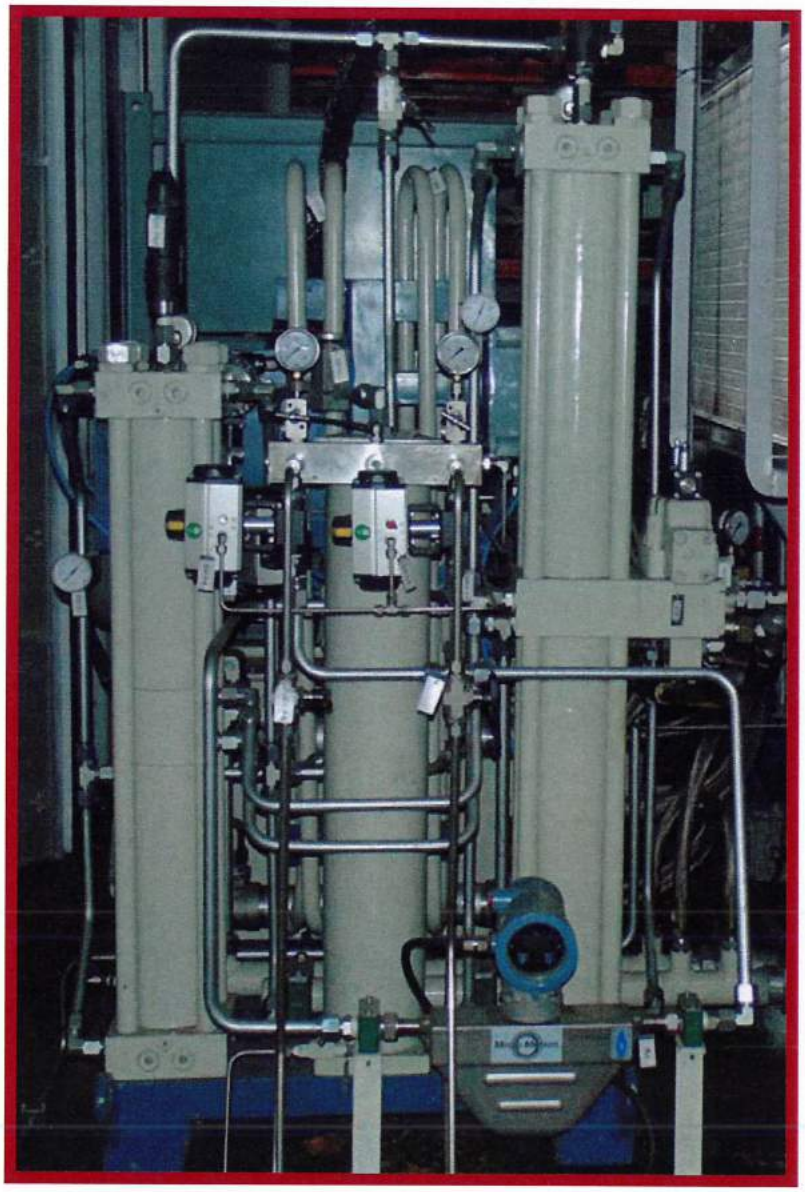
OPERATION AND SERVICE MANUAL
FOR
HYDRAULIC BOOSTER COMPRESSOR

Model: B30-30



INDIAN COMPRESSORS LIMITED

COMPRESSORS IDENTIFICATION INFORMATION

Compressor Model: **B30-30**

Serial Number: .....

PO. No. **HOGPL/PO/49/Booster comp./ICL/ 2019-20**
Date: 11.10.2019

Year Of Manufacture: **March. 2020**

Customer: HPOIL GAS PRIVATE LIMITED

Compressor B30-30

The compressor is supplied completed with:
1. Closed loop cooling system with radiator and electric fan: the gas is cooled , after is compression stage, in water gas heat exchanger . The oil is cooled by means of a water – oil heat exchanger.

2. N.1 drive explosion – proof asynchronous electric motor ; n degree of poles; 4 – 415 V/50Hz – +/- 3% power 22 kw.

3. Safety and control devices including:- delivery pressure gauges ; delivery pressure switch; gas high temperature thermostat ; oil high temperature thermostat ; safety relief valves on each compression stage; sight and electric oil levels; start stop push button panel.

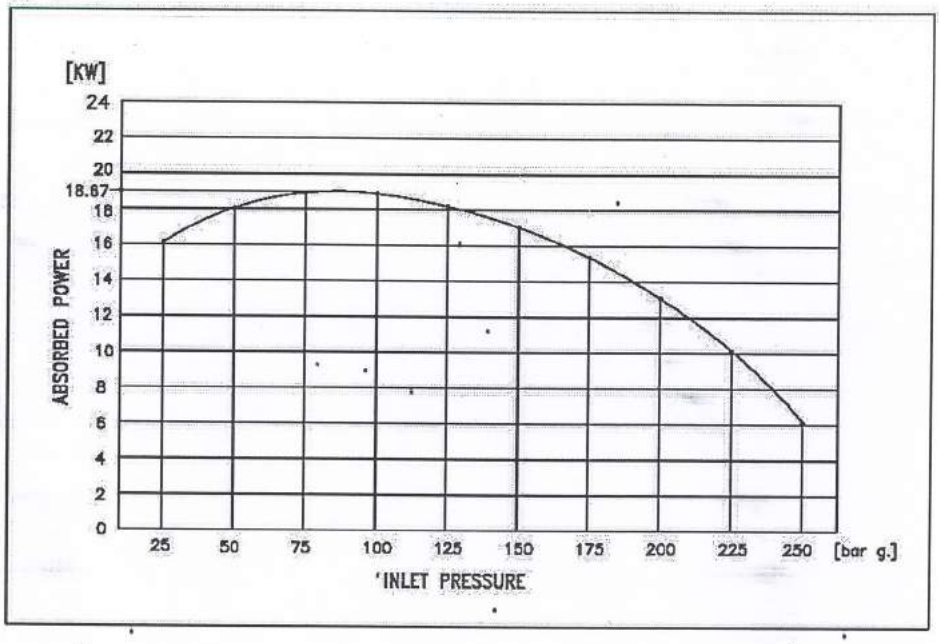
Technical notes:

- The operation of the compressor is automatic
- The above mentioned groups are interconnected and mounted on a single base
- No venting system is provided when the compressor starts and stops since the compressor can start under load - hydraulic oil capacity; 200 litres.
- Noise level – 1 meter distance – 75 dBa.
- Room temperature : 10/+45 degree C – hydraulic oil temperature ; +10/50 degree C
- Hydraulic oil filtering ; 20 micron – intake gas filtering ; 10 micron.
- Gas and water piping entirely pre-built and assembled
- The intake and delivery gas connections are placed on the base. The vents , including the safety relief valve exhausts are collected in a manifold ; we advise you to convey these exhausts into safety area.
- On the compressor can be installed an additional water – gas cooling system which must be connected by the customer when the room temperature is high or low gas temperature on the outlet is needed.
- As to the installation , no particular foundation is needed ; the compressor has simply to be set on the floor and gas , electrical and water connections are only to be connected to start the compressor.

INDEX

TECHNICAL DATA OF COMPONENTS

DO NOT SCALE THE DRG.	IF IN DOUBT ASK	A4



DIDWANIA COMPRESSORS Safe CNG. Tecnology	TITLE: CAPACITY Vs ENERGY CONSUMPTION CURVE FOR HYDRAULIC COMPRESSOR B30-30		INITIALS	DATE
		DRAWN	Jacob	29.01.08
		CHECKED	KSB	29.01.08
		APPROVED		
INDIAN COMPRESSORS LIMITED		DRG.NO.	SCNG-026A	

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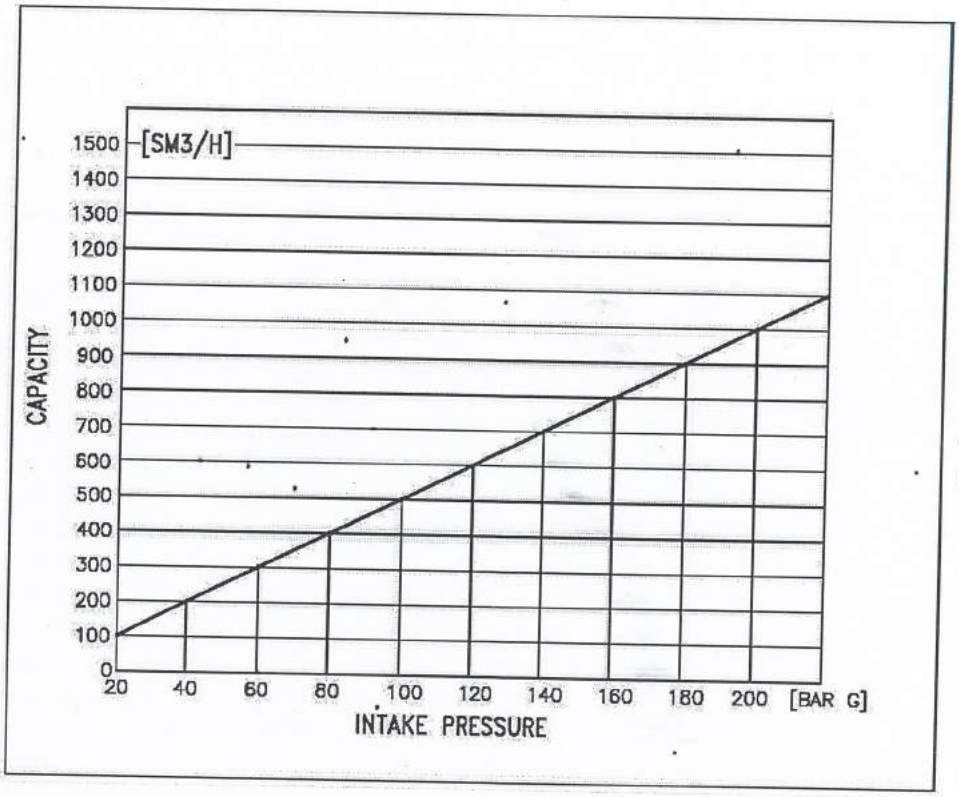
DO NOT SCALE THE DRG. | IF IN DOUBT ASK | A4



DIDWANIA COMPRESSORS Safe CNG. Tecnology	TITLE: CAPACITY Vs SUCTION PRESSURE CURVE FOR HYDRAULIC COMPRESSOR B30-30		INITIALS / DATE
		DRAWN	
		CHECKED	
		APPROVED	
INDIAN COMPRESSORS LIMITED		DRG.NO.	SCNG-027

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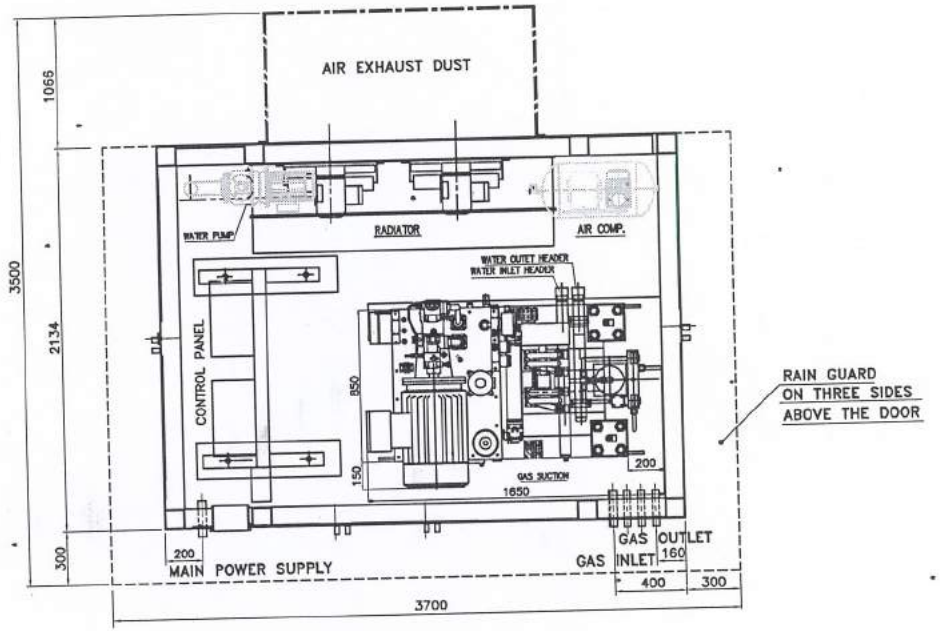
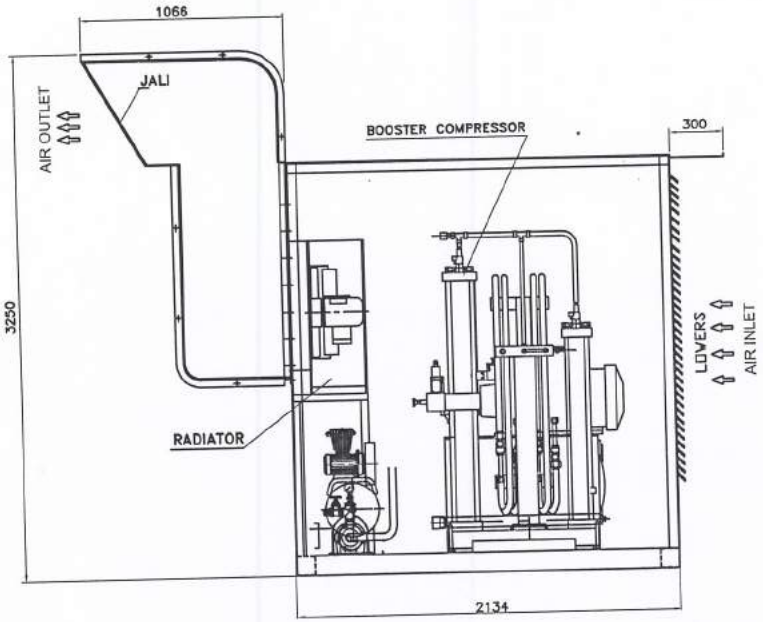
Date: 2026.03.30 17:40:28 IST

COMPRESSOR DIMENSIONS

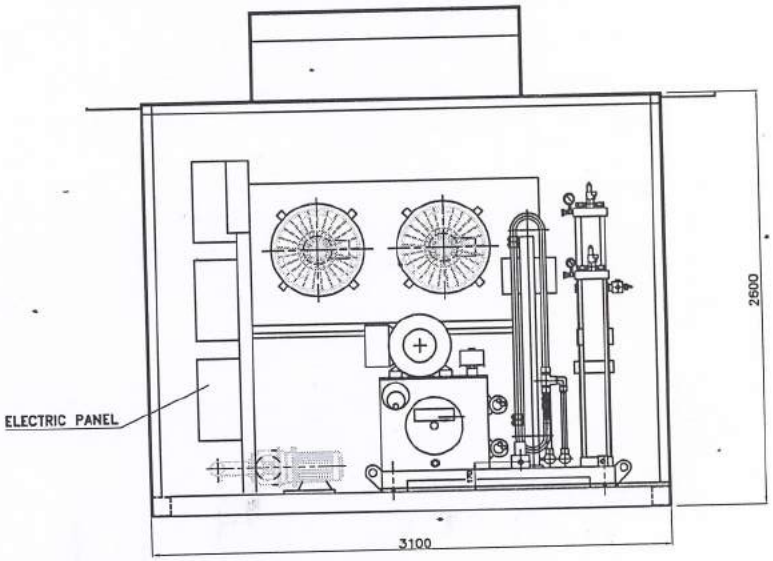
DO NOT SCALE THE DRG. | IF IN DOUBT ASK

A2





SECTIONAL SIDE VIEW



ELEVATION

ALL DIMENSIONS ARE IN MM.

OVERALL SIZE IN MM.		
L	W	H
3700	3500	3250

WEIGHT IN TON	
EMPTY	3.8 TON
FULL LOAD	4.5 TON

CUSTOMER: HPOIL GAS PRIVATE LIMITED
P.O. No. : HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
DATE: 11.10.2019

Rev.	DATE	MODIFICATIONS	INITIALS
2			
1			

DIDWANIA COMPRESSORS

INDIAN COMPRESSORS LIMITED

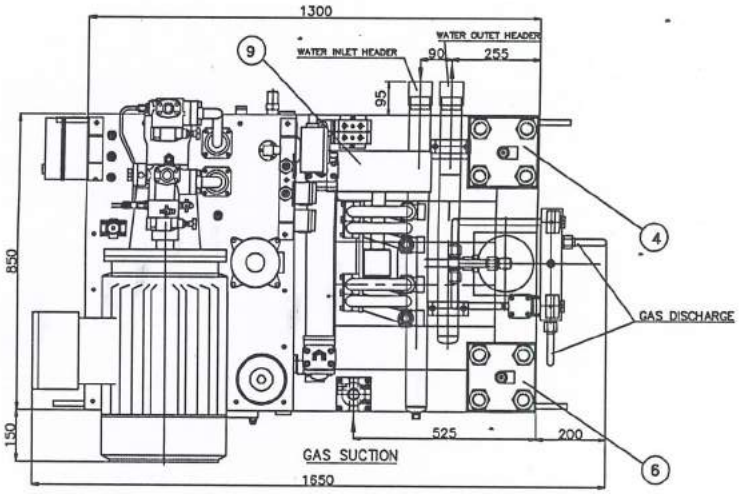
TITLE: G.A.DRAWING BOOSTER B30-30 WITH ENCLOSURE (WITHOUT CASCADE)

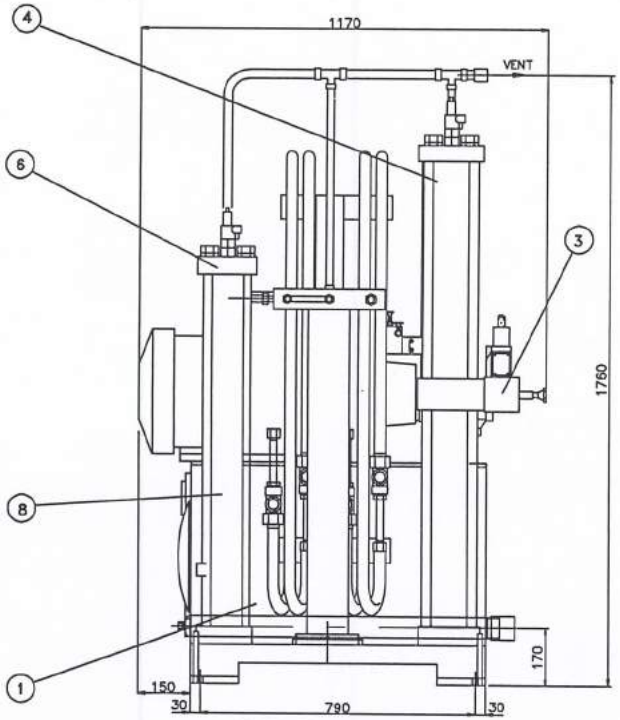
	INITIALS	DATE
DRAWN	JACOB	20.05.19
CHECKED	N.SINGH	20.05.19
APPROVED		
DRG.NO.	GA-B30-0810	R0

DO NOT SCALE THE DRG. | IF IN DOUBT ASK

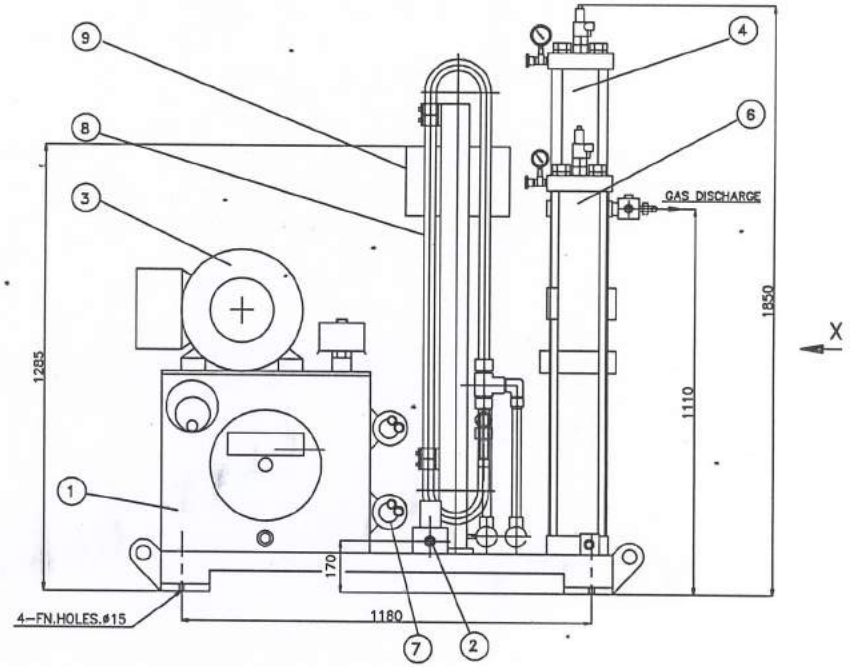
A3

S.NO.	QTY.	DESCRIPTION
9	1	ELECTRIC PANEL
8	2	GAS-WATER HEAT EXCHANGER
7	1	OIL-WATER HEAT EXCHANGER
6	1	2ND. STAGE CYLINDER
4	1	1ST. STAGE CYLINDER
3	1	OIL ELECTROPUMP GROUP
2	1	SUCTION LINE GRUOP
1	1	OIL TANK WITH ACCESSORIES





VIEW FROM ARROW-X



NOTE :

1. COMPLETE ENCLOSURE SHALL BE MOUNTED DIRECT ON FOUNDATION. NO FOUNDATION BOLTS REQUIRED FOR ERECTION OF ENCLOSURE AS THERE IS NO DYNAMIC LOAD IN OUR HYDRAULIC BOOSTER COMPRESSOR.
2. ENTIRE UNIT IS SUPPLIED WITH ACOUSTIC ENCLOSURE.

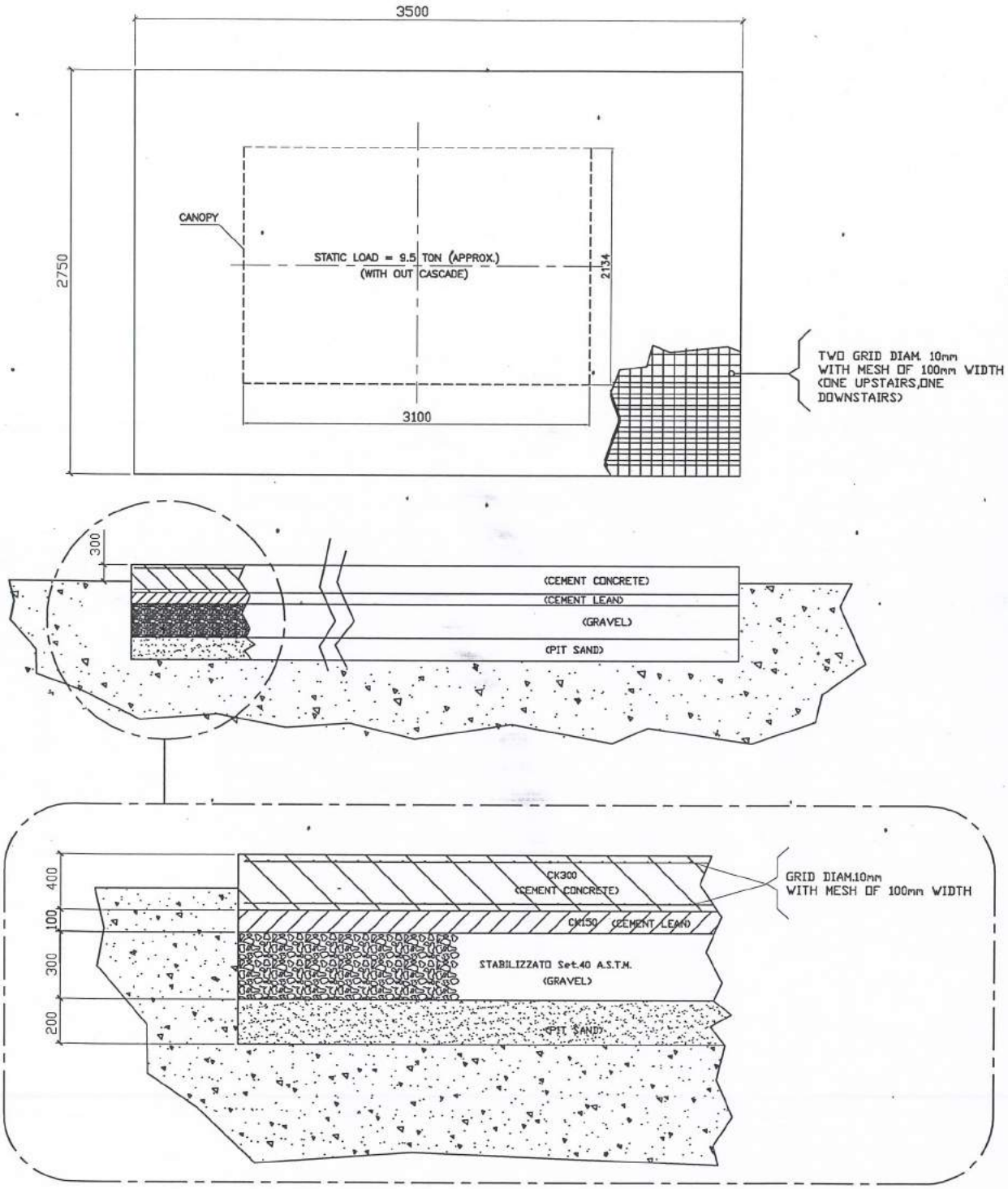
NOTE - ALL DIMENSIONS ARE IN M.M.

CUSTOMER: HPOIL GAS PRIVATE LIMITED
P.O. No. : HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
DATE: 11.10.2019

DIDWANIA COMPRESSORS	TITLE GEN. LAYOUT OF CNG BOOSTER COMPRESSOR	
		INITIALS / DATE
	DRAWN	JACOB 20.05.19
	CHECKED	N.SINGH 20.05.19
	APPROVED	
INDIAN COMPRESSORS LIMITED	DRG.NO.	SCNG-004A R0

COMPRESSOR FOUNDATION

ISO CONTAINER PLATE



NOTE – ALL DIMENSION ARE IN M.M.

NOTES :–

1. GROUTING OF EQUIPMENT ON THE FOUNDATION INCLUDING SUPPLY OF MATERIAL WITH FOUNDATION BOLT, ANCHOR FASTENERS AS REQUIRED IS PART OF ERECTION * IS IN ICL SCOPE.
2. COMPLETE ENCLOSURE SHALL BE MOUNTED DIRECT ON FOUNDATION. NO FOUNDATION BOLTS REQUIRED FOR ERECTION OF PACKAGE AS THERE IS NO DYNAMIC LOAD IN OUR HYDRAULIC BOOSTER COMPRESSOR.

CUSTOMER: HPOIL GAS PRIVATE LIMITED
P.O. No. : HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
DATE: 11.10.2019

Rev.	DATE	MODIFICATIONS	INITIALS

DIDWANIA COMPRESSORS

TITLE: FOUNDATION OF CNG. BOOSTER COMPRESSOR MODEL: B30-30

INDIAN COMPRESSORS LIMITED

	INITIALS	DATE
DRAWN	JACOB	20.05.19
CHECKED	N.SINGH	20.05.19
APPROVED		
DRG.NO.	SCNG-002M	

Digitally signed by Bivek Kumar Singh
Date: 2026.03.30 17:40:28 IST

Preventive Maintenance Schedule 4000 hours

Estimated Down Time: 16 Hours

Number of Mandays required: 2 Days

S.No.	Type of Maintenance	Components to replace	Remarks
A) Booster Compressor:			
1	Replace the Lubrication Oil Filter	Lubrication oil filter	
2	Replace the Suction Gas Filter	Suction Gas Filter	
3	Check the condition of Suction Valve for 1st stage, Replace if required		
4	Check the condition of Discharge Valve for 1st stage, Replace if required		
5	Check the condition of Suction Valve for 2nd stage, Replace if required		
6	Check the condition of Discharge Valve for 2nd stage, Replace if required		
7	Clean the contacts of Main / Star / Delta Contactors, Replace if required		
8	Check the setting of Reversal valve		
9	Check the setting of Pressure Switch of High Bank		
10	Check the setting of Pressure Switch of Medium Bank		
11	Check the setting of Suction Pressure Switch		
12	Check the setting of Emergency Pressure Switch		
13	Tight all the Electrical connection.		
14	Check Voltage and Current with Multimeter		
15	Check the setting of Overload relay of Main Motor		
16	Check the setting of Overload relays of Auxillary Motors		
17	Clean the electrical panel		
18	Check the oil level. It should be 50% to 70%		
19	Check the water level. It should be 60% to 90%		
20	Check for any Gas leakage. Rectify if found any		
21	Check for any Oil leakage. Rectify if found any		
22	Check for any Water leakage. Rectify if found any		
23	Check for any Abnormal Sound. Rectify if found any		
24	Fill all the working parameters in the Log Book		
25	Drain the moisture and oil from the oil seperator		

26	Clean the Compressor		
B) Air Compressor:			
1	Replace the Air Compressor Oil	Air compressor Oil	
2	Check the setting of Air Compressor Pressure Switch		
3	Check the condition of Air Compressor Belt, Replace if required		
4	Check for any Air leakage. Rectify if found any		
5	Drain Water from the Air Receiver of Air Comp.		
6	Check for any Abnormal Sound. Rectify if found any		

Preventive Maintenance Schedule 10000/20000 hours

Estimated Down Time: 36 Hours

Number of Mandays required: 3 Days

S.No.	Type of Maintenance	Components to replace	Remarks
A) Booster Compressor:			
1	Replace the Lubrication Oil Filter	Lubrication oil filter	
2	Replace the Suction Gas Filter	Suction Gas Filter	
3	Replace the 1st Stage Piston rings	Piston Ring 1st Stg.	
4	Replace the 2nd Stage Piston rings	Piston Ring 2nd Stg.	
5	Replace the 1st Stage Piston Slyde Rings	Piston Slyde Ring 1st Stg.	
6	Replace the 2nd Stage Piston Slyde Rings	Piston Slyde Ring 2nd Stg.	
7	Replace the 1st Stage Oil Dynamic Seal	Oil Dynamic Seal 1st Stg.	
8	Replace the 2nd Stage Oil Dynamic Seal	Oil Dynamic Seal 2nd Stg.	
9	Replace the 1st Stage Oil Slyde Ring	Oil Slyde Ring 1st Stg.	
10	Replace the 2nd Stage Oil Slyde Ring	Oil Slyde Ring 2nd Stg.	
11	Repalce the Compressor Oil	Compressor Oil	
12	Replace the Water in Compressor Radiator	Radiator Water	
13	Check the condition of Liner 1st Stage		
14	Check the condition of Liner 2nd Stage		
15	Check the condition of Piston Rod 1st Stage		
16	Check the condition of Piston Rod 2nd Stage		
17	Check the condition of Piston 1st Stage		
18	Check the condition of Piston 2nd Stage		
19	Check the condition of Suction Valve for 1st stage, Replace if required		
20	Check the condition of Discharge Valve for 1st stage, Replace if required		
21	Check the condition of Suction Valve for 2nd stage, Replace if required		
22	Check the condition of Discharge Valve for 2nd stage, Replace if required		
23	Check the condition of Air Compressor Belt, Replace if required		
24	Clean the contacts of Main / Star / Delta Contactors, Replace if required		
25	Check the setting of Reversal valve		

26	Check the setting of Pressure Switch of High Bank		
27	Check the setting of Pressure Switch of Medium Bank		
28	Check the setting of Suction Pressure Switch		
29	Check the setting of Emergency Pressure Switch		
30	Tight all the Electrical connection.		
31	Check Voltage and Current with Multimeter		
32	Check the setting of Overload relay of Main Motor		
33	Check the setting of Overload relays of Auxillary Motors		
34	Clean the electrical panel		
35	Check the oil level. It should be 50% to 70%		
36	Check the water level. It should be 60% to 90%		
37	Check for any Gas leakage. Rectify if found any		
38	Check for any Oil leakage. Rectify if found any		
39	Check for any Water leakage. Rectify if found any		
40	Check for any Abnormal Sound. Rectify if found any		
41	Fill all the working parameters in the Log Book		
42	Drain the moisture and oil from the oil seperator		
43	Clean the Compressor		

B) Air Compressor:

1	Replace the Air Compressor Oil	Air compressor Oil	
2	Check the setting of Air Compressor Pressure Switch		
3	Check the condition of Air Compressor Belt, Replace if required		
4	Check for any Air leakage. Rectify if found any		
5	Drain Water from the Air Receiver of Air Comp.		
6	Check for any Abnormal Sound. Rectify if found any		

Daily Check List for Booster B30-30 Compressor

S.No.	Type of Check	Status	Remarks
1	Clean the radiator from the top with Air		
2	Check the oil level. It should be 50% to 70%		
3	Check the water level. It should be 60% to 90%		
4	Check for any Gas leakage. Rectify if found any		
5	Check for any Oil leakage. Rectify if found any		
6	Check for any Water leakage. Rectify if found any		
7	Check for any Air leakage. Rectify if found any		
8	Check for any Abnormal Sound. Rectify if found any		
9	Fill all the working parameters in the Log Book		
10	Drain the moisture and oil from the oil seperator		
11	Drain Water from the Air Reciever of Air Comp.		
12	Check the oil level in Air Compressor		
13	Clean the Compressor		

MANUAL

INDEX

Compressor B30-30

TECHNICAL DATA

Compressor Type :	B30-30
Number of Cylinder:	2
Number of compression Stage:	2
Operation :	Continuous
Compressed Gas	Natural Gas

Gas intake requirements :

- Minimum pressure:	28 bar r
- Maximum Pressure:	250 bar r
- Gas Temperature:	20 degree c

Gas exhaust requirements :

-Maximum Pressure :	250 bar
Gas Temperature After final cooling :	about 10 degree C over ambient temperature

PERFORMANCE

Intake Pressure	Exhaust Pressure	Capacity
bar.r	bar.r	Nm3/h
28	250	200
50	250	360
85	250	600
200	250	1400

Environmental Operational Temperature :

- Minimum temperature :	- 10 c
- Maximum temperature :	-45 c

Compressor B30-30

Hydraulic Oil :-

- Quantity: 250 liters
- Recommended oil : SHELL TELLUS 32 or HLP-32

Oil Specification :

Density @ 15 C : 0.872 Kg /dm3

Flammability point V.A. ; 220 degree C

Flow point :- 30 degree C

Kinematic viscosity @ 40 C : 32 cSt

Kinematic viscosity at 100 C : 5,5 cSt

Viscosity index; 106

Hydraulic Oil Filtration;

(Model 30 RF 20 C)

-Low – pressure filter (.max. 10 bar) installed on exhaust circuit. Filtration capability ; 20 micron.

Intake gas filtration;

- (Modal DF60 with cartridge type 0060 D010 BN3HC)

-Filter for medium – pressure (max. operational pressure 250 bar). Filtration capability;10 micron.

Cooling system

The cooling of the gas is achieved by means of an air – gas heat exchanger .

(Modal NHLN 58C)

Cooling water capacity: 80 liters

Compressor Oil

SERVO PLUS –100
Set Pressure: 6 to 8 bar

Compressor B30-30.

ELECTRIC MOTORS:

Hydraulic oil pump Motor

1 no. Explosion proof electric motor with the following specifications :

Make	:Crompton Greaves
Rpm.	: 1470
Ins.	: CI. F
Amp.Temp.	:45 deg.C
Polarities	: 4
Voltage	: 415 +/- 10%
Frequency	: 50 Hz
Power absorption	:22 kw
Construction type	: B35

Radiator fan Motor

2 nos. electric motors;

Pole	: 4
Voltage	: 380-415 VAC
Frequency	: 50 Hz
Power Absorption	: 0.75 kw

Exhaust fan Motor

1 no. electric motors:

Pole	: 4
Voltage	: 380-415 VAC
Frequency	: 50 Hz
Power Absorption	: 0.75 kw

Compressor B30-30.

Water Pump Motor

1 no. electric motor:

Pole	: 2
Voltage	: 380-415 VAC
Frequency	: 50 Hz
Power Absorption	: 1.5 kw

Air Compressor Motor

1 no. electric motor:

Voltage	: 380-415 VAC
Frequency	: 50 Hz
Power Absorption	: 1.5 kw

Mechanic Characteristics :

1st stage:
diam 120 mm
stroke 526 mm
rod 50 mm

2nd stage:
diam 100 mm
stroke 330 mm

Compressor B30-30.

COMPERESSOR OPERATION

The compressing unit is made up of the following main components ;

A Tank and accessories (position 201 , drawing no. H-0000111N
C Pumping assembly (position 2, 3 drawing NO. G-0000240N
D Hydraulic exchange assembly (position 216, 208 drawing NO. H-0000111N
E First stage pumping unit (position 2, drawing NO. G-0000240N
F Second stage pumping unit (position 3, drawing NO. G-0000240N
G First and stage water air cooling assembly (position 4, drawing NO. G-0000240N)

HYDRAULIC OIL CIRCUIT

Re; drawing H-0000111N

The compressor is driven hydraulically. The hydraulic oil stored in tank 201 is with drawn by double pump 206 powered by electric motor 204 and alternatively sent, by means of main sprig – loaded distributor 208,to the oil chambers of the pumping units.

The hydraulic circuit also includes maximum pressure relief valves 209 and 210.

Maximum pressure relief valve 209 discharge the main capacity section of pump 206 when a pre-determined hydraulic pressure valve is reached. This valve can be ready by pressure gauge P121.

Pressure gauge P122 reads the pressure of the hydraulic oil driving the pistons.

By-opening shut – off cock 214, it is possible to discharge the main capacity section of the pump.

GAS CIRCUIT

Re drawing G-0000240N

The gas coming from the pipe line goes through filter 1, is compressed in the 1st stage cylinder , then cooled in the air – gas heat exchanger 4, is further compressed in the 2nd stage and gain cooled in heat exchanger 4 , Moreover the gas circuit includes pressure gauge P101, threads the pressure from the first stage , pressure gauge P102 that reads the pressure from the 2nd stage , safety valve PSV01 in 1st stage , and safety valves PSV02 in 2nd stage.

The compressed gas goes through Filter – Damper 5 and is intercepted by Thermostat TSXH01, by Pressostats PSL / H 03 , and PSL/ H 04.

Compressor B30-30

SAFETY AND MONITORING DEVICES

Re: drawing G-0000240N

The equipment includes :

- intake gas filter (position 1)
- gas safety relief valves on each stage of the compressor (PSV01 1ST stage, PSV02 2NDstage).
- Inter-stage and delivery pressure gauge (P101 1ST stage delivery, P102 2nd stage delivery)
- Gas thermostat TSXH01

Re ; drawing H-0000111N

- Hydraulic circuit pressure gauges P122
- Visual indicators of oil temperature and level LG 20 , T120
- Electric oil level indicator LSXL20
- Oil thermostats TSXH20
- Maximum oil pressure relief valves 209, 210

COOLING SYSTEM

The cooling system consist of the following elements :

-Air – water cooling assembly

(position 303, drawing No. I-0000142N

At the outlet of each stage, the gas is cooled in the water gas heat exchanger , which is equipped with above – mentioned electric fan.

-water oil heat exchanger

(position 310 , drawing No . I-0000142N

The hydraulic oil is cooled by means of a water- oil heat exchanger.

COMPRESSOR INSTALLATION AND HOOK – UPS

NO particular foundation is required for the installation of the compressor. The unit can simply sit on the ground.

To proceed with the compressor 's installation, the following procedure must be followed.

- Connect the compressor to the natural gas distribution network by means of the ¾'' NPT female thread located on the filter block, position 1 in drawing No. G-0000240N
- Connect the delivery pipe by means of the ½'' NPT female thread pos A,B,C, D drawing No . G-0000240N
- Connect the cooling heat exchanger.

Compressor B30-30

COMPRESSOR START – UP

Re: drawing No. G-0000240N and
The new compressor can perform two function :

1 Compress the gas stored from vessel truck to dispenser
2 Compress the gas from to line to dispenser
A) Before start – up open the valves at suction and discharge line gas.
B) Check the oil level in the tank. It must reach at least ¾ of the visual oil level indicator LG20 (drawing no. H-0000111N.)

Otherwise, do as follow:

Fill the hydraulic oil tank up to the total submersion of the visual oil level indicator (oil quantity required: 210 liters).

Use hydraulic oil with the following specifications ;

Density @ 15 C:	0.872 Kg/ dm3
Flammability point V.A. :	220 C
Flow point :	-30C
Kinematic viscosity @ 40 C :	32 cSt
Kinematic viscosity @ 100 C :	5.5 cSt
Viscosity index :	106

We recommended the use of hydraulic oil type SHELL TELLUS 32 equivalent (i.e. MOBILFLUID 32).

To fill with oil :

1 Remove fill plug 203
2
3 Fill oil tank up to the complete submersion of visual level indicator LG20
4
5 Fcrew plug 203 back on

C) Make sure that the cooling water flows through the oil heat exchanger and that all shut – off cocks are open.

G) Press the "run" button , located on the compressor's panel.

Compressor B30-30

DRAINING OF SEPARATORS – DAMPER

Re drawing No . – G-0000240N

The draining of the fluid (oil and condensation) from the separator – damper 5 is achieved by opening valves 9 and only after the 8 and re-closing them when the draining is complete.

Be carefull: before opening the valve 9 check that valve 9 is closed.

SPARE PARTS

When ordering spare parts, please indicate ;

1 – compressor type and serial number (located on the identification plate of the compressor) : B30-30 mat, 38059.

2 – position or denomination, and code number of the part required .

3 – quantity required.

LIST OF ENCLOSED DRAWINGS AND PHOTOGRAPHS

G-0000240N	GAS CIRCUIT SCHEMATIC.
H-0000111N	HYDRAULIC CIRCUIT SCHEMATIC B30-30
I-0000142N	WATER CIRCUIT SCHEMATIC
F-0000418N	WATER – AIR EXCHANGER
L-00253	ELECTRICAL SCHEMATIC

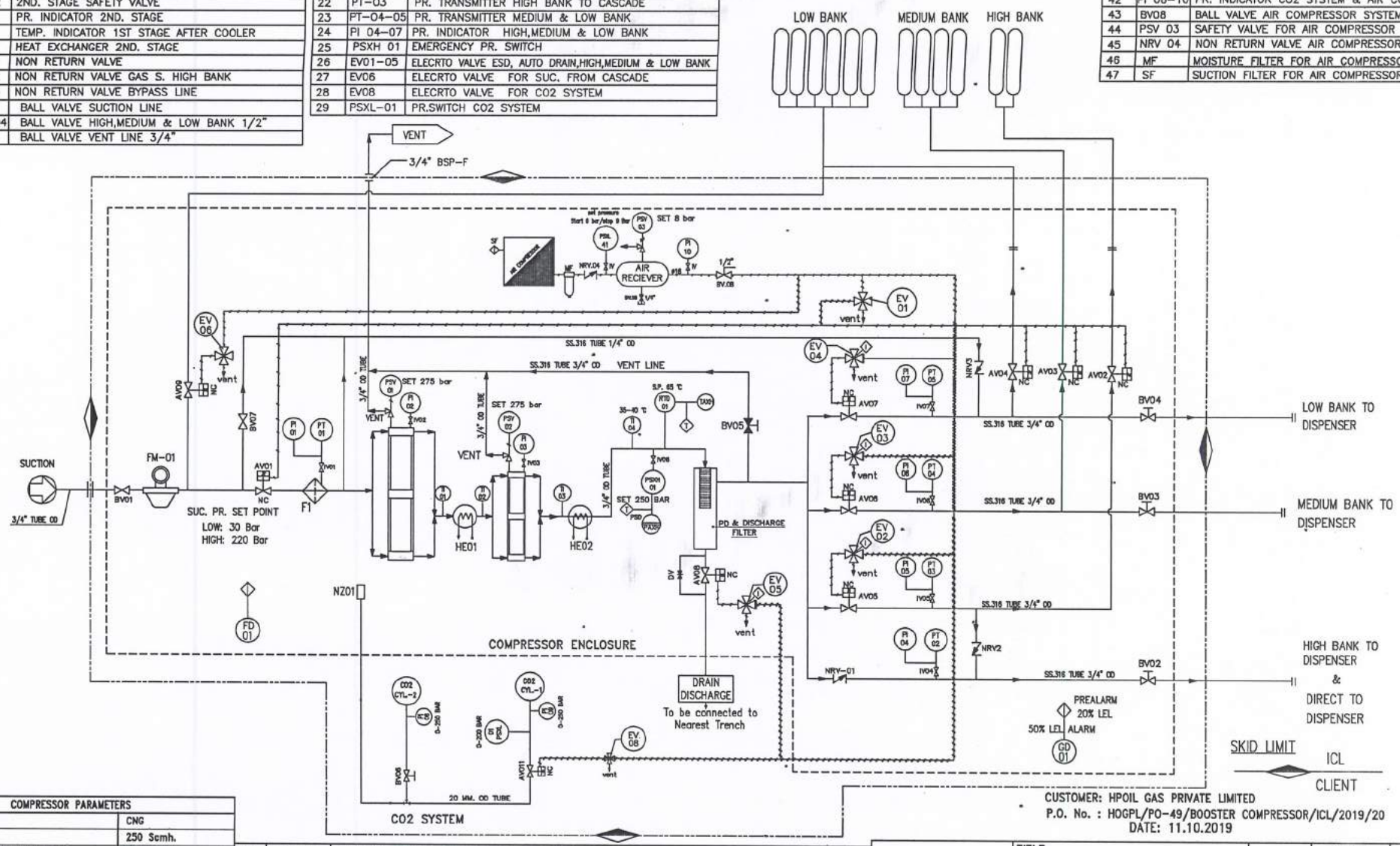
DRAWING

S.NO.	ITEM	DESCRIPTION
1	PT-01	SUCTION PR. TRANSMITTER
2	F1	INLET FILTER
3	PSV 01	1ST. STAGE SAFETY VALVE
4	PI 01	PR. INDICATOR INLET
5	PI 02	PR. INDICATOR 1ST. STAGE
6	TI 01	TEMPRETURE INDICATOR 1ST. STAGE BEFORE COOLER
7	HE 1	HEAT EXCHANGER 1ST. STAGE
8	PSV 02	2ND. STAGE SAFETY VALVE
9	PI 03	PR. INDICATOR 2ND. STAGE
10	TI 02	TEMP. INDICATOR 1ST STAGE AFTER COOLER
11	HE 02	HEAT EXCHANGER 2ND. STAGE
12	NRV 01	NON RETURN VALVE
13	NRV 02	NON RETURN VALVE GAS S. HIGH BANK
14	NRV 03	NON RETURN VALVE BYPASS LINE
15	BV01	BALL VALVE SUCTION LINE
16	BV02-04	BALL VALVE HIGH,MEDIUM & LOW BANK 1/2"
17	BV05	BALL VALVE VENT LINE 3/4"

S.NO.	ITEM	DESCRIPTION
15	BV06&07	BALL VALVE LOW BANK TO BYPASS LINE & CO2 CYL.1
16	AV01-04	ACTUATOR VALVE FOR ESD CASCADE & INLET LINE
17	AV-05-07	ACTUATOR VALVE FOR HIGH, MEDIUM & LOW BANK
18	AV08	ACTUATOR VALVE FOR AUTO DRAIN
19	AV09	ACTUATOR VALVE FOR LOW BANK CASCADE TO SUC
20	AV011	ACTUATOR VALVE FOR CO2 SYSTEM
21	PT-02	PR. TRANSMITTER DIRECT DISPENSER
22	PT-03	PR. TRANSMITTER HIGH BANK TO CASCADE
23	PT-04-05	PR. TRANSMITTER MEDIUM & LOW BANK
24	PI 04-07	PR. INDICATOR HIGH,MEDIUM & LOW BANK
25	PSXH 01	EMERGENCY PR. SWITCH
26	EV01-05	ELECRTO VALVE ESD, AUTO DRAIN,HIGH,MEDIUM & LOW BANK
27	EV06	ELECRTO VALVE FOR SUC. FROM CASCADE
28	EV08	ELECRTO VALVE FOR CO2 SYSTEM
29	PSXL-01	PR.SWITCH CO2 SYSTEM

30	NZ01	NOZZLE FOR CO2 SYSTEM
31	TI 03	TEMP. INDICATOR 2ND STAGE DISC. BEFORE COOLER
32	TI 04	TEMP. INDICATOR 2ND STAGE AFTER COOLER
33	IV01-08	ISOLATION VALVE 1/4" FOR PR. INDICATOR

34	-	CONNECTOR 3/4" BSP (M) X 3/4" OD
35	-	REDUCING UNION 1/2" OD X 3/4" OD
36	FD01	FLAME DETECTOR
37	GD01	GAS DETECTOR
38	PD	PULSATION DAMPNER & DIS. COALESCER FILTER
39	FM-01	MASS FLOW METER COMPRESSOR SUCTION
40	CYL.01-02	CO2 CYLINDER
41	RTD01	TEMPERATURE SENSOR (PT-100)
42	PI 08-10	PR. INDICATOR CO2 SYSTEM & AIR COMPRESSOR
43	BV08	BALL VALVE AIR COMPRESSOR SYSTEM
44	PSV 03	SAFETY VALVE FOR AIR COMPRESSOR SYSTEM
45	NRV 04	NON RETURN VALVE AIR COMPRESSOR SYSTEM
46	MF	MOISTURE FILTER FOR AIR COMPRESSOR
47	SF	SUCTION FILTER FOR AIR COMPRESSOR



COMPRESSOR PARAMETERS	
MEDIUM	CNG
FLOW	250 Scmh.
SUCTION PRESSURE (Variable)	220-30 Bar
DISCHARGE PRESSURE	250 Bar
1st STAGE DISCHARGE PR.	130 Bar
2nd STAGE DISCHARGE PR.	250 Bar
TEMP. BEFORE 1st & 2nd STAGE COOLER	65 °C
TEMP. AFTER 1st & 2nd STAGE COOLER	35 °C

CUSTOMER: HPOIL GAS PRIVATE LIMITED
P.O. No. : HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
DATE: 11.10.2019

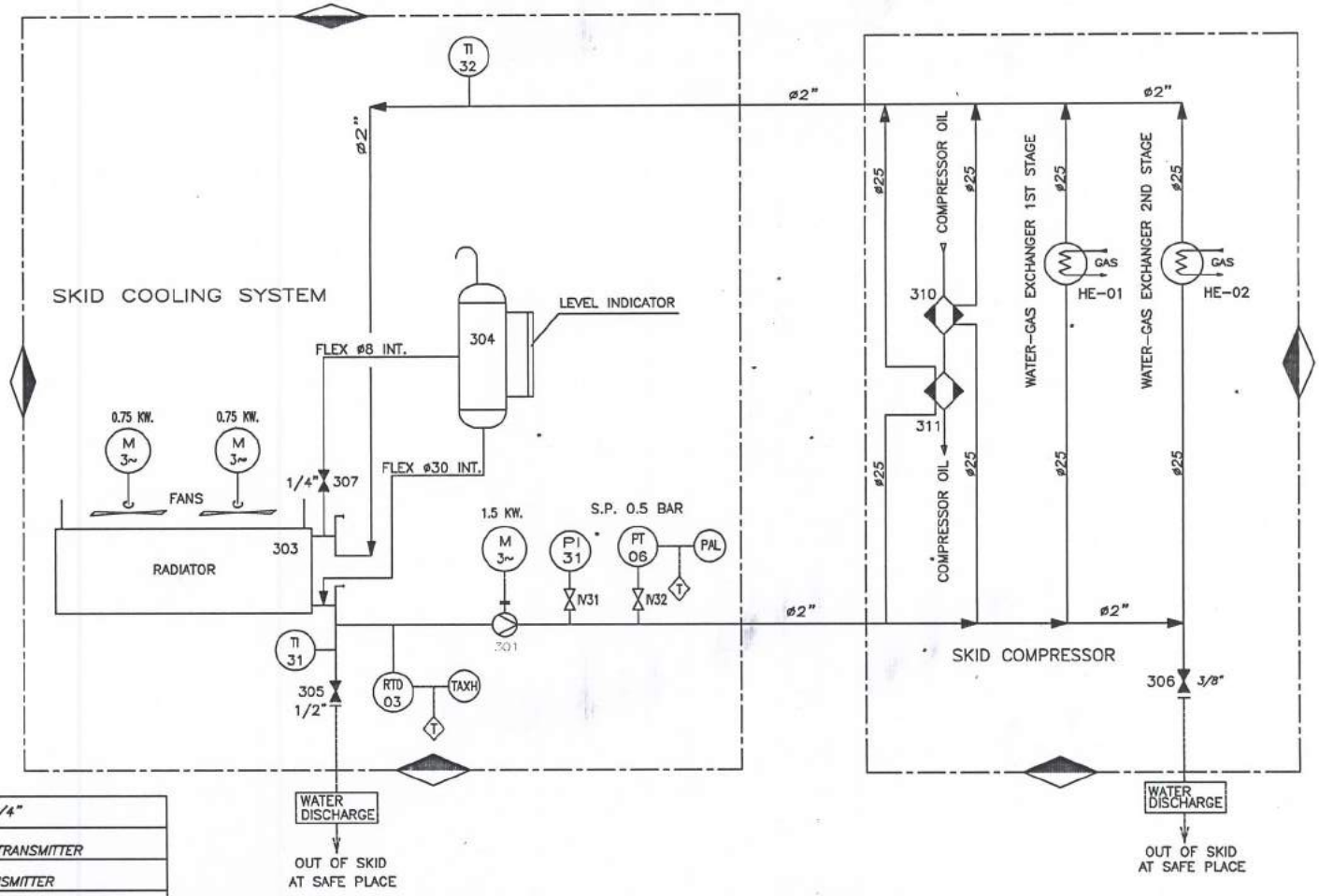
Rev.	DATE	MODIFICATIONS
4	19.07.19	REMOVED PSXH 01 FROM CO2 SYSTEM INSTRUMENT AIR LINE
3	16.07.19	PROVIDED AIR COMPRESSOR SYSTEM
2	12.07.19	PROVIDED PR. SWITCH BETWEEN CO2 CYL. AND ACTUATOR VALVE AV011

DIDWANIA COMPRESSORS

TITLE: P&ID GAS LINE OF CNG BOOSTER COMPRESSOR MODEL: B30-30

INDIAN COMPRESSORS LIMITED

	INITIALS	DATE
DRAWN	JACOB	20.05.19
CHECKED	N.SINGH	20.05.19
APPROVED		
DRG.NO.	G-0000240N	R4



ITEM	QTY.	DESCRIPTION
IV31&32	2	ISOLATION VALVE 1/4"
PT-06	1	WATER PRESSURE TRANSMITTER
RTD-03	1	TEMPERATURE TRANSMITTER
TI-31&32	2	TEMPERATURE GAUGE AT IN & OUT
PI-31	1	PRESSURE GAUGE
HE-02	1	WATER GAS HEAT EXCHANGER 2ND STAGE
HE-01	1	WATER GAS HEAT EXCHANGER 1ST STAGE
311	1	HEAT EXCHANGER OIL-WATER
310	1	HEAT EXCHANGER OIL-WATER
307	1	BALL VALVE 1/4"
306	1	BALL VALVE 3/8"
305	1	BALL VALVE 1/2"
304	1	EXPANSION TANK
303	1	HEAT EXCHANGER (RADIATOR)
301	1	ELECTRIC PUMP (WATER PUMP)

Rev.	DATE	MODIFICATIONS
2		
1	11.06.19	REVISED THE DRAWING AS PER THE COMMENTS ON 29.05.2019

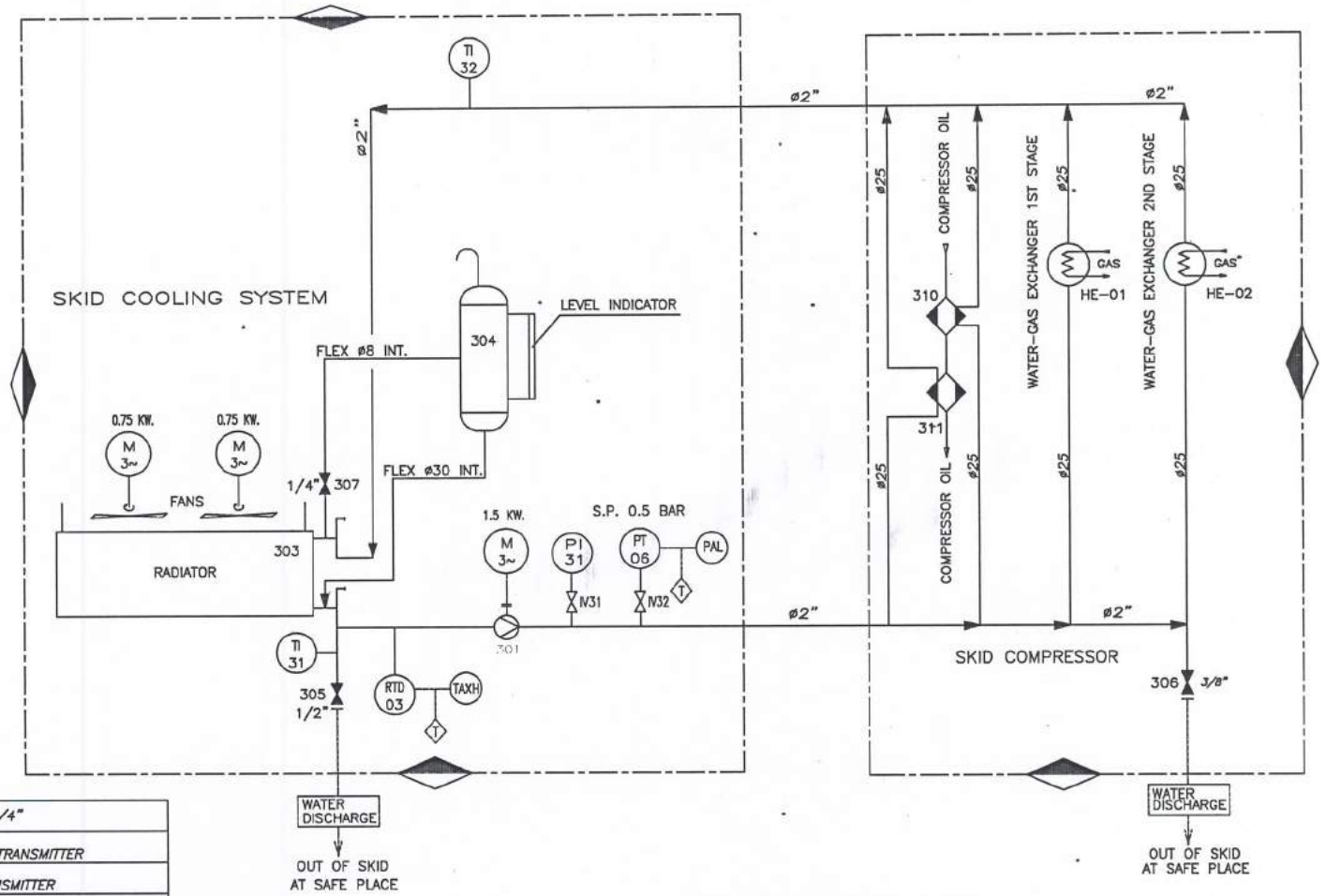
CUSTOMER: HPOIL GAS PRIVATE LIMITED
P.O. No. : HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
DATE: 11.10.2019

DIDWANIA COMPRESSORS

TITLE
P&ID COOLING WATER
BOOSTER COMPRESSOR
MODEL: B30-30

INDIAN COMPRESSORS LIMITED

	INITIALS	DATE
DRAWN	JACOB	20.05.19
CHECKED	N.SINGH	20.05.19
APPROVED		
DRG.NO.	I-0000142N	R1



ITEM	QTY.	DESCRIPTION
IV31&32	2	ISOLATION VALVE 1/4"
PT-06	1	WATER PRESSURE TRANSMITTER
RTD-03	1	TEMPERATURE TRANSMITTER
TI-31&32	2	TEMPERATURE GAUGE AT IN & OUT
PI-31	1	PRESSURE GAUGE
HE-02	1	WATER GAS HEAT EXCHANGER 2ND STAGE
HE-01	1	WATER GAS HEAT EXCHANGER 1ST STAGE
311	1	HEAT EXCHANGER OIL-WATER
310	1	HEAT EXCHANGER OIL-WATER
307	1	BALL VALVE 1/4"
306	1	BALL VALVE 3/8"
305	1	BALL VALVE 1/2"
304	1	EXPANSION TANK
303	1	HEAT EXCHANGER (RADIATOR)
301	1	ELECTRIC PUMP (WATER PUMP)

Rev.	DATE	MODIFICATIONS
2		
1	11.06.19	REVISED THE DRAWING AS PER THE COMMENTS ON 29.05.2019

CUSTOMER: HPOIL GAS PRIVATE LIMITED
P.O. No. : HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
DATE: 11.10.2019

DIDWANIA COMPRESSORS

TITLE
P&ID COOLING WATER
BOOSTER COMPRESSOR
MODEL: B30-30

INDIAN COMPRESSORS LIMITED

	INITIALS	DATE
DRAWN	JACOB	20.05.19
CHECKED	N.SINGH	20.05.19
APPROVED		
DRG.NO.	I-0000142N	R1

ELECTRIC DOCUMENTATION

Manufacturer (company)	INDIAN COMPRESSOR LIMITED

Customer	HPOIL GAS PRIVATE LIMITED
P.O. No.	HOGPL/PO-49/BOOSTER COMPRESSOR/ICL/2019/20
Title	WIRING SCHEME FOR BOOSTER COMPRESSOR
Project description	PLC PANEL FOR 22 KW BOOSTER COMP.
Drawing number	L-00261

Project No.	ICL-22 KW COMP. (HOGPL)
Revision	
Mains/Control voltage	415/110VAC,24VDC
Type	PLC TYPE
Protection class	IP66

Created on	08/04/19
Edit date	29/04/19

Number of pages 31

Table of contents

F06_003

Previous page
0

Next page
2

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- TABLE OF CONTENT	
DATE- 08/04/19	ICL-22 KW COMP. (HOHGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	APPROVED BY:	Page 1
					DRWAN BY:	CHECKED BY:	

WIRE SCHEME

S.NO.	DESCRIPTION	VOLTAGE	WIRE COLOR	WIRE SIZE
1	24VDC POWER DISTRIBUTION	24VDC 0VDC	BLUE WHITE	1.0 Sq.mm
2	240VAC SUPPLY	PHASE NEUTRAL	RED/WHITE BLACK/WHITE	1.0 Sq.mm 1.0 Sq.mm
3	3PH. POWER 415VAC	BLACK		25&16 Sq.mm
4	3PH. POWER 415VAC	RED, YELLOW, BLUE		2.5 Sq.mm
5	PROTECTION EARTH	YELLOW/GREEN		2.5 Sq.mm
6	DIGITAL INPUT SIGNALS TO PLC	BLUE		0.75 Sq.mm
7	DIGITALOUTPUT SIGNALS FROM PLC	YELLOW		0.75 Sq.mm
8	ANALOG INPUT FROM PLC TO BARRIER	GRAY		0.75 Sq.mm
9	ANALOG INPUT FROM BARRIER TO TERMINAL	GRAY		0.75 Sq.mm

DRAWG.NO.- L-00261	PROJECT No:- ICL-22KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22KW BOOSTER COMP	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFACTURER:- INDIAN COMPRESSOR LIMITED	Modification date: 29/04/19 REV. no.:	PAGE DESCRI:- PANEL WIRING SCHEME	
DATE- 08/04/19					DRWAN BY:	APPROVED BY: CHECKED BY:	Page 4

BILL OF MATERIALS

S.NO.	DESCRIPTION	TPYE NO.	MAKE	QTY.
1.00	PLC			
1.01	CPU, 1214-C, 14DI,10DO ,24VDC	6ES7- 214-1AG40-0XB0	SIEMENS	1
1.02	8 DI/DO MODULE ,24VDC	6ES7-223-1BH32-0XB0	SIEMENS	1
1.03	8 AI MODULE , 4-20mA	6ES7-231-4HF32-0XB0	SIEMENS	1
1.04	4 AI MODULE ,4-20mA	6ES7-231-4HD32-0XB0	SIEMENS	1
1.05	HMI,KTP-700, BASIC-PN	6AV-2123-2GB03-0AX0	SIEMENS	1
2.00	SWITCHGEARS & MISC.			
2.01	MCB DP,6A	A9N2P06C	SCHNEIDER	1
2.02	MCB DP, 10A	A9N2P10C	SCHNEIDER	1
2.03	MCB DP, 6A	A9N1P06C	SCHNEIDER	4
2.04	CONTACTOR 40A, 110VAC	LC1D40A	SCHNEIDER	3
2.05	OVERLOAD RELAY , 23-32A	LRD32	SCHNEIDER	1
2.06	CONTACTOR 12A, 110VAC	LC1D12	SCHNEIDER	3
2.07	MPCB , 1.6-2.5A	GV2ME07	SCHNEIDER	2
2.08	MPCB , 2.5-4A	GV2ME08	SCHNEIDER	2
2.09	MPCB , ADD ON BLOCK ,1NO+1NC	GVAE11	SCHNEIDER	4
2.10	CONTROL CONTACTOR , 9A, , 24VDC	CA3KN22	SCHNEIDER	7
2.11	CONTROL RELAY , 110VAC	MY2N-GS	OMRON	2
2.12	POWER SUPPLY, 5A, 110VC/24VDC	EDR-120-24	MEAN WELL	1
2.13	SURGE ARESTOR, 230VAC	VAL-MS 320ST2838843	PHOENIX	1
2.14	SINGLE PHASE RELAY		MINILEC	1
2.15	EARTH FAULT RELAY		MINILEC	1
2.16	CBCT, 125/5A	CBCT	PROCOM	1
2.17	MULTIFUCTION METER WITH RS-485	EM6436	CONSERVE	1
2.18	CURRENT TRANSFORMER, 125/5A	160/5A	AE	3
2.19	POTENTIAL TRANSFORMER	500VA, 240/110VAC	ASHOKA	1
2.20	RELAY BORAD, 1C/O, 24VDC		UL	2

Previous page
4

Next page
6

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFRACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- BILL OF MATERIAL	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.: DRWAN BY:-	APPROVED BY: CHECKED BY:	Page 5

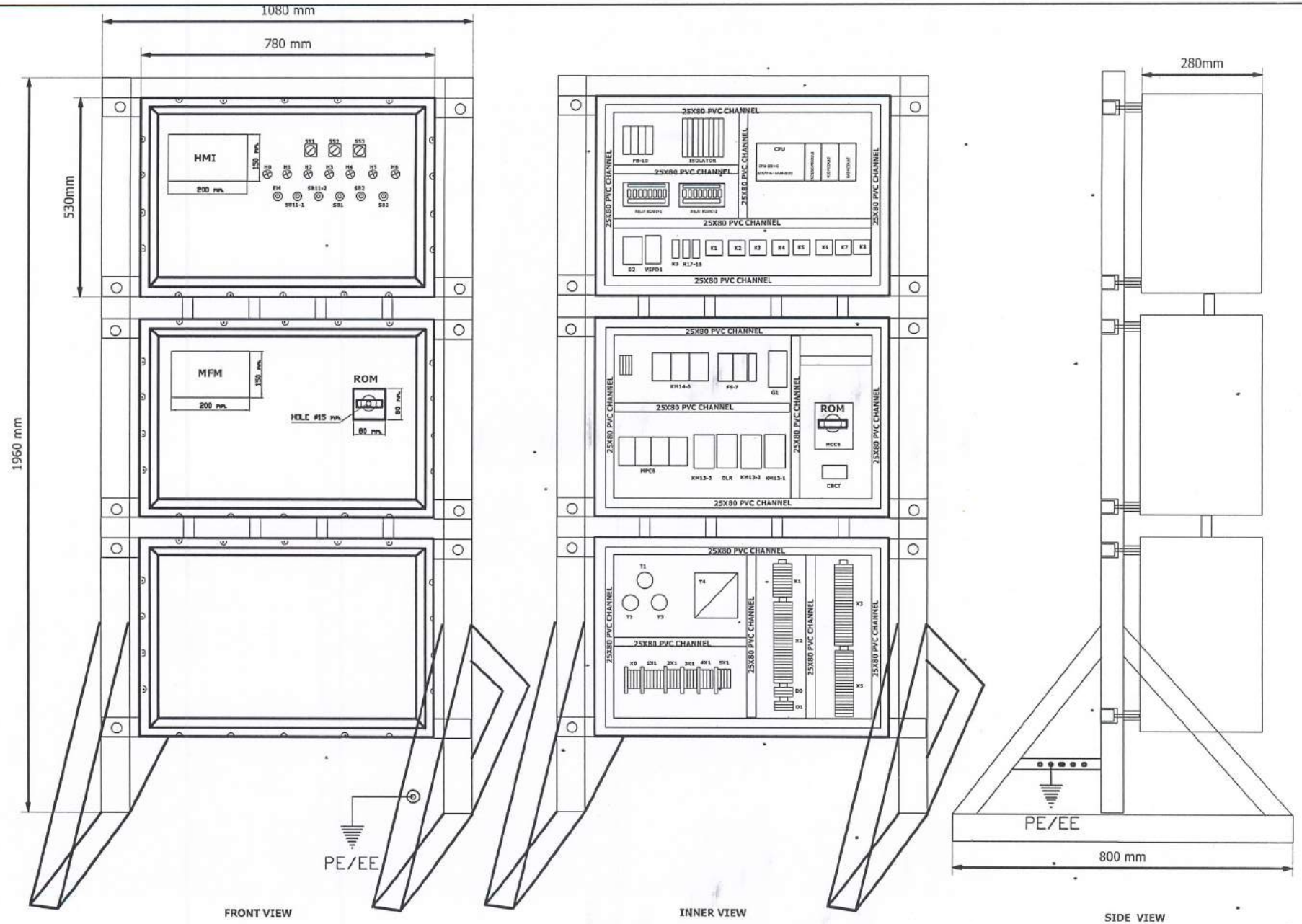
BILL OF MATERIALS

S.NO.	DESCRIPTION	TPYE NO.	MAKE	QTY.
2.21	STAR DELTA TIMER, 110VAC	H3DKZ-G	OMRON	1
2.22	GLASS FUSE, 0.5A	EI-0.5A	EI	7
2.23	GLASS FUSE, 1.0A	EI-1A	EI	18
2.24	POWER CABLE 25mm2/16mm2,2.5mm2	KEI	KEI	LOT
2.25	CONTROL CABLE 1.5mm2,1.0mm2,0.75mm2	KEI	KEI	LOT
2.26	PVC DUCT CHANNEL	TBWDN25X80LG2, 40X80LH2	TRINITY	LOT
2.27	DIN RAIL CHANNEL		TRINITY	LOT
3.00	TERMINALS & CONNECTORS			
3.01	SCREW TPYE TERMINAL, 35mm2	CTS35U	CONNECTWELL	4
3.02	SCREW TPYE TERMINAL, 25mm2	CTS25U	CONNECTWELL	6
3.03	SCREW TPYE TERMINAL, 6mm2	CTS6U	CONNECTWELL	14
3.04	SCREW TPYE TERMINAL, 2.5mm2	CTS2.5UN	CONNECTWELL	76
3.05	SCREW TPYE FUSE TERMINAL, 4.0mm2	CF4U	CONNECTWELL	25
3.06	GROUP MARKER HOLDER MOUTABLE ON CA103, GRAY	GMH8	CONNECTWELL	12
3.07	END STOPPER	CA702	CONNECTWELL	3
4.00	ICL SCOPE			
4.01	MCCB, 125A		ICL	1
4.02	FLAME PROOF BOX		ICL	1
4.03	DI BARRIER, 110VAC, 2CH.		ICL	1
4.04	AI BARRIER ,INPUT:4-20mA , OUTPUT:4-20mA, 24VDC		ICL	4
4.05	RTD BARRIER, INPUT:RTD, OUTPUT:-4-20mA, 24VDC		ICL	3
4.06	ROM OF MCCB		ICL	1
4.07	SELECTOR SWITCH		ICL	3
4.08	EM. STOP		ICL	1
4.09	PUSH BUTTON		ICL	5
4.10	INDICTION LAMP		ICL	6
4.11	HOOTER		ICL	1
4.12	AVIATION LIGHT		ICL	1
4.13	TUBE LIGHT		ICL	1

Previous page 5

Next page 7

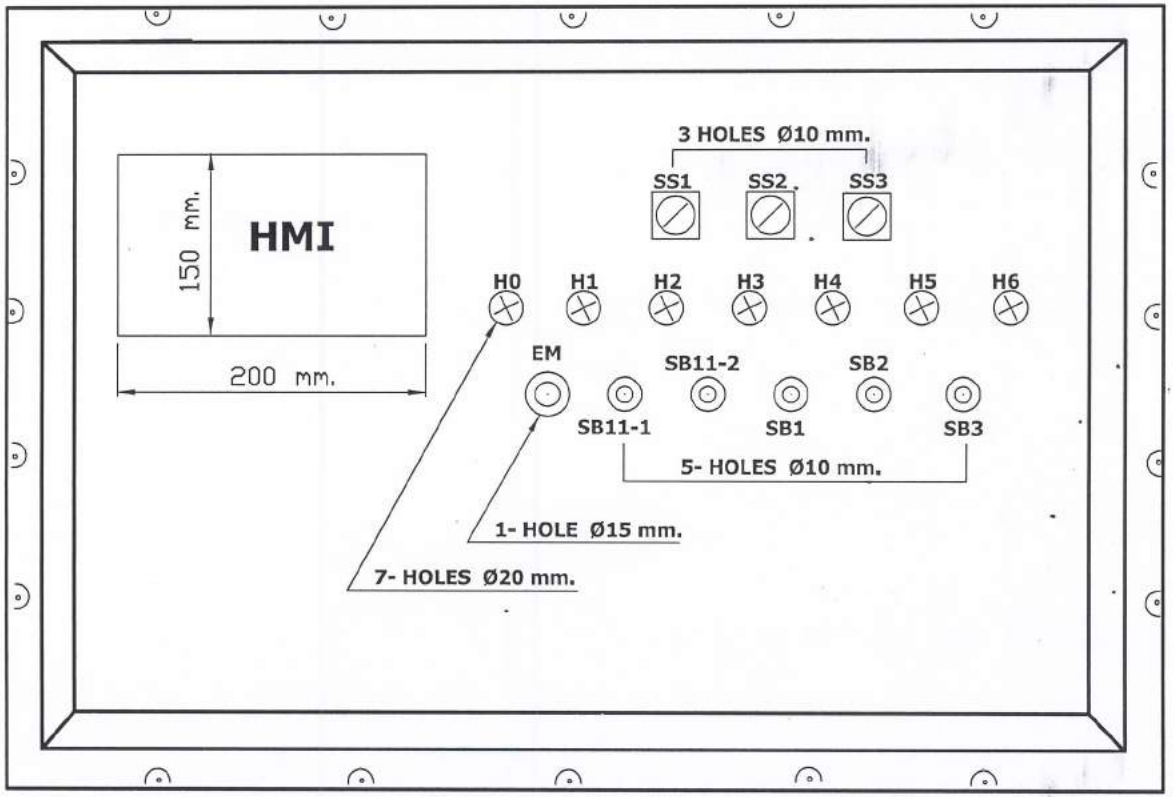
DRAWG.NO.- L-00261	PROJECT No:- ICL-22 KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22 KW BOOSTER COMP.	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFACTURER:- INDIAN COMPRESSOR LIMITED	Modification date: 29/04/19 REV. no.:	PAGE DESCRI:- BILL OF MATERIAL
DATE- 08/04/19					DRWAN BY-	APPROVED BY: CHECKED BY:



Previous page
6

Next page
8

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- PANEL LAYOUT
DATE- 08/04/19	ICL-22 KW COMP. (HOGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.: DRWAN BY:	APPROVED BY: CHECKED BY:



NOTE:1

1. Make : Sudhir / Shyam
2. Enclosure Class: IP66
3. Material: Cast Aluminium Alloy LM6
4. Paint shade: 631 Light gray epoxy powder coated

NOTE:2

1. Paint Thickness : 80 Micron min.
2. Enclosure Weight : 210 Kgs. (Approx. Enclosure With Stand)
3. Gland Plate Thickness : 13 mm. Thk. min. at Cable Entry Side
4. Enclosure Construction detail : LM6 Material
5. Enclosure : Ex–d , GAS gr.IIA & IIB, zone 1

Previous page 7

Next page 9

DRAWG.NO.- L-00261	PROJECT No:- ICL-22 KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22 KW BOOSTER COMP.	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFACTURER:- INDIAN COMPRESSOR LIMITED	Modification date: 29/04/19 REV. no.:	PAGE DESCRI:- PANEL LAYOUT	
DATE- 08/04/19					DRWAN BY:	APPROVED BY: CHECKED BY:	Page 8

LEGEND DETAILS

H0 : POWER ON

H1 :COMPRESSOR ON

H2 : PHASE FAILURE / EARTH FAULT

H3 : ALARM

H4 : SPARE

H5 : SPARE

H6 : SPARE

SB1 :TEST PB

SB2 : ACK PB

SB3 : RESET PB

SB11-1 : CYCLE START PB

SB11-2 : CYCLE STOP PB

LEGEND DETAILS

SS1 : CO2 CYLINDER AUTO / OFF/ MANUAL

SS2 : SPARE

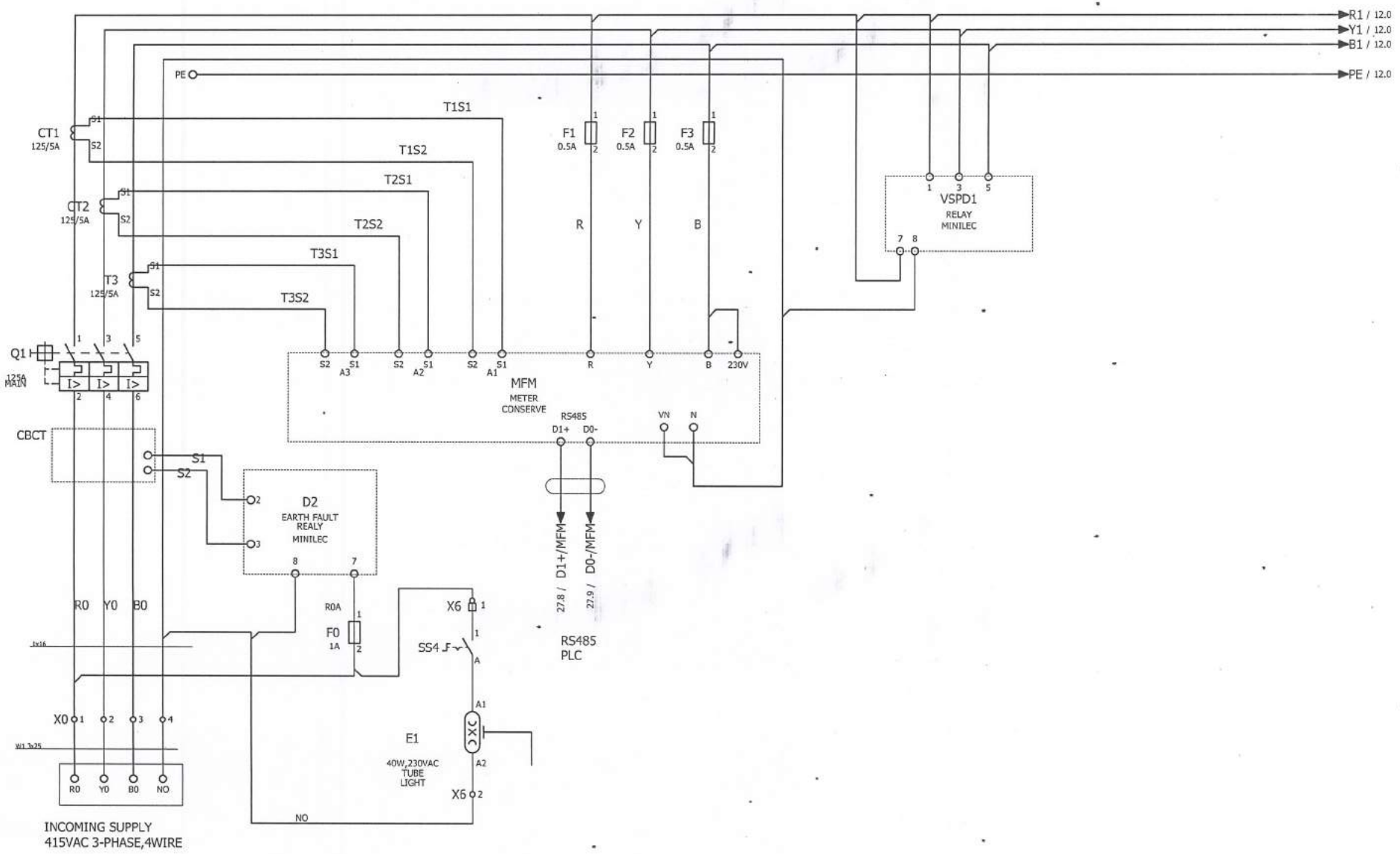
SS3: SPARE

EM: EMERGENCY STOP BUTTON

Previous page
8

Next page
10

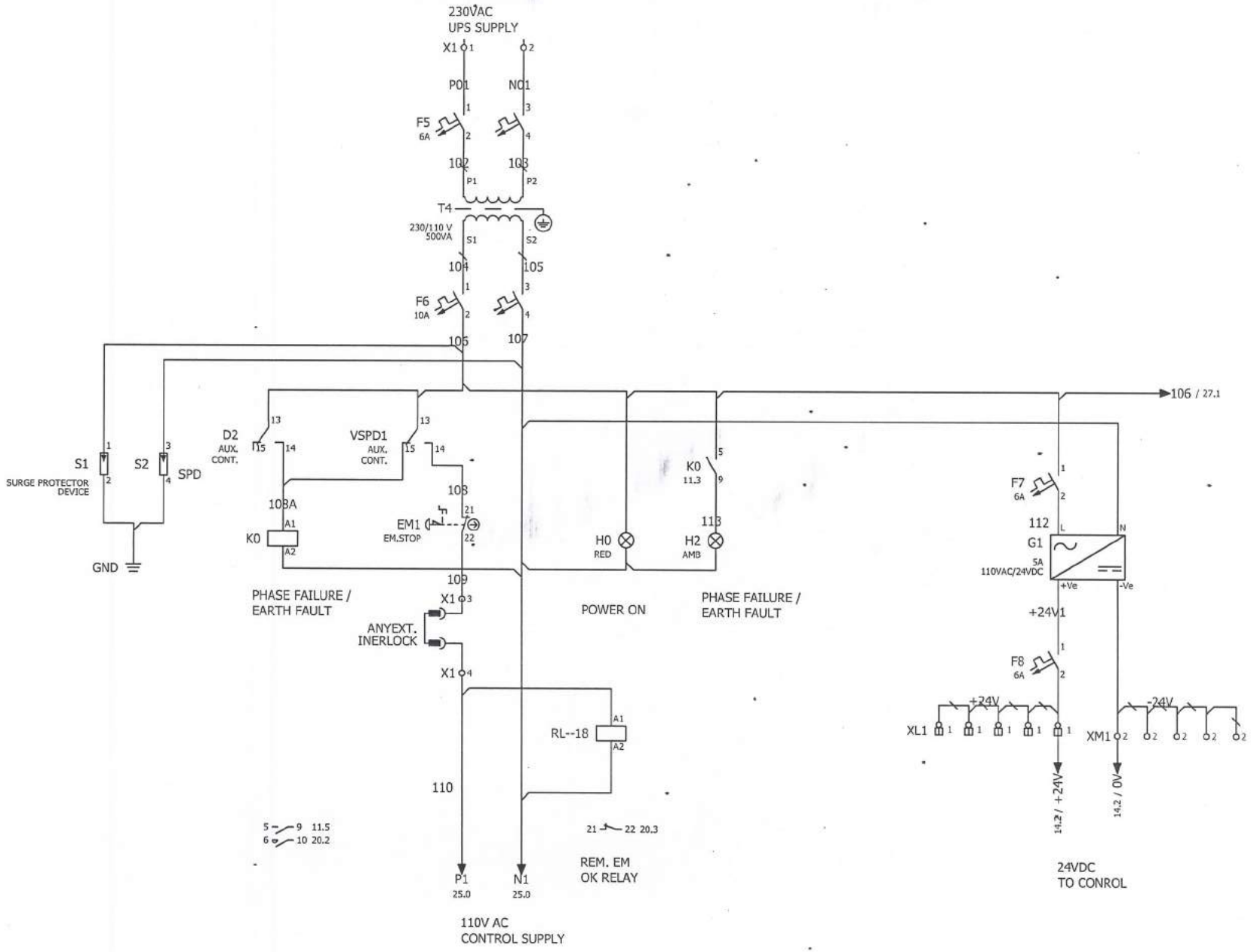
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- PANEL LEGEND DETAIL	
DATE- 08/04/19	ICL-22 KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.: DRWAN BY:	APPROVED BY: CHECKED BY:	Page 9



Previous page
9

Next page
11

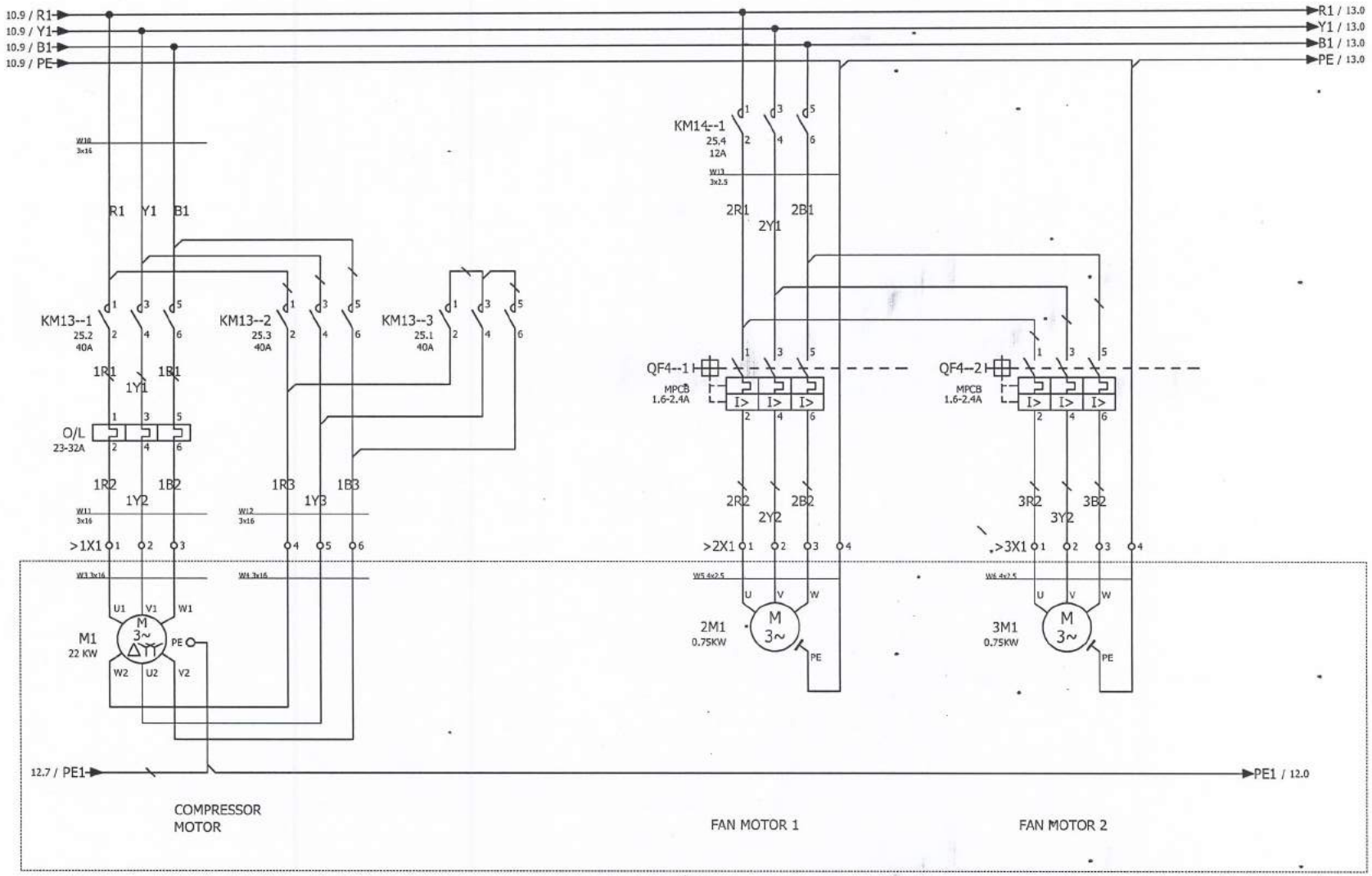
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- MAIN AND METERING	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.: DRWAN BY:	APPROVED BY: CHECKED BY:	Page 10



Previous page
10

Next page
12

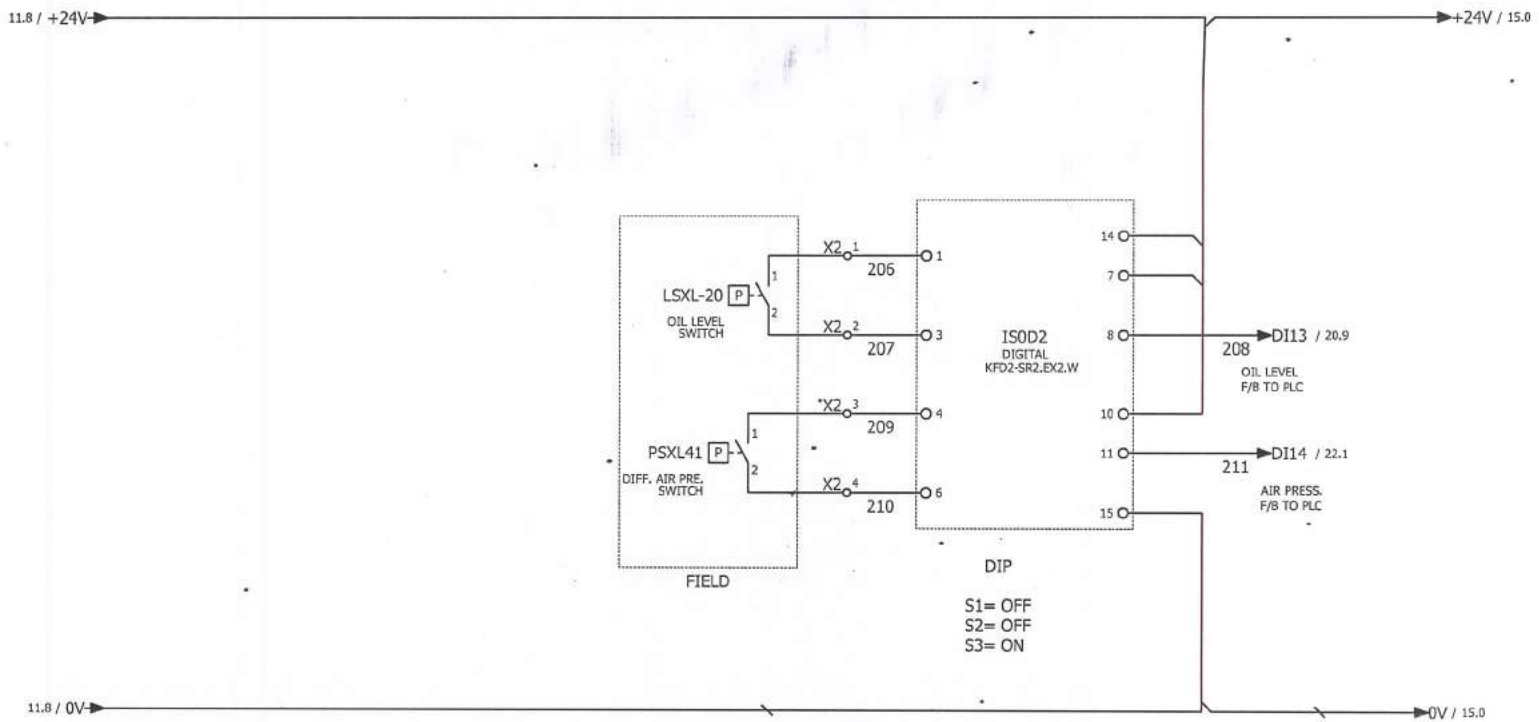
DRAWG.NO.- L-00261	PROJECT No:- ICL-22 KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22KW BOOSTER COMP.	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFACTRURER:- INDIAN COMPRESSOR LIMITED	Modification date: 30/04/19 REV. no.: DRWAN BY:	PAGE DESCRI:- CONTROL SUPPLY APPROVED BY: CHECKED BY:
DATE- 08/04/19						Page 11



Previous page
11

Next page
13

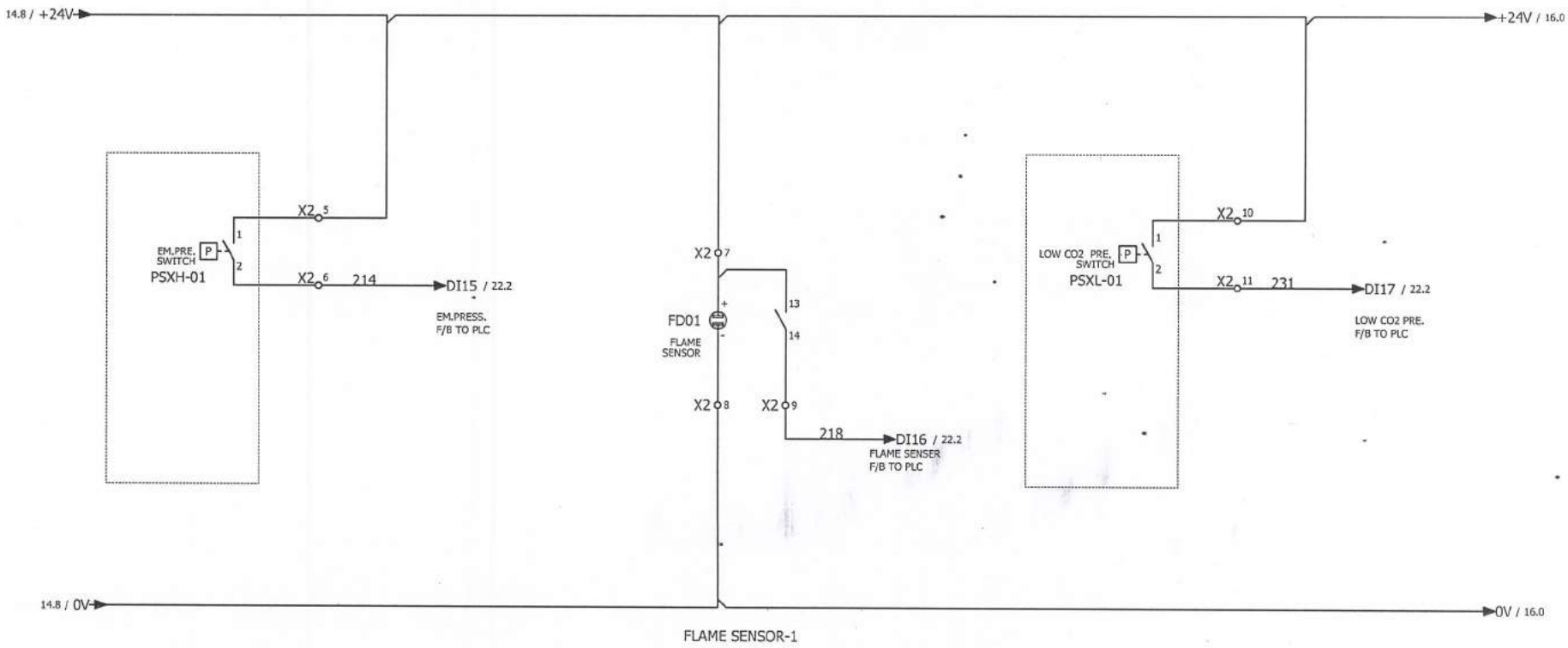
DRAWG.NO.- L-00261	PROJECT No:- ICL-22KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22KW BOOSTER COMP.	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFRACTURER:- INDIAN COMPRESSOR LIMITED	Modification date: 29/04/19 REV. no.: DRAWN BY:	PAGE DESCRI:- POWER COMPRESSOR FAN1,FAN2 MOTOR APPROVED BY: CHECKED BY:
DATE- 08/04/19						Page 12



Previous page 13

Next page 15

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- OIL LEVEL & DIFF. PRS. S/W CONTROL	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.: DRWAN BY: SS ALAM	APPROVED BY: * MR. RIZWAN CHECKED BY: MR. RIZWAN	Page 14

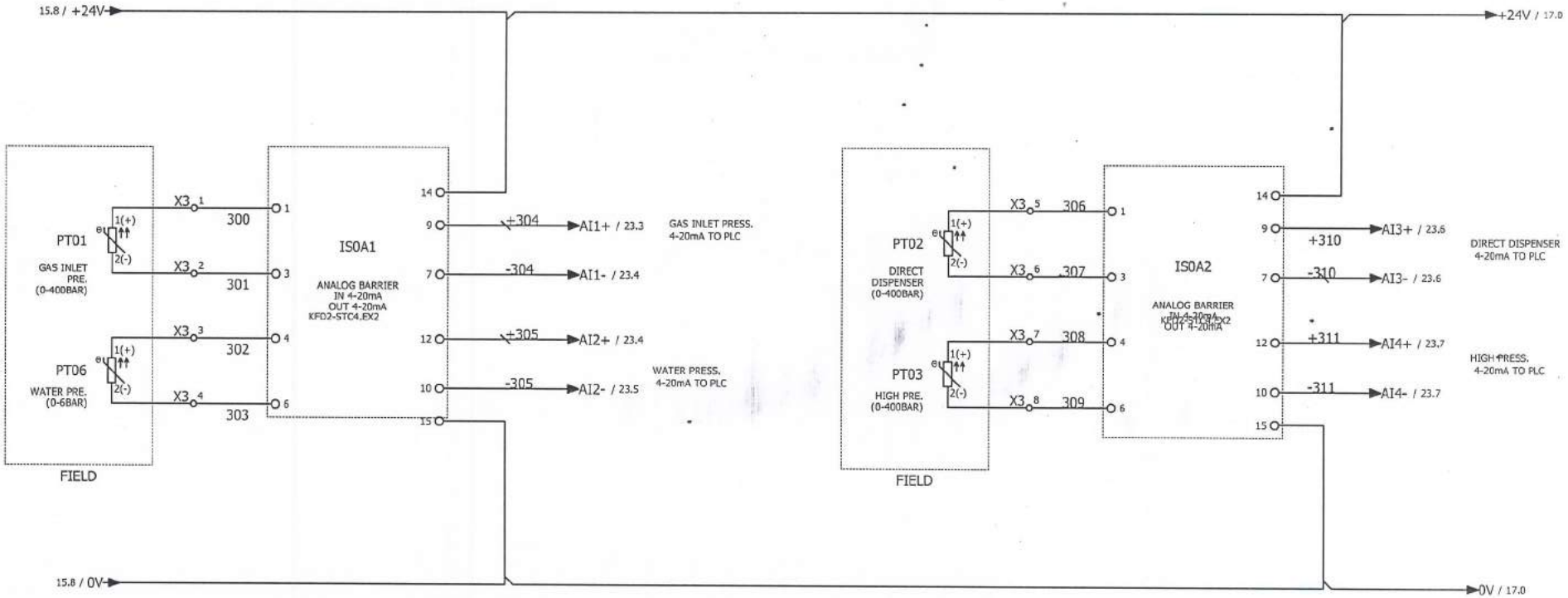


FLAME SENSOR-1

Previous page
14

Next page
16

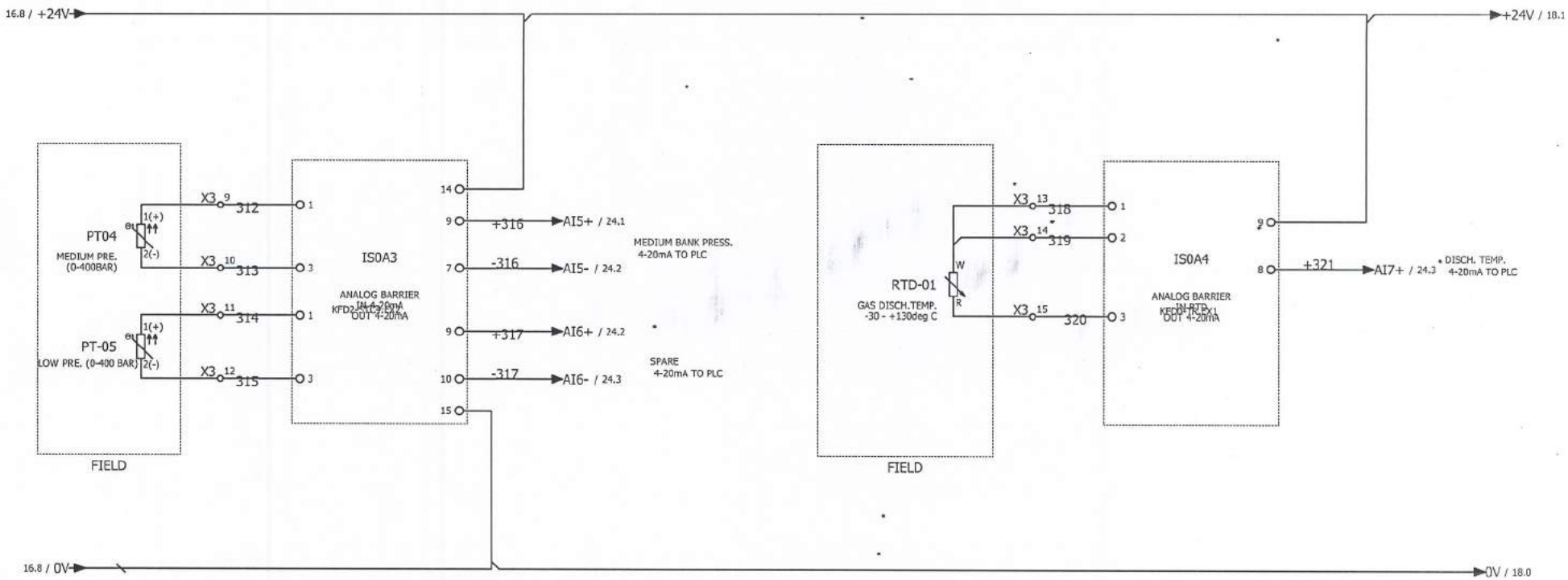
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFRACTURER:-	Modification date: 29/04/19	PAGE DESCRI:-	EM PRE. FLAME SENSER CONTROL
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:		
					DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN	
						CHECKED BY: MR. RIZWAN	



Previous page
15

Next page
17

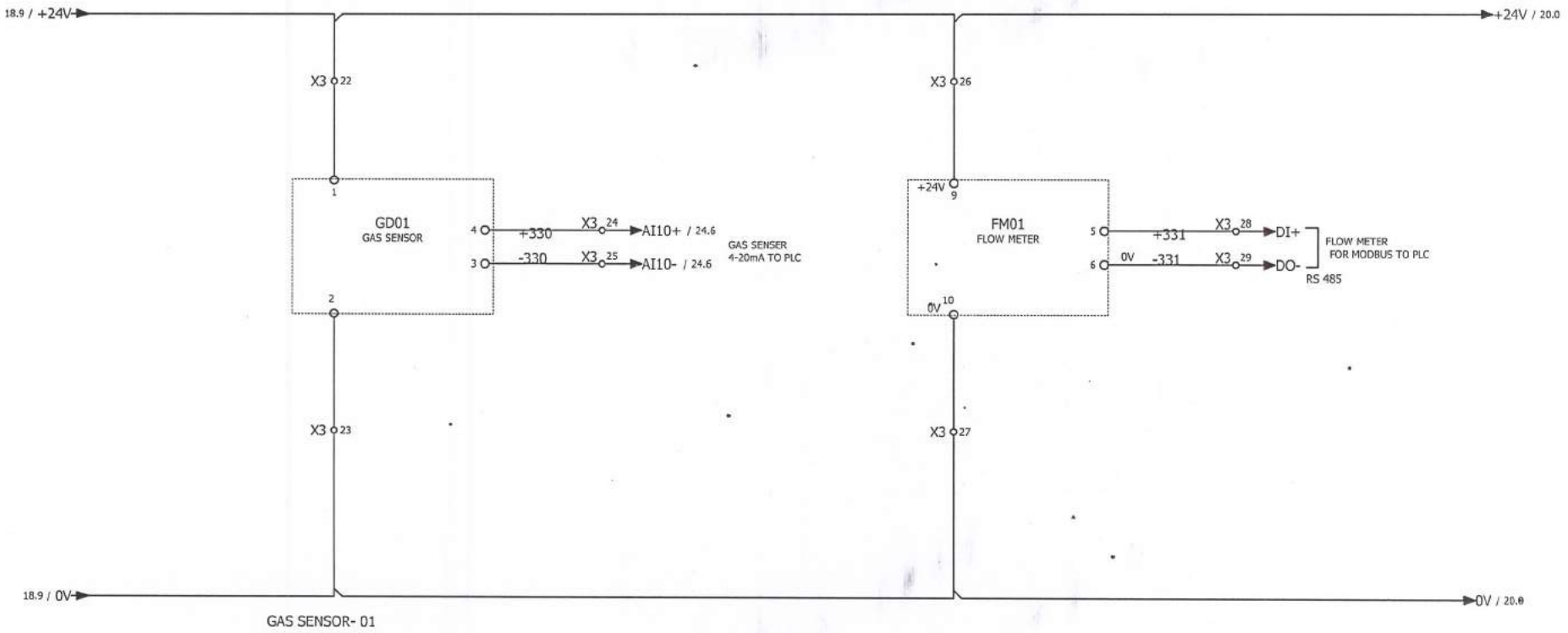
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:-	GAS PRE.& WATER PRE. HIGH. PRE.& DIRECT PRE.
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	APPROVED BY:	MR. RIZWAN
					DRWAN BY:- SS ALAM	CHECKED BY:	MR. RIZWAN



Previous page
16

Next page
18

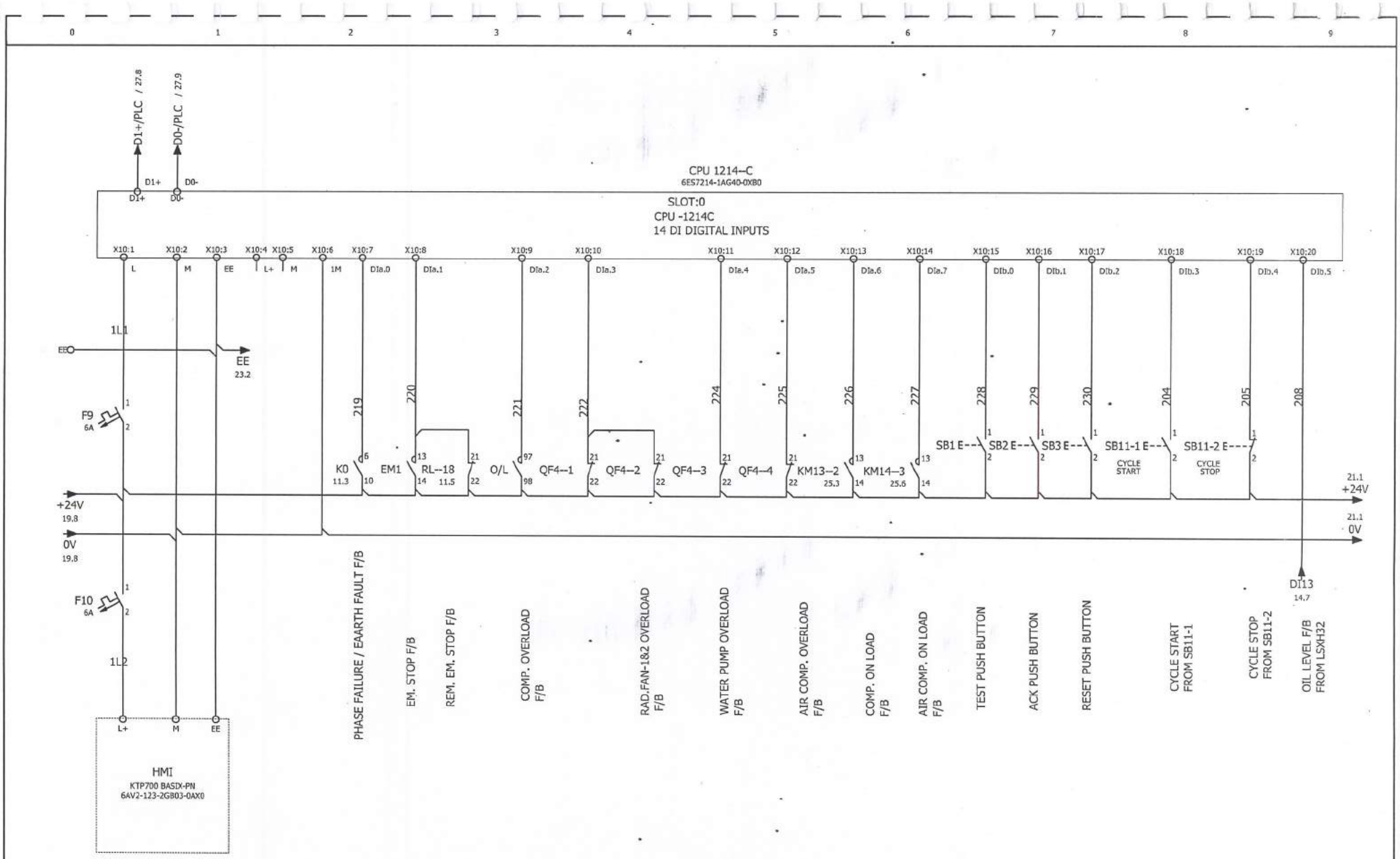
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTRURER:-	Modification date: 29/04/19	PAGE DESCRI:- MED. PRE, GAS DISCH TEMP.
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	
					DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN
						CHECKED BY: MR. RIZWAN



Previous page
18

Next page
20

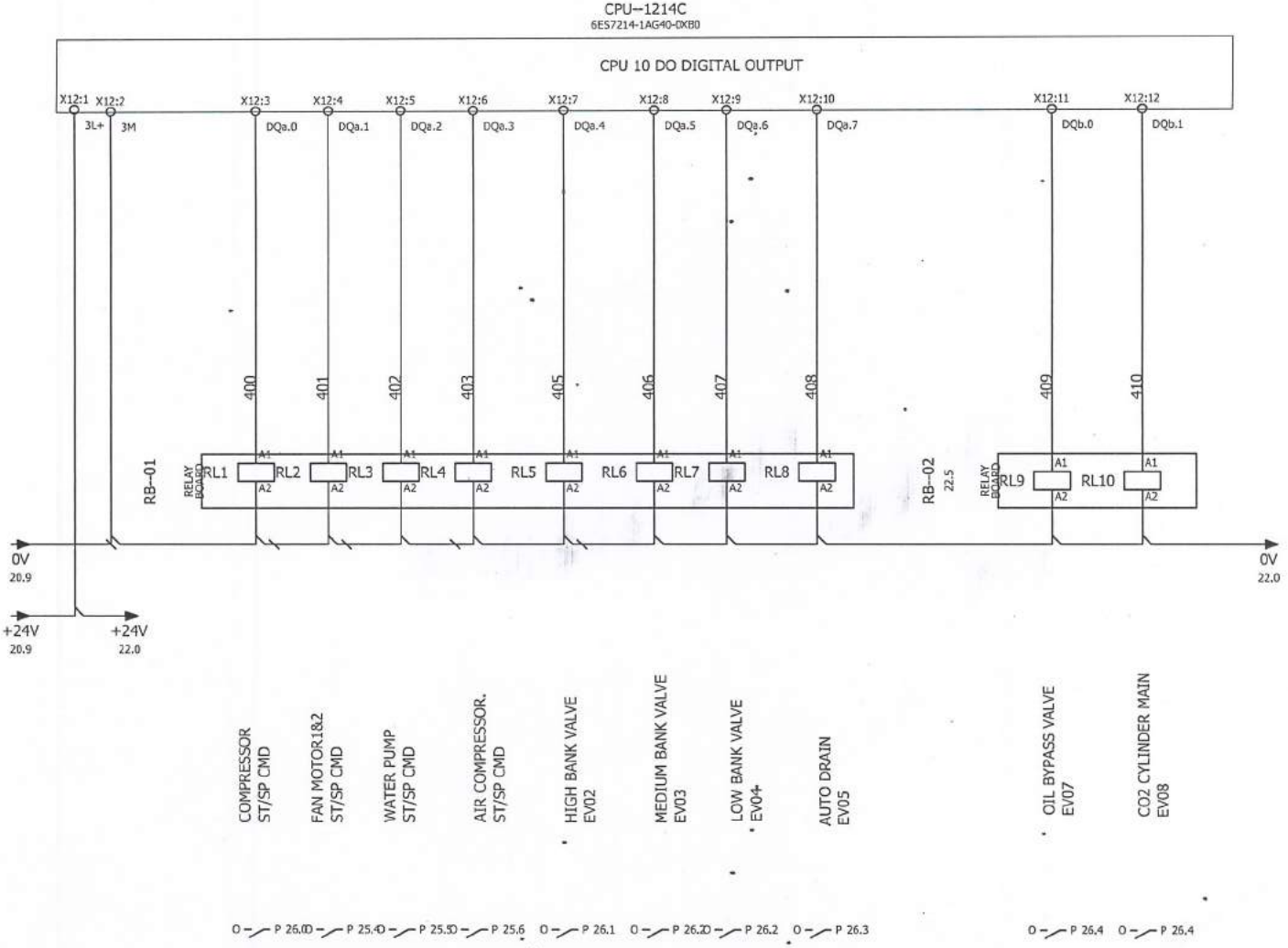
DRAWG.NO.- L-00261	PROJECT No:- ICL-22 KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22 KW BOOSTER COMP.	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFRACTURER:- INDIAN COMPRESSOR LIMITED	Modification date: 29/04/19 REV. no.: DRWAN BY:- SS ALAM	PAGE DESCRI:- GAS SENSER CONTROL	
DATE- 08/04/19						APPROVED BY: MR. RIZWAN CHECKED BY: MR. RIZWAN	Page 19



Previous page 19

Next page 21

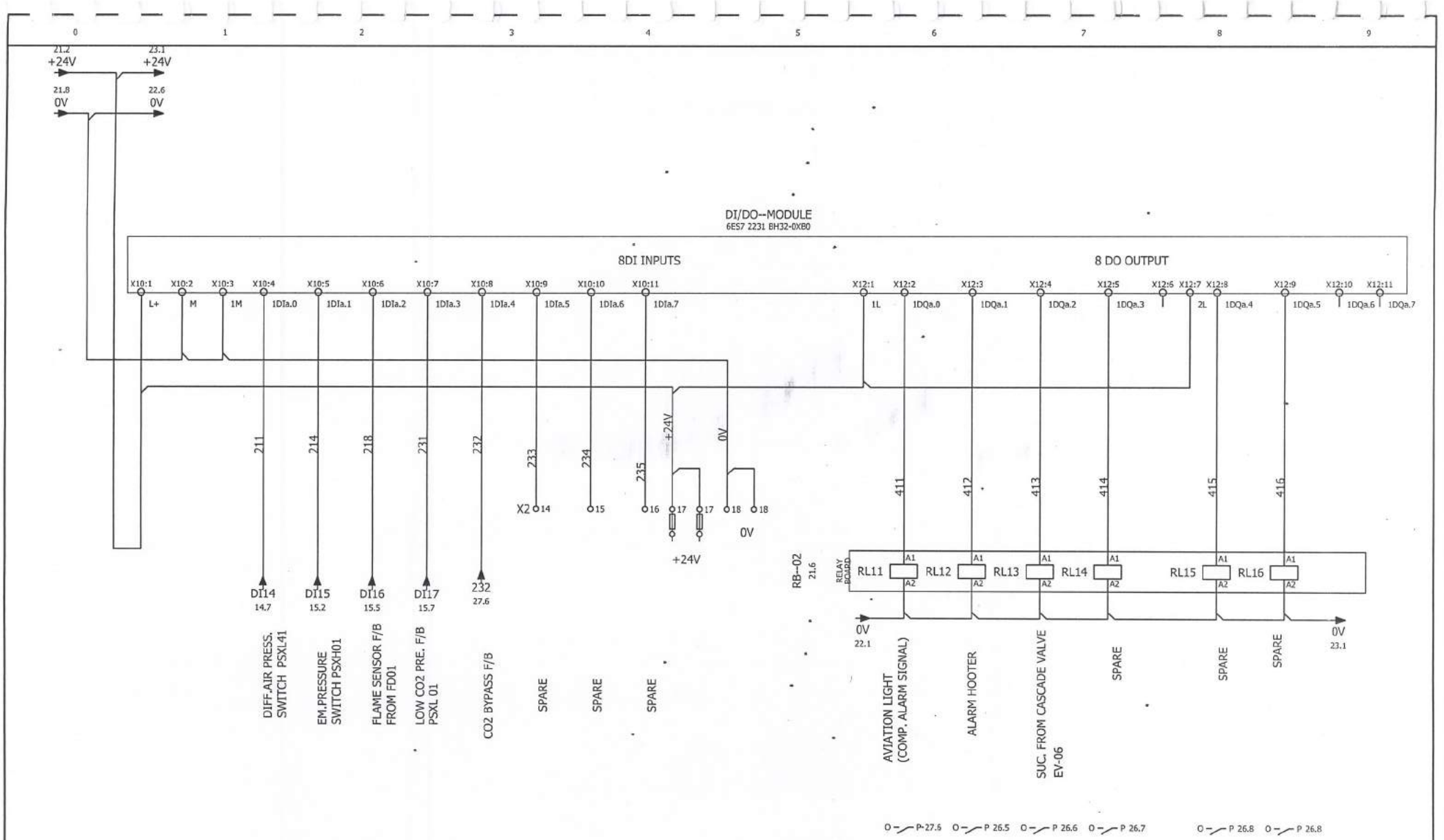
DRAWG.NO.- L-00261	PROJECT No:- ICL-22KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22KW BOOSTER COMP	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFACTURER:- INDIAN COMPRESSOR LIMITED	Modification date: 29/04/19 REV. no.: DRAWN BY: SS ALAM	PAGE DESCRI:- DIGITAL INPUTS
DATE- 08/04/19					APPROVED BY: MR. RIZWAN CHECKED BY: MR. RIZWAN	Page 20



Previous page
20

Next page
22

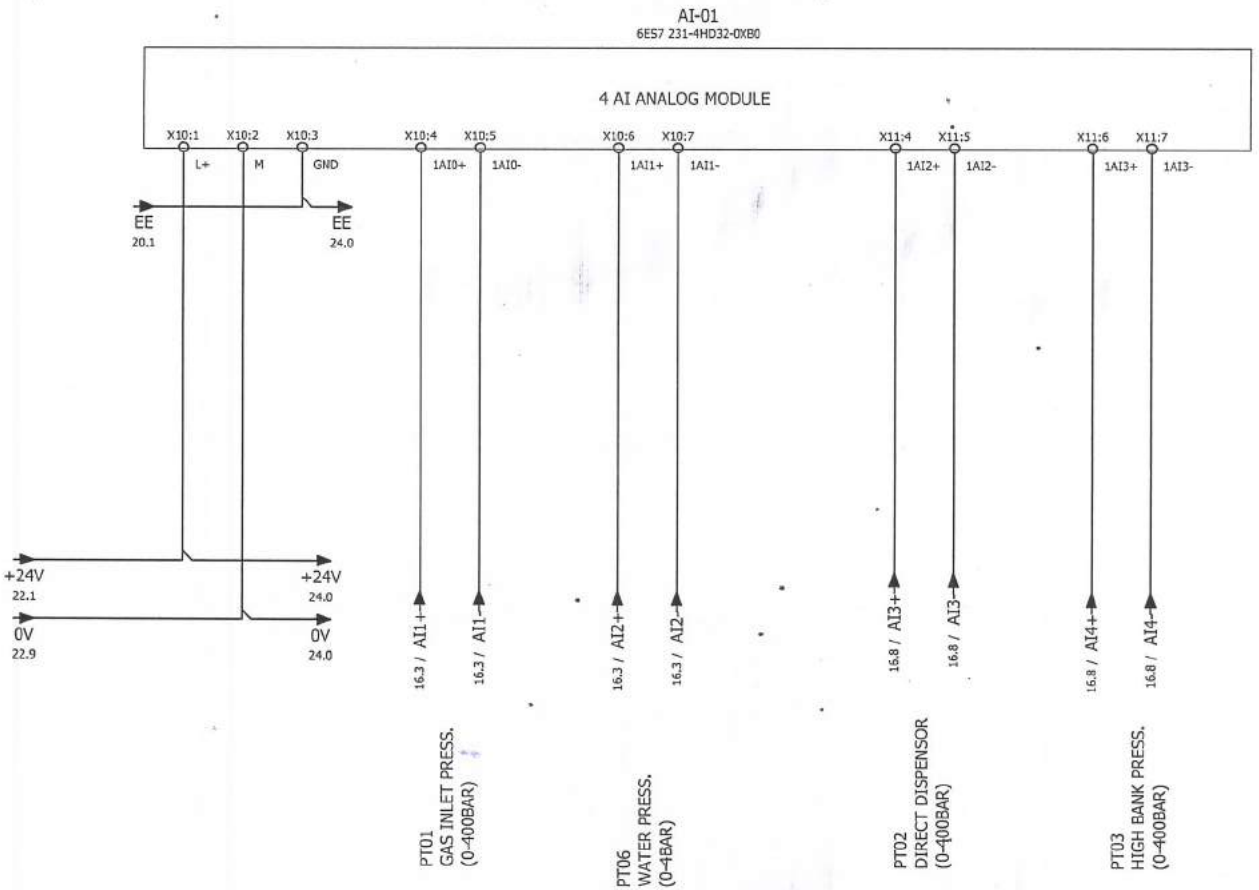
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTRURER:-	Modification date: 29/04/19	PAGE DESCRI:- DIGITAL OUTPUT	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. NO.: DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN CHECKED BY: MR. RIZWAN	Page 21



Previous page
21

Next page
23

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- DIGITAL INPUT/OUTPUS	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:		
					DEWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN	
						CHECKED BY: MR. RIZWAN	Page 22



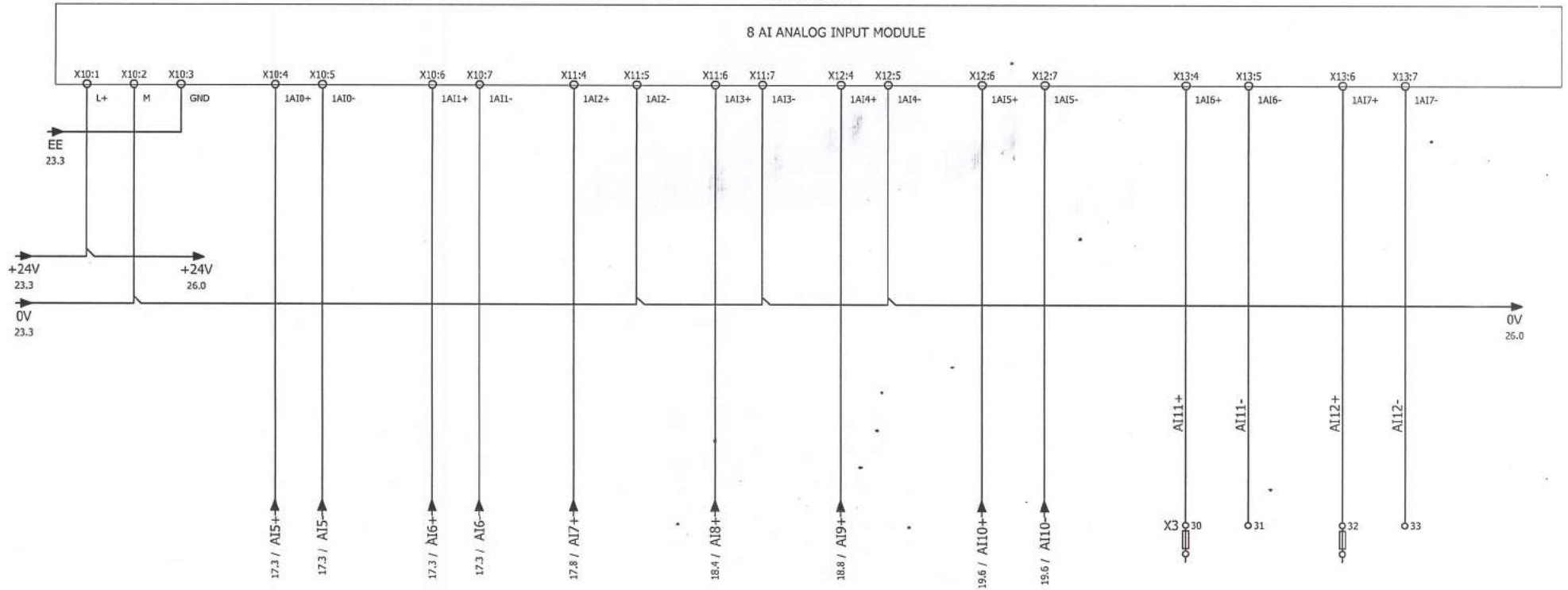
Previous page
22

Next page
24

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- ANALOG INPUT
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	
					DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN
						CHECKED BY: MR. RIZWAN

AI-02

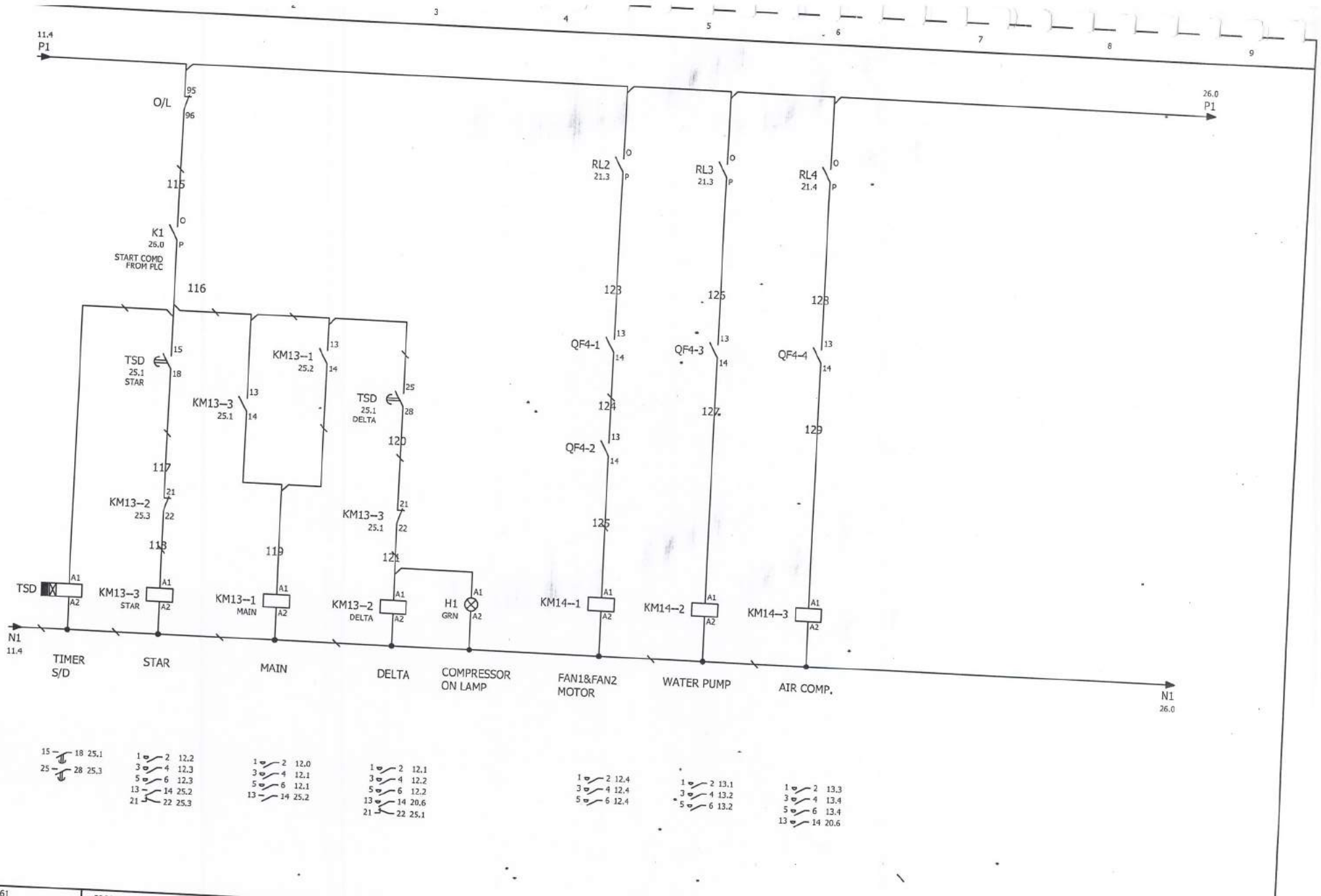
6ES7 231-4HF32-0XB0



Previous page 23

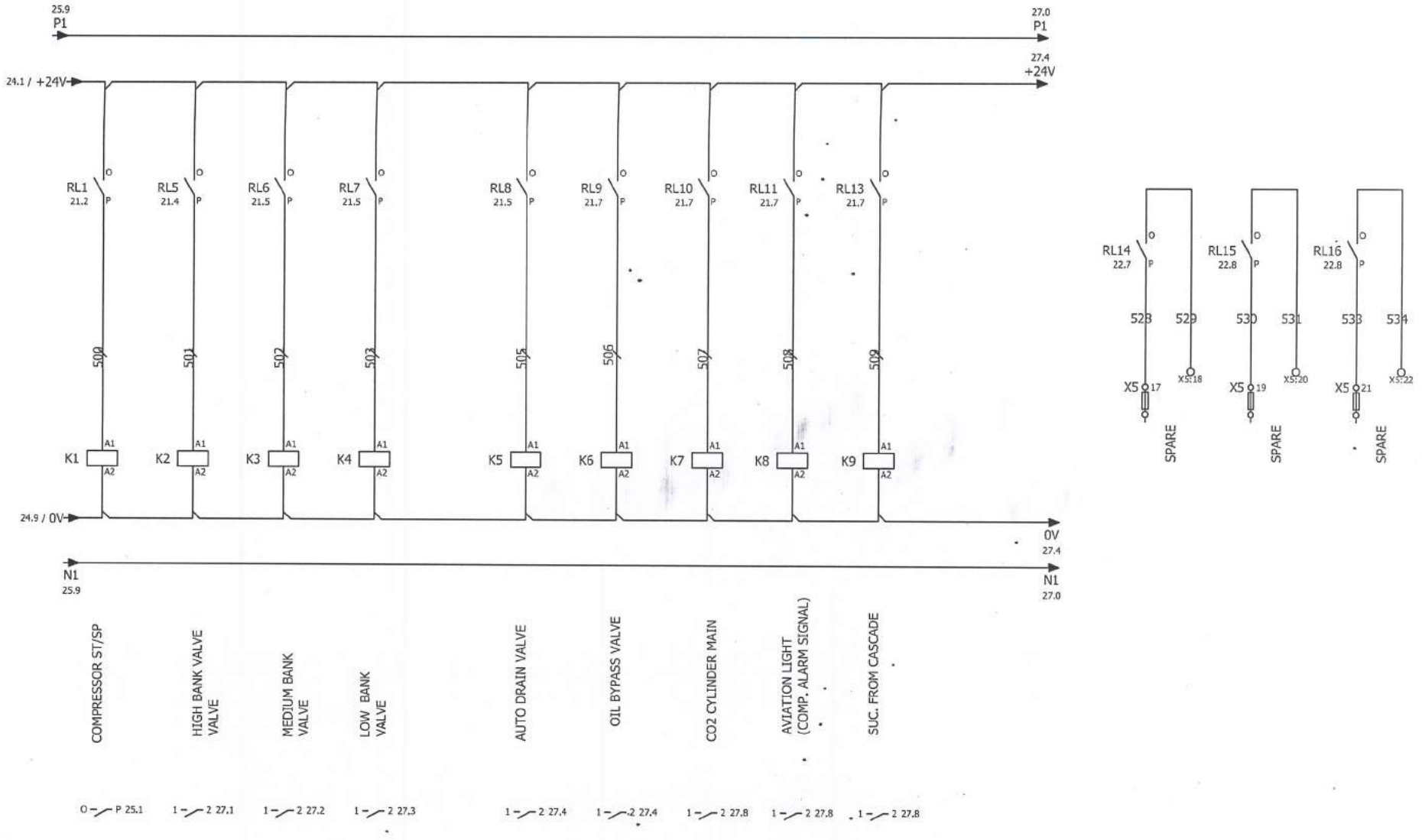
Next page 25

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFRACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- ANALOG INPUTS
	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	
DATE- 08/04/19					DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN
						CHECKED BY: MR. RIZWAN



Previous page
24

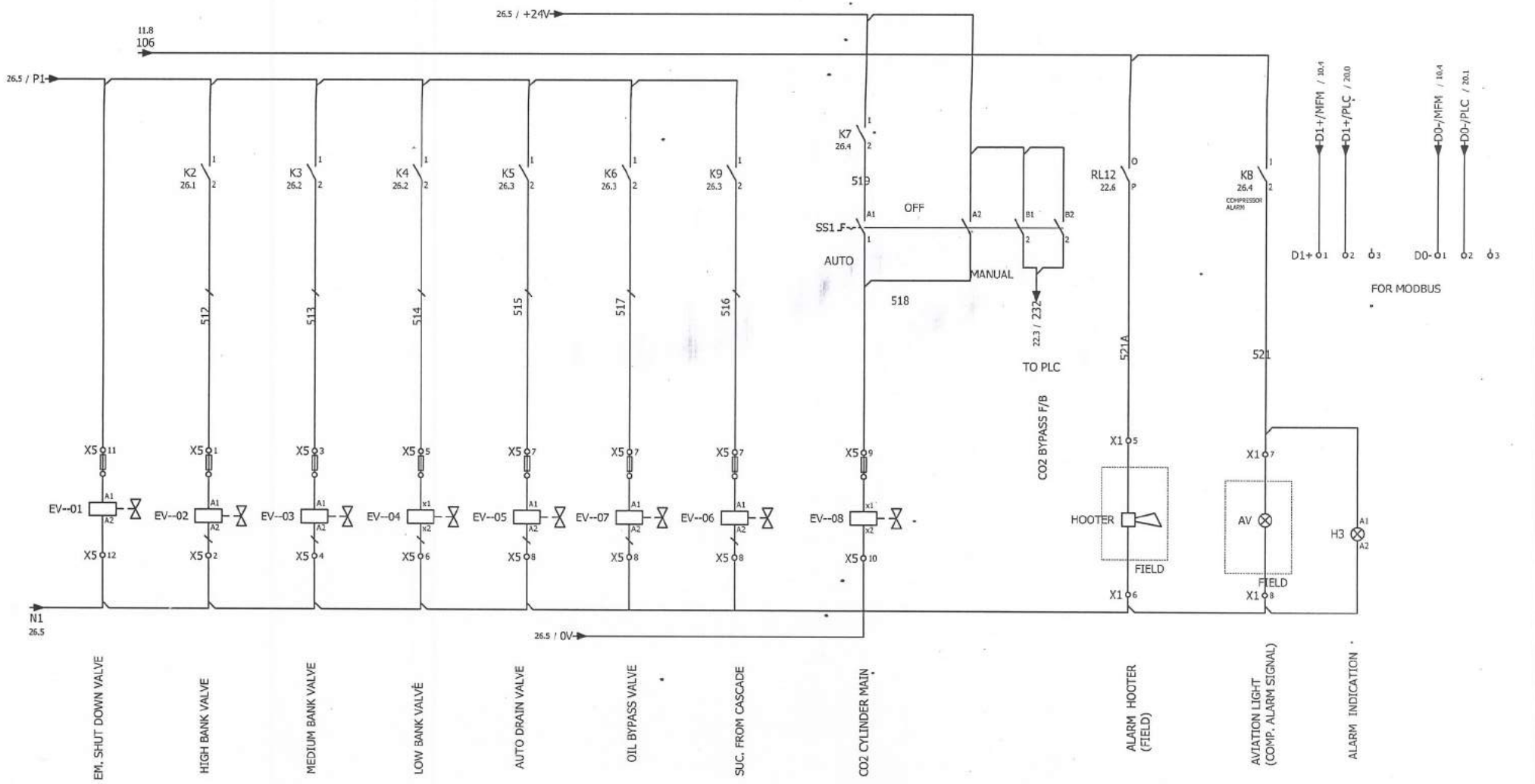
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFRACTURER:-	Modification date: 30/04/19	PAGE DESCRI:- MOTOR CONTROL	Next page 26
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:		
					DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN	
						CHECKED BY: MR. RIZWAN	Page 25



Previous page
25

Next page
27

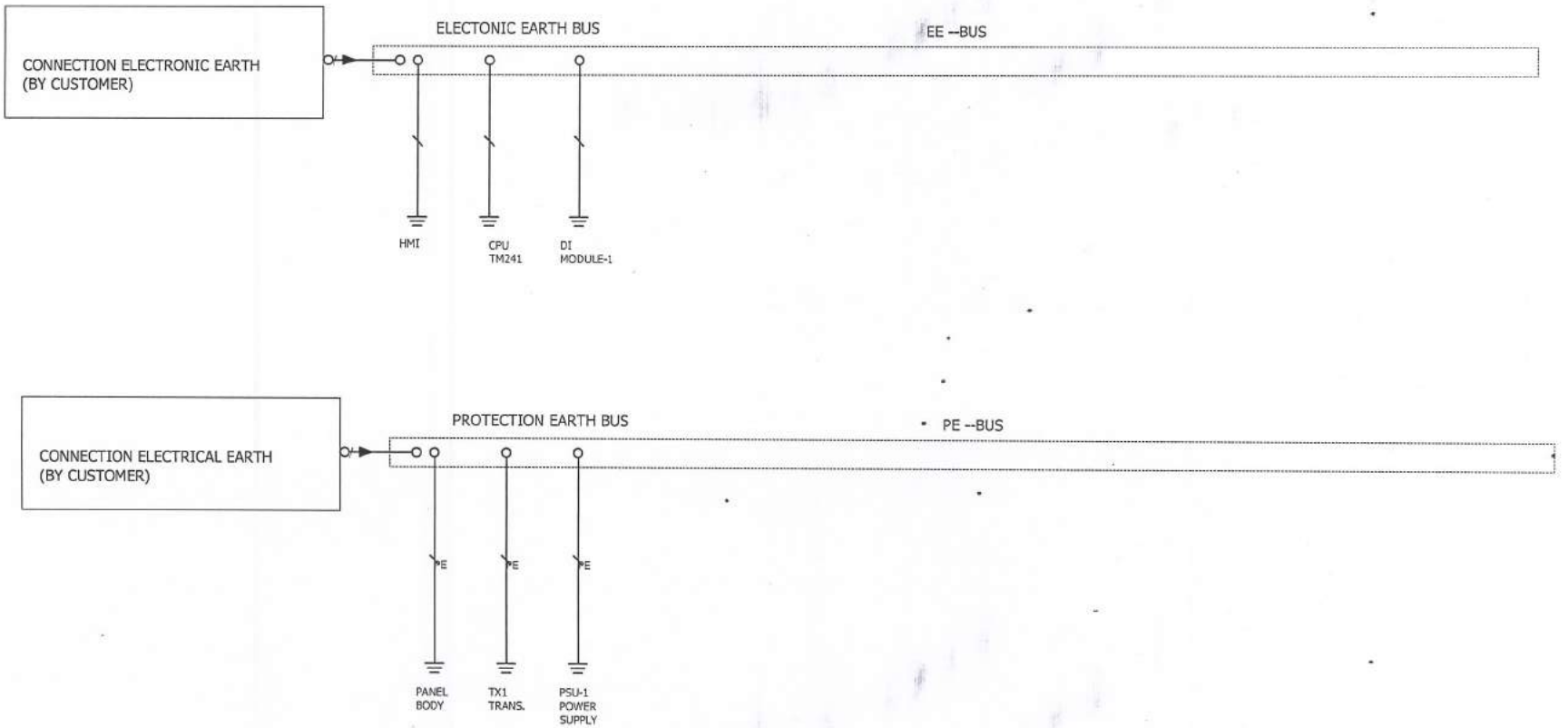
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- VALVES CONTROL	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22 KW BOOSTER COMP.	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	APPROVED BY: MR. RIZWAN	Page 26
					DRWAN BY: SS ALAM	CHECKED BY: MR. RIZWAN	



Previous page
26

Next page
28

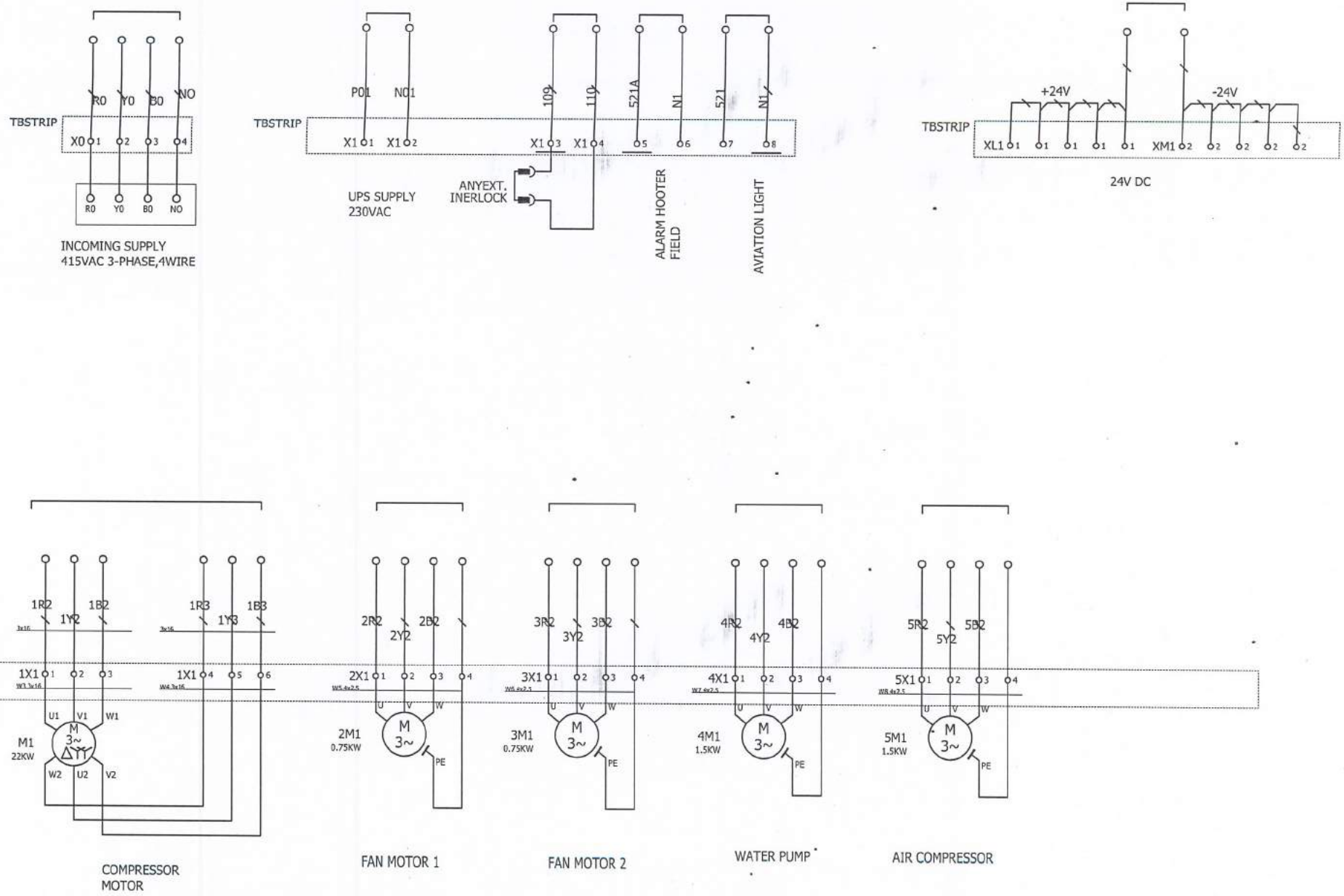
DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 30/04/19	PAGE DESCRI:- FUTURE PROVISION CONTROL	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HPOIL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.:	DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN
							CHECKED BY: MR. RIZWAN



Previous page
27

Next page
29

DRAWG.NO.- L-00261	PROJECT No:-	PROJECT DESCRIPTION:-	CUSTOMER:-	MANUFACTURER:-	Modification date: 29/04/19	PAGE DESCRI:- PANEL EARTHING	
DATE- 08/04/19	ICL-22KW COMP. (HOGPL)	PLC PANEL FOR 22KW BOOSTER COMP	HOGPL GAS PVT. LTD.	INDIAN COMPRESSOR LIMITED	REV. no.: DRWAN BY: SS ALAM	APPROVED BY: MR. RIZWAN CHECKED BY: MR. RIZWAN	Page 28

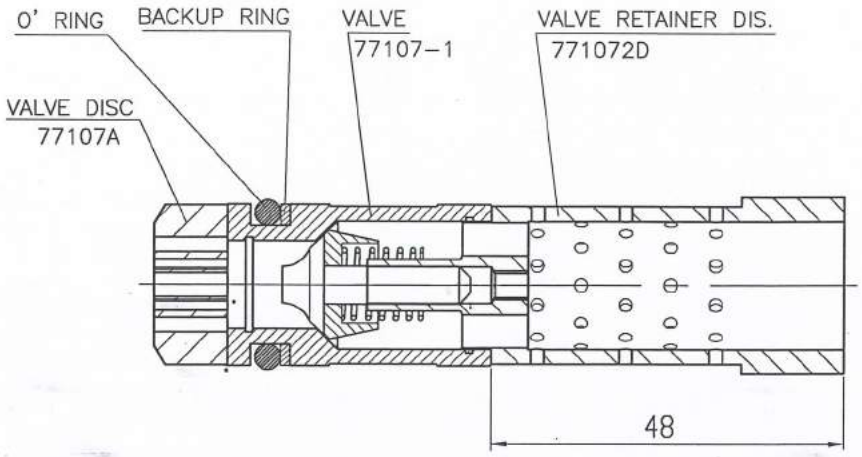


Previous page
28

Next page
30

DRAWG.NO.- L-00261	PROJECT No:- ICL-22KW COMP. (HOGPL)	PROJECT DESCRIPTION:- PLC PANEL FOR 22KW BOOSTER COMP.	CUSTOMER:- HPOIL GAS PVT. LTD.	MANUFACTRURER:- INDIAN COMPRESSOR LIMITED	Modification date: 30/04/19 REV. no.: DRWAN BY:- SS ALAM	PAGE DESCRI:- TERMINAL DETAIL
DATE- 08/04/19						APPROVED BY: MR. RIZWAN CHECKED BY: MR. RIZWAN

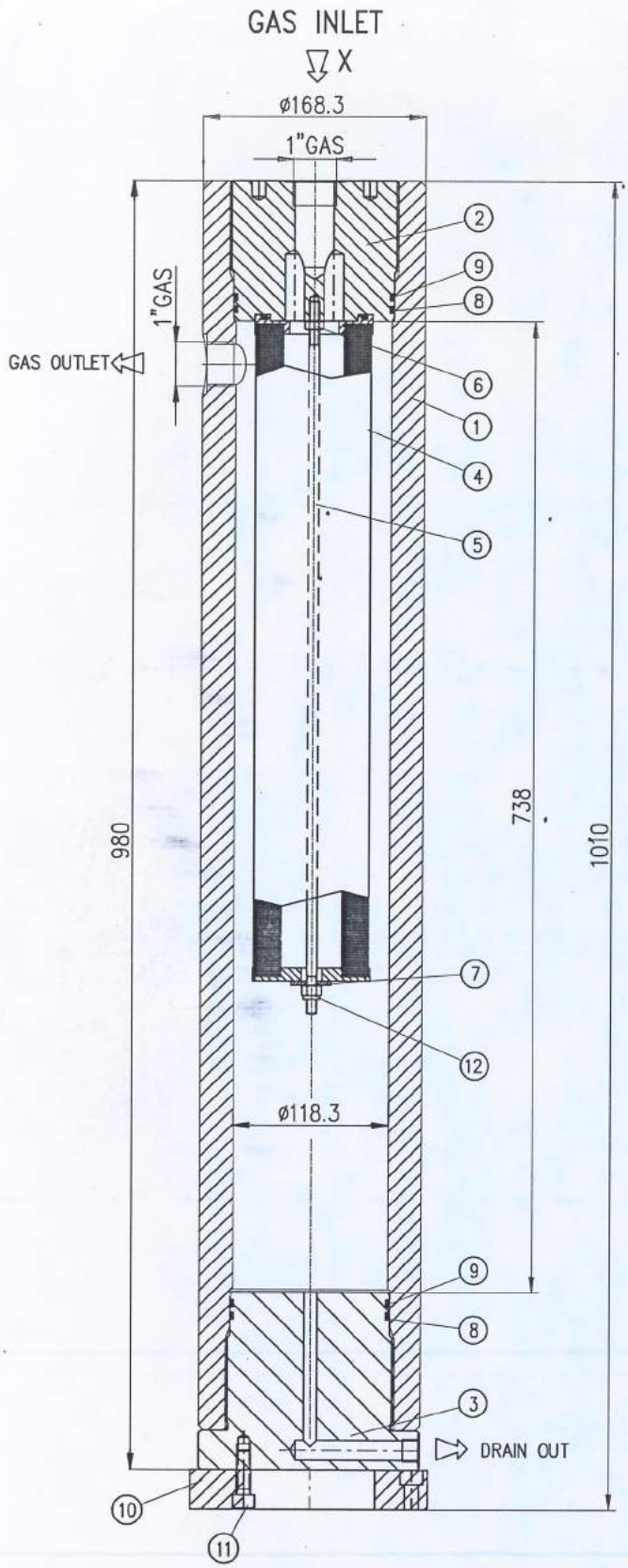
DO NOT SCALE THE DRG.	IF IN DOUBT ASK	A4

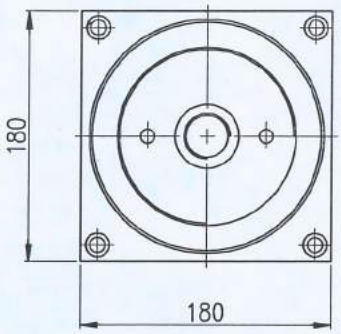


S.NO.	DESCRIPTION	QTY.	CODE NO.
1	VALVE DISC	1	771071A
2	O' RING	1	771075
3	BACKUP RING	1	771074
4	VALVE ASSEMBLY	1	6372300
5	VALVE RETAINER DISC.	1	771072

UNSPECIFIED MACHINING TOLERANCE				CODE NO.	77107-D	
0---75 ±0.125	75---150 ±0.250	150---300 ±0.375	>300 ±0.500	DRG. NO.	VCD3030771072D	
INDIAN COMPRESSORS LIMITED	MODEL	SURFACE FINISH			INITIALS	DATE
	B30-30	~ > 80 ▽ 40 - 80 ▽▽ 16 - 40 ▽▽▽ UPTO 16		DRAWN	JACOB	13.05.13
				CHECKED	KSB	13.05.13
				APPROVED		
SCALE -	TITLE VALVE ASSBMBLY 1ST STAGE SUC.& DIS. 2ND STAGE DIS.			QTY. 2 NOS.	MATERIAL	
					WT.	

Digitally signed by Bivek Kumar Singh
Date: 2026.03.30 17:40:28 IST





VIEW FROM ARROW–X

Working pressure: = 250 bar
Hydrostatic test pr. = 375 bar
Test duration of time = 30 min.
Max working temperature: 60°C

S.NO.	QTY.	DESCRIPTION	CODE NO.
12	1	LOCK NUT M8	881808
11	4	ALLEN BOLT M10X35 LONG	88003010035B
10	1	BOTTOM MOUNTING FLANGE	7799219
9	4	O' RING 246 110.72 ID X ø3.53	89310264
8	4	BACKUP RING 246 122 ID X128 OD X 1.5 THK.	89320246
7	1	PLAIN WASHER W8	881008
6	2	HEX. NUT M8	880508
5	1	STUD M8X550 LONG	880908
4	1	COALESCER FILTER	71ZV2000
3	1	BOTTOM CASE	A–0000408
2	1	TOP CASE	A–0000364
1	1	DAMPNER SHELL	A–0000366

DIDWANIA
COMPRESSORS

TITLE
X–SECTIONAL ASSEMBLY OF
PULSATION DAMPNER
B30–30

	INITIALS	DATE
DRAWN	JACOB	21.05.15
CHECKED	KSB	21.05.15
APPROVED		
DRG.NO.	F–0001658	

INDIAN COMPRESSORS LIMITED

Digitally signed by Bivek Kumar Singh
Date: 2026.03.30 17:40:28 IST