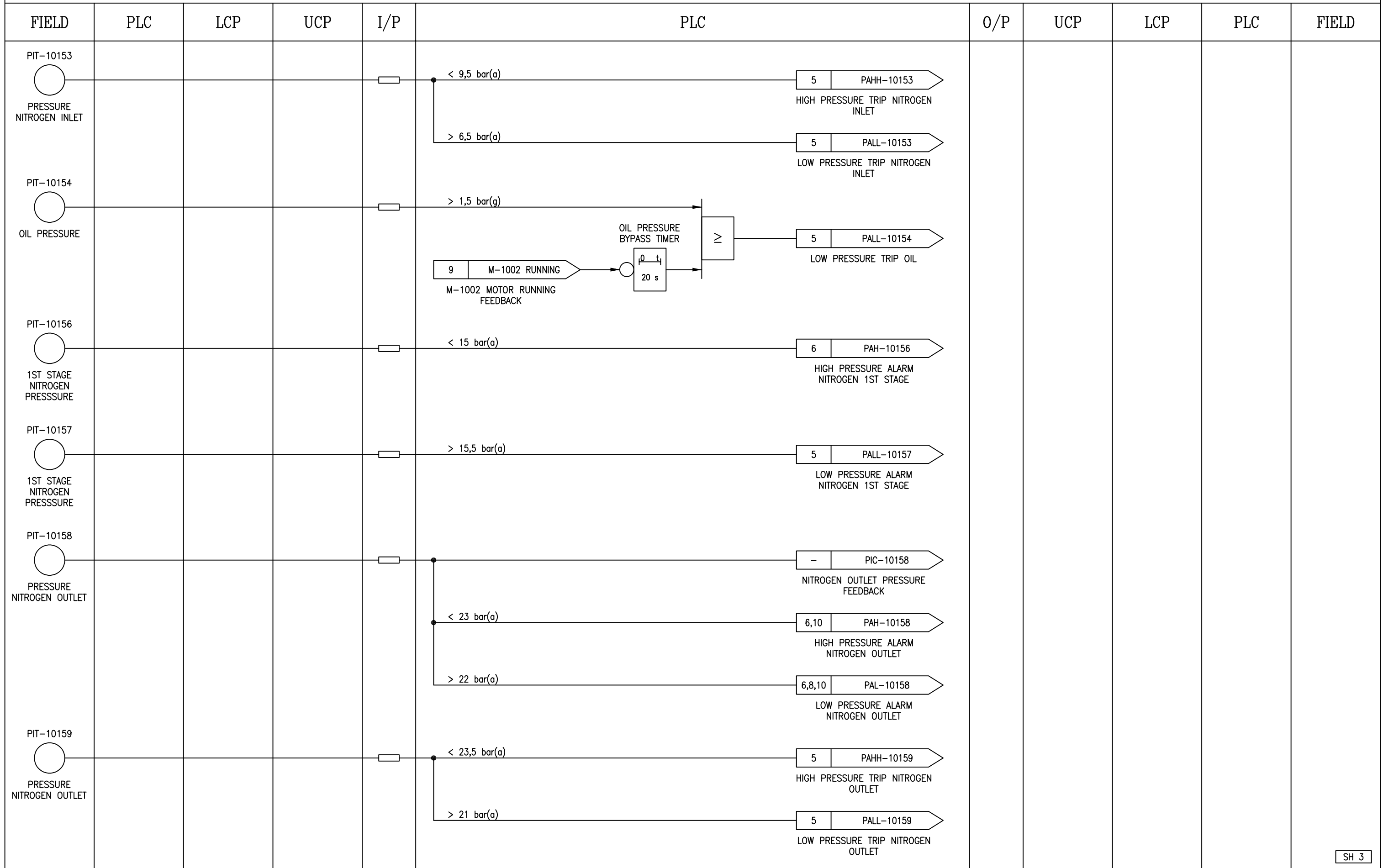


SUBJECT		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN COMPRESSOR	
CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION	IRAN
CLIENT REF	20-C-1002	DRAWING NO.	17811-32A
AIRPACK REF	17811	SHEETNO.	02 /13

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 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 NITROGEN 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-1002	DRAWING NO. 17811-32A	CHECKED BY KP	REV 03 18-03-2022 AS	
AIRPACK REF 17811	SHEETNO. 03 /13		REV 02 03-01-2022 AS	
			REV 01 29-11-2021 WZ	
			REV 00 20-11-2020 TJ	

LOGIC DIAGRAM

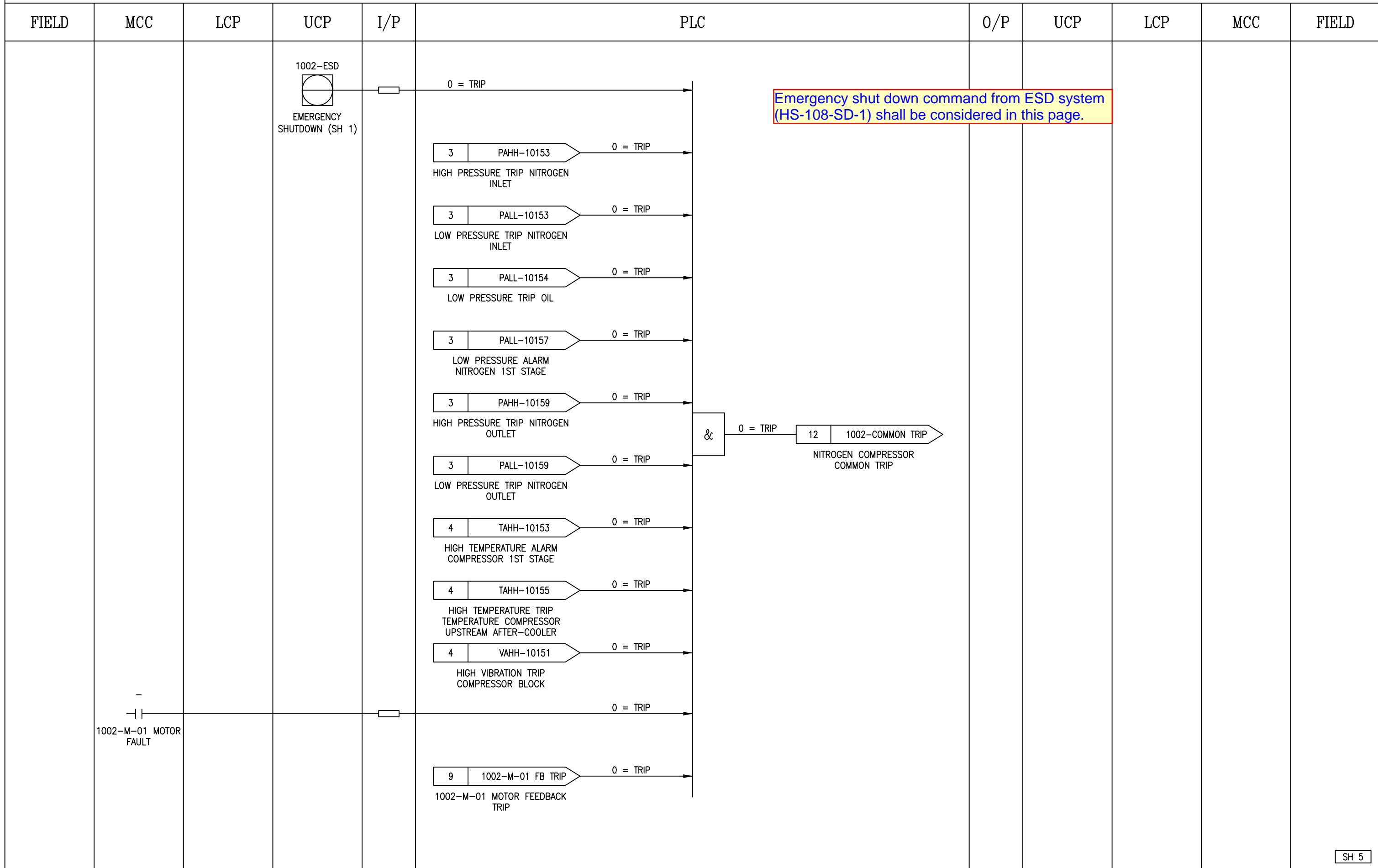


SH 4

NOTES:

	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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-1002	DRAWING NO. 17811-32A	CHECKED BY KP	REV 03 18-03-2022 AS	
AIRPACK REF 17811	SHEETNO. 04 /13		REV 02 03-01-2022 AS	
			REV 01 29-11-2021 WZ	
			REV 00 20-11-2020 TJ	

LOGIC DIAGRAM



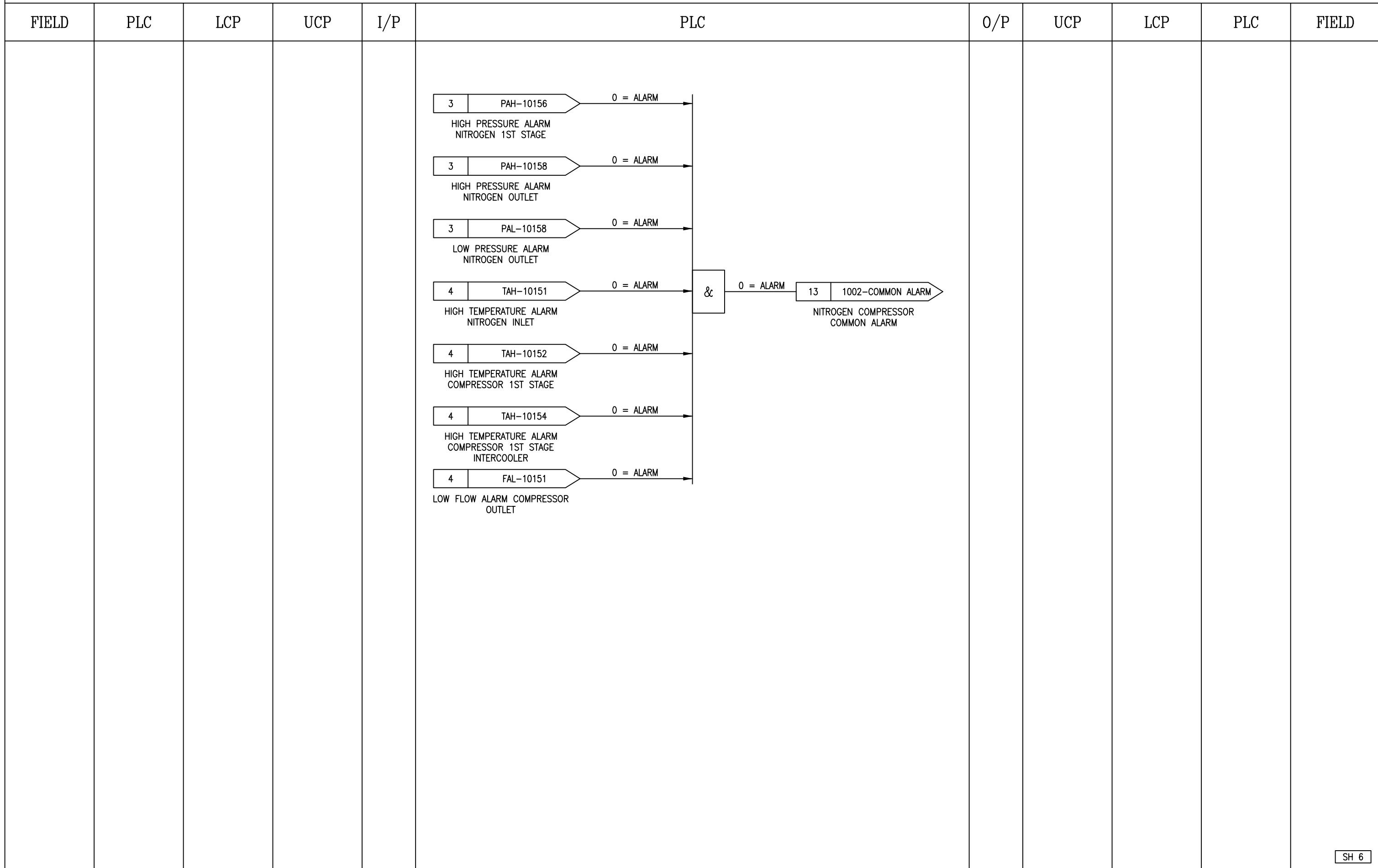
Emergency shut down command from ESD system (HS-108-SD-1) shall be considered in this page.

NOTES:



SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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			
CLIENT	BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION	IRAN	REV 03	18-03-2022	AS
CLIENT REF	20-C-1002	DRAWING NO.	17811-32A	REV 02	03-01-2022	AS
AIRPACK REF	17811	SHEETNO.	05 /13	REV 01	29-11-2021	WZ
				REV 00	20-11-2020	TJ

LOGIC DIAGRAM

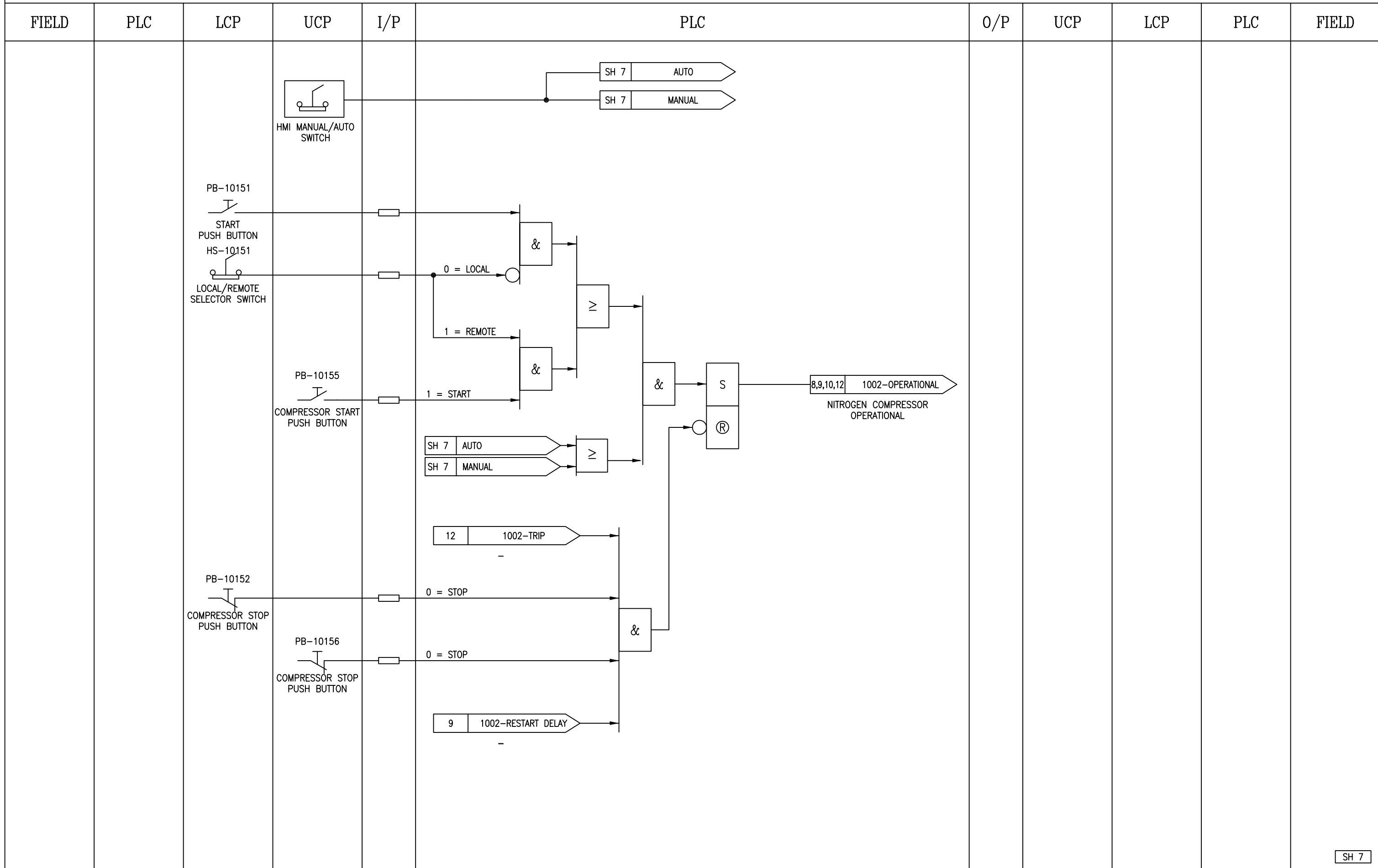


SH 6

NOTES:

	SUBJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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			
	CLIENT REF	20-C-1002	DRAWING NO.	17811-32A	REV 03	18-03-2022	AS
	AIRPACK REF	17811	SHEETNO.	06 /13	REV 02	03-01-2022	AS
					REV 01	29-11-2021	WZ
					REV 00	20-11-2020	TJ

LOGIC DIAGRAM

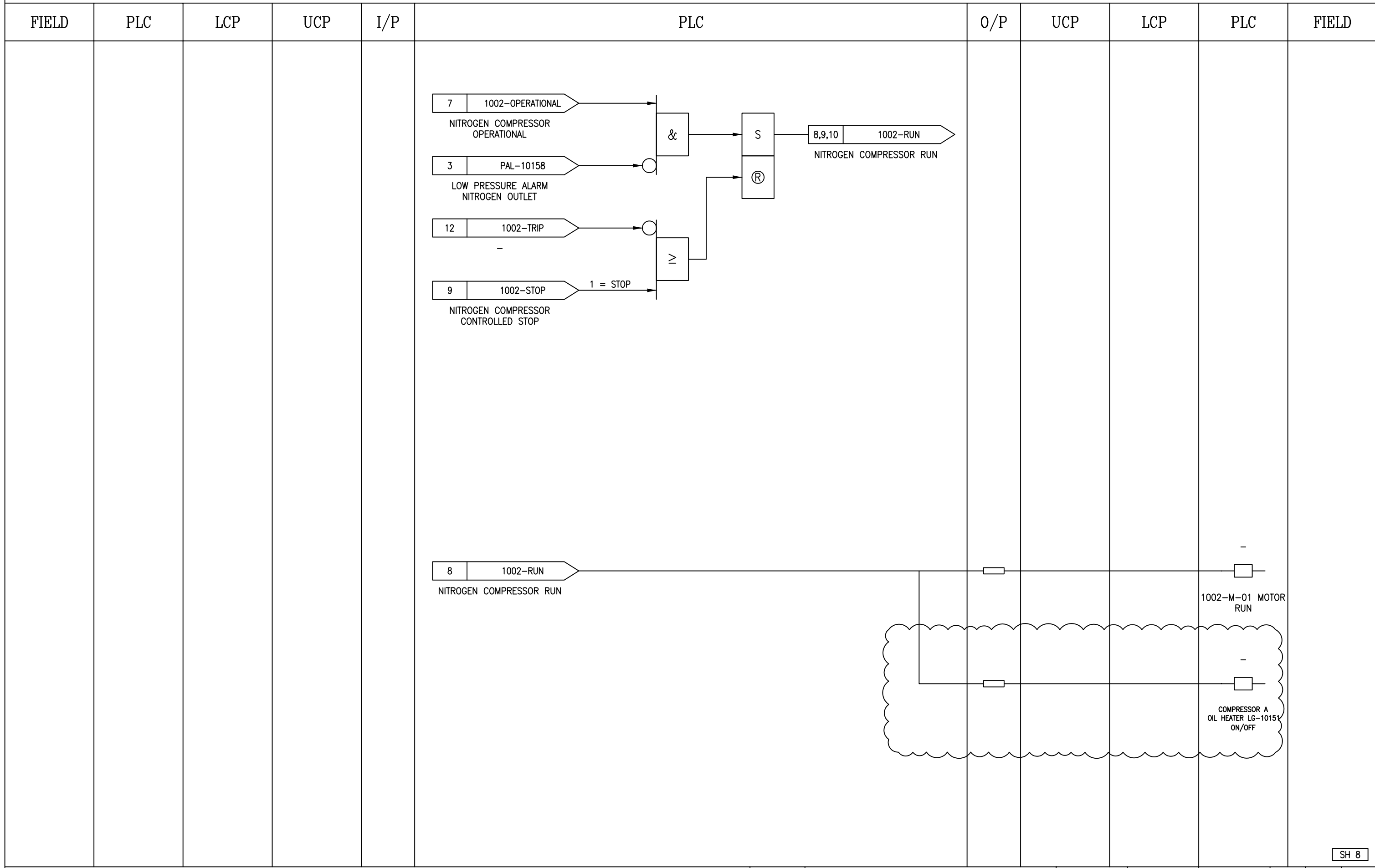


SH 7

NOTES:

	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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-1002	DRAWING NO. 17811-32A	CHECKED BY KP	REV 03 18-03-2022 AS	
AIRPACK REF 17811	SHEETNO. 07 /13		REV 02 03-01-2022 AS	
			REV 01 29-11-2021 WZ	
			REV 00 20-11-2020 TJ	

LOGIC DIAGRAM

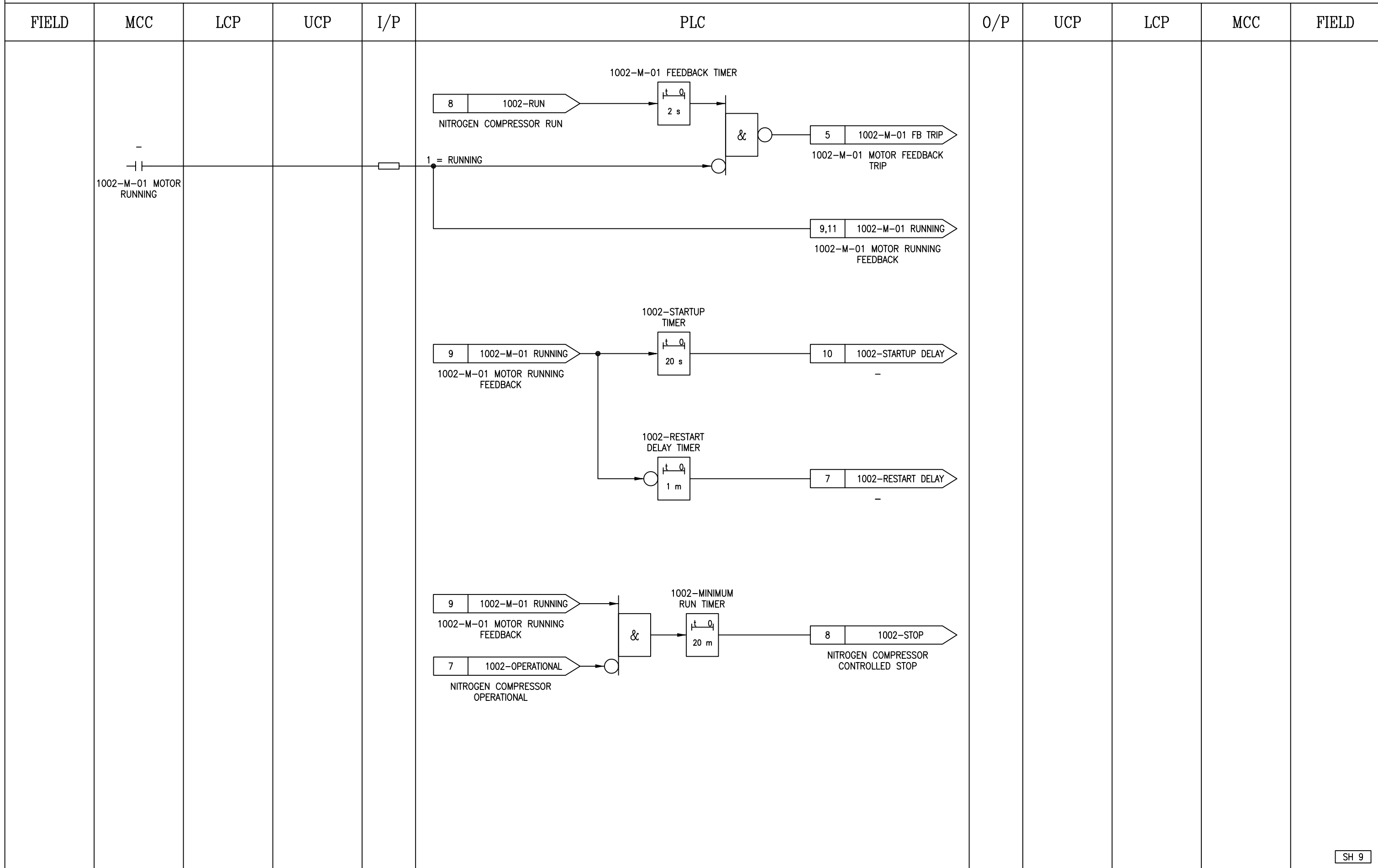


SH 8

NOTES:

	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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-1002	CHECKED BY	KP	PLANT LOCATION	IRAN
AIRPACK REF	17811	DRAWING NO.	17811-32A	SHEETNO.	08 /13
					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

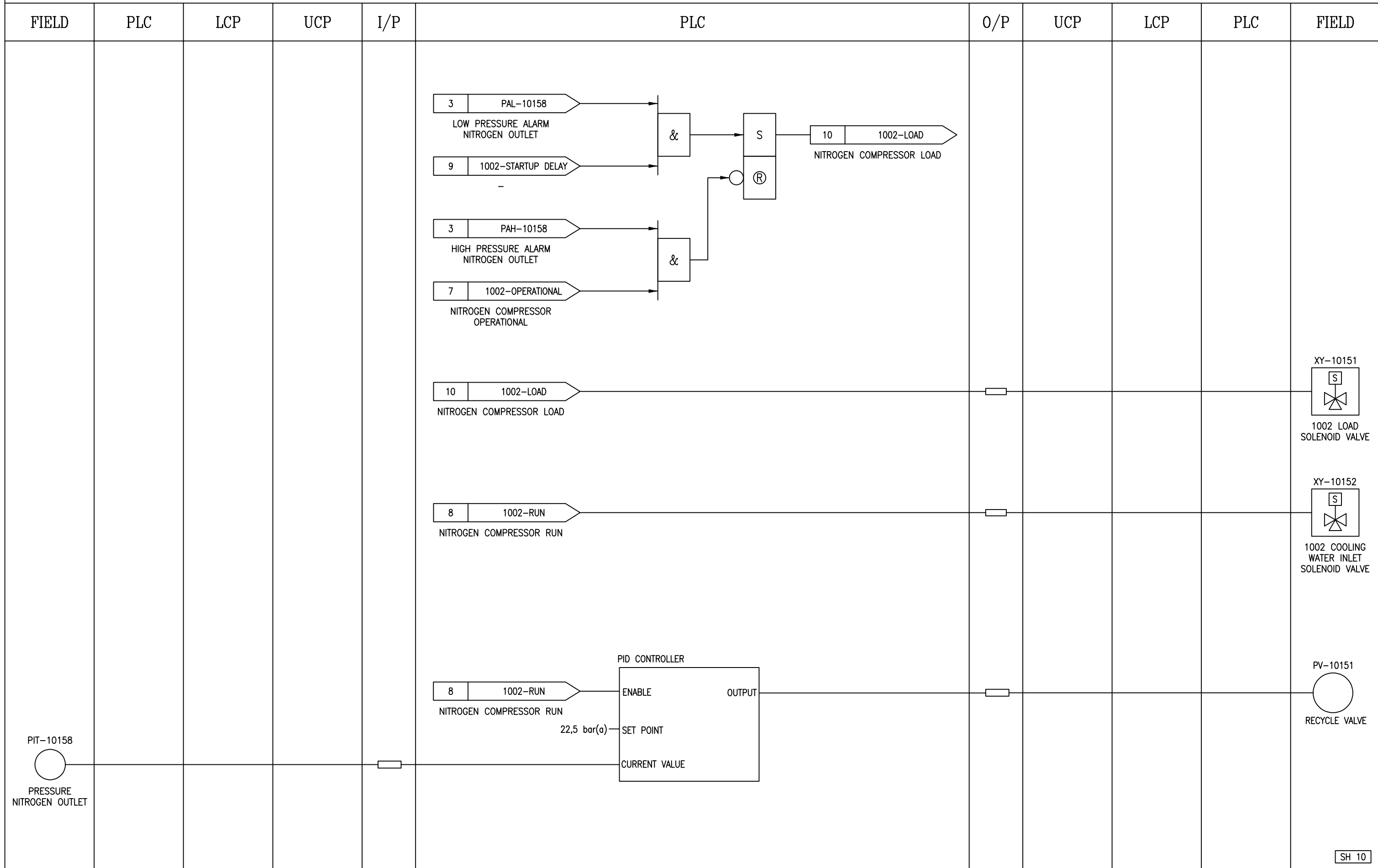


SH 9

NOTES:

	SUBJECT BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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	
			PLANT LOCATION IRAN	
CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	CLIENT REF 20-C-1002	AIRPACK REF 17811	DRAWING NO. 17811-32A	REV 03 18-03-2022 AS
			SHEETNO. 09 /13	REV 02 03-01-2022 AS
				REV 01 29-11-2021 WZ
				REV 00 20-11-2020 TJ

LOGIC DIAGRAM

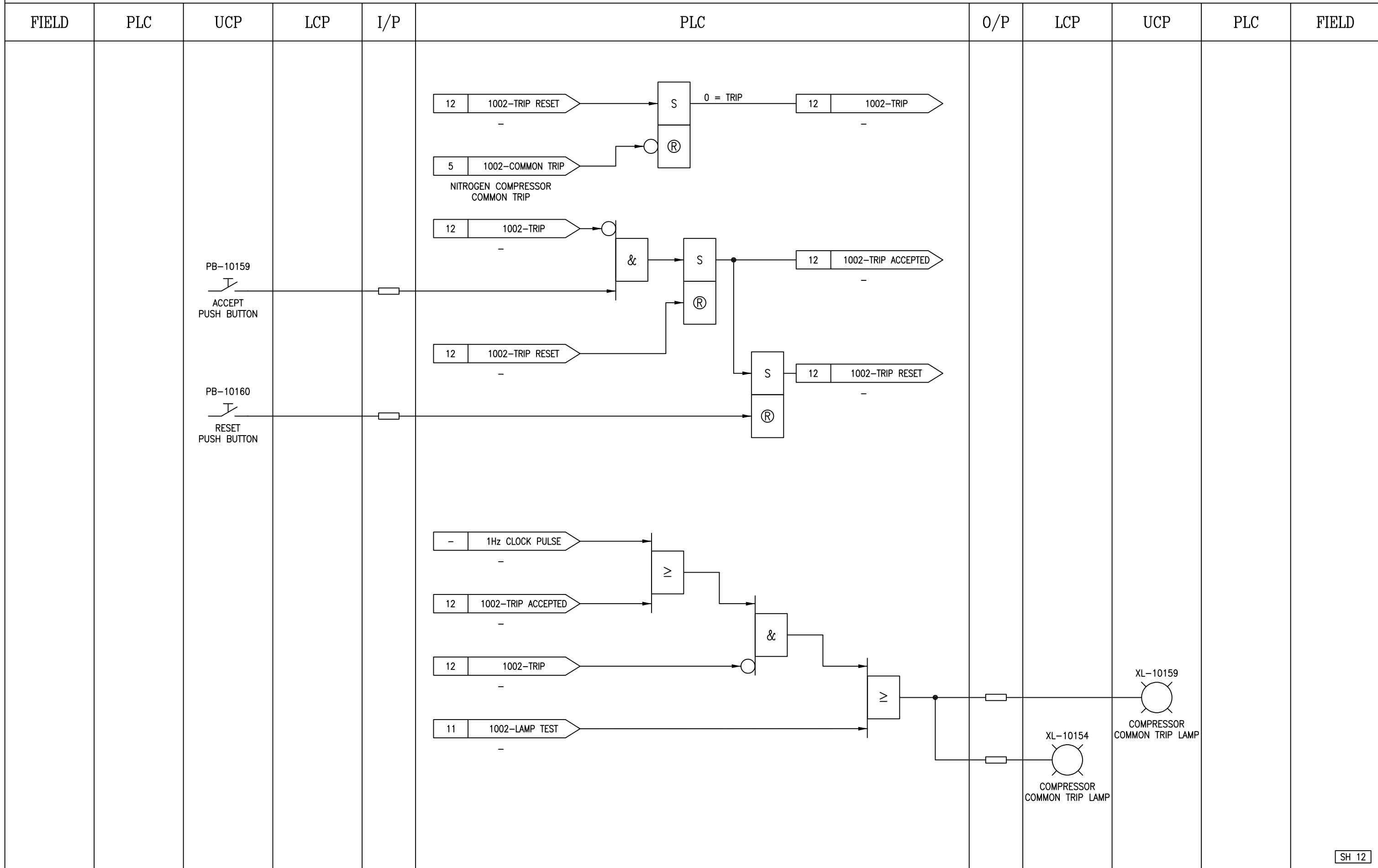


SH 10

NOTES:

	SUBJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN 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		
CLIENT REF	20-C-1002	DRAWING NO.	17811-32A	REV 03	18-03-2022	AS
AIRPACK REF	17811	SHEETNO.	10 /13	REV 02	03-01-2022	AS
				REV 01	29-11-2021	WZ
				REV 00	20-11-2020	TJ

LOGIC DIAGRAM

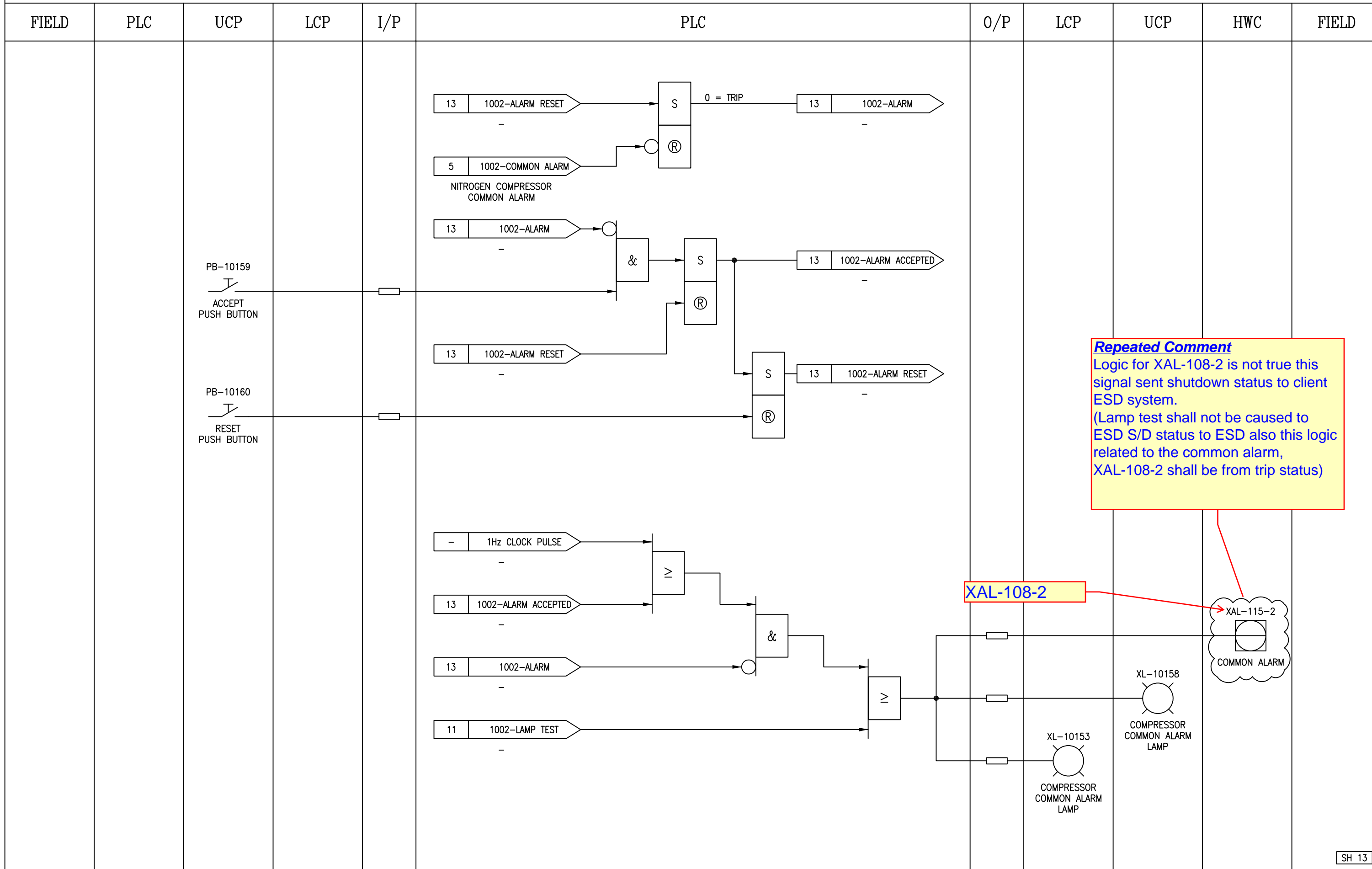


SH 12

NOTES:

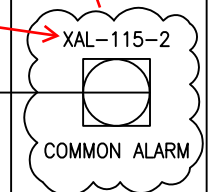
	SUBJECT	DATE	THIS DRAWING IS OWNED BY AIRPACK AND SHALL NOT BE PRINTED OR COPIED IN ANY OTHER WAY THAN WITH AIRPACKS PERMISSION
	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT NITROGEN COMPRESSOR	20-11-2020	REV 03 18-03-2022 AS
CLIENT	CLIENT REF	DRAWN BY	REV 02 03-01-2022 AS
BUSHEHR PETROCHEMICAL COMPANY (BUPC)	20-C-1002	TJ	REV 01 29-11-2021 WZ
AIRPACK REF	PLANT LOCATION	CHECKED BY	REV 00 20-11-2020 TJ
17811	IRAN	KP	
	DRAWING NO.	SHEETNO.	
	17811-32A	12 / 13	

LOGIC DIAGRAM



Repeated Comment
 Logic for XAL-108-2 is not true this signal sent shutdown status to client ESD system.
 (Lamp test shall not be caused to ESD S/D status to ESD also this logic related to the common alarm, XAL-108-2 shall be from trip status)

XAL-108-2



NOTES:

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	CLIENT BUSHEHR PETROCHEMICAL COMPANY (BUPC)	PLANT LOCATION IRAN	DRAWN BY TJ	
CLIENT REF 20-C-1002	DRAWING NO. 17811-32A	CHECKED BY KP	REV 03 18-03-2022 AS	
AIRPACK REF 17811	SHEETNO. 13 /13		REV 02 03-01-2022 AS	
			REV 01 29-11-2021 WZ	
			REV 00 20-11-2020 TJ	