



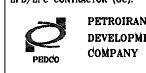
# LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
SUBSTRICAL LOAD UNIT	SK-CGS-PRDCC-120-BL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LF PANEL	SK-CGS-PRDCC-120-BL-DC-002

KEY PLAN

DD6	DEC.2025	IPA	K.BAGHA	M.FADISMAN	M.HUSEIN	M.HUSEIN	** **										
DD4	FEB.2025	IPA	K.BAGHA	M.FADISMAN	M.HUSEIN	M.HUSEIN	** **										
DD5	AUG.2022	IPA	K.BAGHA	M.FADISMAN	M.HUSEIN	M.HUSEIN	** **										
DD2	MAY.2022	IPA	K.BAGHA	M.FADISMAN	M.HUSEIN	M.HUSEIN	** **										
DD1	APR.2022	IPA	K.BAGHA	M.FADISMAN	M.HUSEIN	M.HUSEIN	** **										
DD0	DEC.2021	IPC	K.BAGHA	M.FADISMAN	M.HUSEIN	M.HUSEIN	** **										
REV.	DATE	P.O.I.F.	PREP.	CHK.	APP.	AUT.		REV.	DESCRIPTION	BY	DATE	BY	DATE	CHECKED	REV. APPR.		
<p>اميل و كليه نسخ اين نقشه و سوي نقشه مشخص به تركت ملي مناطق نفت فزر جنوب ميباشد.</p> <p>THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS</p>																	
<p>PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION</p>																	
<p>PROJECT NO.: 971020</p>																	
<p>EPC CONTRACTOR:</p>  <p>HIRASAN ENERGY - DESIGN &amp; INSPECTION COMPANIES</p>				<p>EPD/EPC CONTRACTOR (CO):</p>  <p>PETROIRAN DEVELOPMENT COMPANY</p>				<p>BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION</p>									
								DATE		SCALE		DRAWING BY		CHECKED BY		PROJECT ENG.	
<p>DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM</p>								<p>NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED</p>									
<p>APPROVED FOR CONSTRUCTION</p>								<p>BY: DATE:</p>									
SCALE	SIZE	DRAWING NO.		SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION					
N.T.B	A2	SK-CGS-PRDCC-120-BL-002		01 OF 23	DD6	003-070-0104	P	2	P	709005	01 OF 23	DD6					

**NOTES:**

1- ALL AMMETERS OF MOTORS HAVE TO BE 6xIn.

2- CATEGORY DESCRIPTION:

F1: SIMPLE 4-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR I<63A FEEDERS.

F2: SIMPLE 4-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 63A=<I<100A FEEDERS.

F3: SIMPLE 4-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 100A=<I FEEDERS.

F4: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR I<63A FEEDERS.

F5: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 63A=<I<100A FEEDERS.

F6: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 100A=<I FEEDERS.

F7: SIMPLE 2-POLE MCCB FEEDER FOR FEEDING SINGLE PHASE LOADS (PH+N OR 2-PH)

F8: SIMPLE 2-POLE MCCB FEEDER FOR FEEDING SINGLE PHASE LOADS (PH+N OR 2-PH) WITH CONTACTOR (ONLY FOR HAVAYAR)

F9: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 100A=<I FEEDERS. WITH CONTACTOR (ONLY FOR HAVAYAR)

M1: DIRECT ON LINE MOTOR STARTER FEEDERS FOR P < 4kW, (SWITCH FUSE+CONTACTOR+BIMETAL+R/L SIGNALING)

M2: DIRECT ON LINE MOTOR STARTER FEEDERS FOR 4kW ≤ P < 18.5kW, (SWITCH FUSE+CONTACTOR+BIMETAL+R/L SIGNALING+R/L AMMETER)

M3: DIRECT ON LINE MOTOR STARTER FEEDERS FOR 18.5kW ≤ P < 30kW  
SWITCH FUSE + CONTACTOR + BIMETAL + R/L SIGNALING + R/L AMMETER + (49, 50G + PHASE CONTROL)

M4: DIRECT ON LINE MOTOR STARTER FEEDERS FOR 30kW ≤ P  
(SWITCH FUSE + CONTACTOR + R/L SIGNALING+ R/L AMMETER + MOTOR PROTECTION RELAY(MPR),(49, 50G & PHASE CONTROL)

M5: DIRECT ON LINE MOTOR STARTER FEEDERS FOR P ≤ 30kW (ONLY FOR HAVAYAR)  
(SWITCH FUSE + CONTACTOR + R/L SIGNALING+ R/L AMMETER + MOTOR PROTECTION RELAY(MPR),(49, 50G & PHASE CONTROL)

3- CORE BALANCE CT RATING OF EARTH LEAKAGE RELAYS SHALL BE ACCORDING TO RELAY MANUFACTURER STANDARD.

4- VOLTAGE AND CURRENT TRANSFORMERS SHALL HAVE APPROPRIATE VA.

5- THIS SWITCHGEAR SHALL BE DESIGNED, MANUFACTURED, INSPECTED AND TESTED IN ACCORDING WITH THE APPLICABLE SECTION OF IPS-E-EL-100(1) & IPS-E-EL-143(3)

6- ALL SWITCH FUSES SHALL BE EQUIPPED WITH STRIKER PIN

7- ALL EQUIPMENT SIZING SHALL BE FINALIZED BY MANUFACTURER BASED ON SITE CONDITION. IN ADDITION, TYPE 2 OF COORDINATION SHALL BE FOLLOWED BY VENDOR.

8- WHEN FUNCTION 27 IS ACTIVATED, ALL OUTGOING FEEDERS SHALL BE TRIPPED.

9- STATUS FROM BUS TIE & LV INCOMING TO DCS SHALL BE CONSIDERED BY VENDOR.

10- STOP & START PUSH BUTTON SHALL BE CONSIDERED ON INCOMINGS & BUS-TIES.

11- CONTROL CIRCUIT VOLTAGE FOR OUTGOING IS 230 VAC WHICH WILL BE SUPPLIED FOR EACH LV CUBICLE. EACH LV CUBICLE ONE ISOLATED DRY TYPE TRANSFORMER SHALL BE CONSIDERED BY VENDOR.

12- FOR FEEDER WITH TYPE M3,M4, CURRENT AND VOLTAGE FAULT SHALL BE CONSIDERED SEPARATELY BY VENDOR

13- MICROPROCESSOR TYPE PROTECTIVE RELAYS SHALL BE EQUIPPED WITH RS 485 TO SEND SIGNALS BY SERIAL LINK

14- MCCB TYPE OUTGOING FEEDER SHALL BE EQUIPED WITH ROTARY SWITCH

15- CONNECTION BETWEEN MEASURING UNIT AND DCS SHALL BE RS 485 TO SEND SIGNALS BY SERIAL LINK.



NOTES	
LEGEND	
REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-CGF-PBDC0-120-BL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANEL	BK-CGF-PBDC0-120-BL-DC-0002
KEY PLAN	

NO.	DATE	BY	DESCRIPTION	BY	DATE	BY	DATE

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPD CONTRACTOR: HIRSAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY  
 DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM  
 NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED  
 APPROVED FOR CONSTRUCTION BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SCALE: A2    DRAWING NO.: BK-CGF-PBDC0-120-BL-0002    SHEET NO.: 02 OF 23    REV.: D06    BUDGET REF. LOCATION: 003-070-0104    SIZE: P    CLASS: 2    P    SERIAL NO.: 709005    SHEET REVISION: 02 OF 23    D06

# LEGEND

	WITHDRAWABLE AIR CIRCUIT BREAKER WITH MOTORIZED & MANUALLY CHARGED STORED ENERGY MECHANISM		MOULDED CASE CIRCUIT BREAKER, MANUALLY OPERATED WITH THERMAL MAGNETIC OVER CURRENT RELAY
	CONTACTOR (CONTACT OPEN IN THE UNOPERATED POSITION)(N.O.)		OPERATING DEVICE GENERAL SYMBOL
	PUSH BUTTON STATION START-STOP WITH AMMETER (W/P)		PUSH BUTTON STATION START-STOP WITH AMMETER (EX.)
	ZERO SEQUENCE CURRENT TRANSFORMER (CORE-BALANCE)		LOAD BREAK SWITCH
	26 SYNCHRONIZING CHECK RELAY		PUSH BUTTON STATION START-STOP (W/P)
	27 UNDER VOLTAGE RELAY		PUSH BUTTON STATION START-STOP (EX.)
	46 REVERSE PHASE OR PHASE BALANCE CURRENT RELAY		SWITCH FUSE
	47 PHASE SEQUENCE OR PHASE BALANCE VOLTAGE RELAY		VOLTMETER SELECTOR SWITCH
	49 THERMAL OVERLOAD RELAY		AMMETER SELECTOR SWITCH
	50 INSTANTANEOUS OVER CURRENT RELAY		SELECTOR SWITCH
	61 TIME DELAYED OVER CURRENT RELAY		LED TYPE SIGNAL LAMP
	50N INSTANTANEOUS EARTH FAULT RELAY		TRANSFORMER
	61N INVERSE TIME EARTH FAULT RELAY		CURRENT TRANSFORMER
	500 INSTANTANEOUS EARTH FAULT RELAY (BY ZERO SEQUENCE CT)		MOTOR
	61d INSTANTANEOUS EARTH FAULT RELAY (BY ZERO SEQUENCE CT)		ALARM WINDOW WITH RESET & ACKNOWLEDGE
	59 OVER VOLTAGE RELAY		CABLE GLAND
	63 LIQUID AND GAS PRESSURE RELAY		CABLE SEALING END
	64 GROUND DETECTOR RELAY		WITHDRAWABLE PART
	74 TRIP CIRCUIT SUPERVISION		POWER CABLE
	86 LOCK OUT RELAY		CONTROL CABLE
	86 MOTOR PROTECTION RELAY		START PUSH BUTTON
	94 INTERTRIP RECEIVE RELAY		EMERGENCY STOP, MUSHROOM TYPE
	THERMAL OVERLOAD RELAY (49)		
	PH.C PHASE SEQUENCE OR PHASE BALANCE RELAY (47)		

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PBDC-120-BL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LF PANEL	BE-CGS-PBDC-120-BL-DC-002

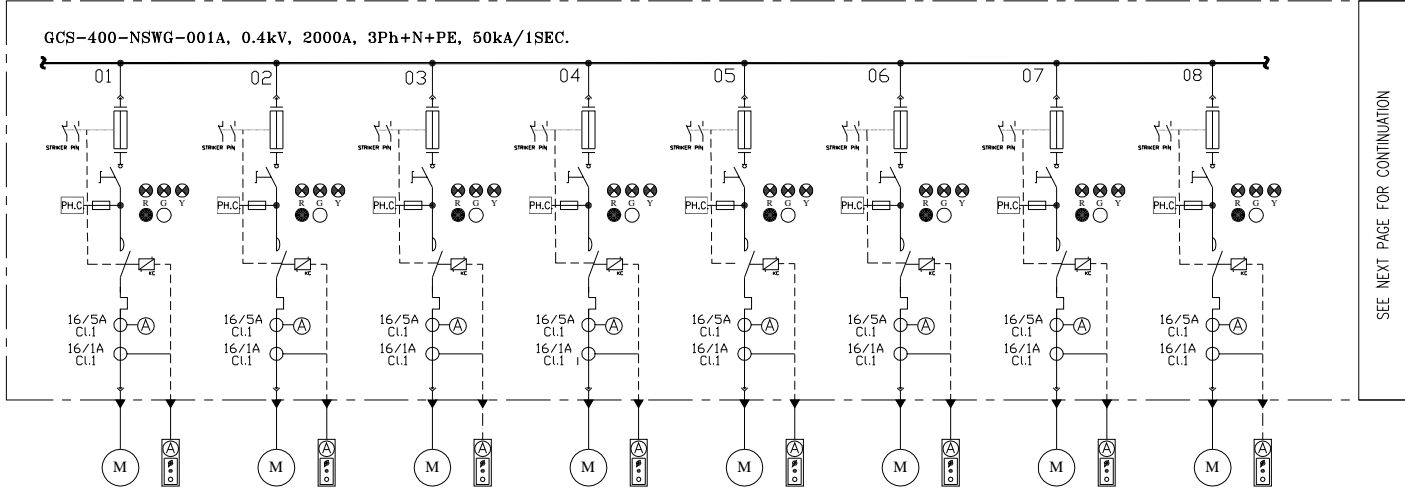
KEY PLAN

DD6	DEC.2025	IPA	ALBAEBA	ALJABERAN	ALJABERAN	***													
DD4	FEB.2025	IPA	ALBAEBA	ALJABERAN	ALJABERAN	***													
DD5	AUG.2025	IPA	ALBAEBA	ALJABERAN	ALJABERAN	***													
DD2	MAY.2025	IPA	ALBAEBA	ALJABERAN	ALJABERAN	***													
DD1	APR.2025	IPA	ALBAEBA	ALJABERAN	ALJABERAN	***													
DD0	DEC.2021	IPC	ALBAEBA	ALJABERAN	ALJABERAN	***													
REV.	DATE	P.O.L	PREP.	CHK.	APP.	AUT.													
PROJECT NAME:							BINAQ OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION												
PROJECT NO.:							971020												
EPC CONTRACTOR:																			
DRAWING TITLE:							LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM												
SCALE:							AS SHOWN												
SHEET NO.:							03 OF 23												
REV.:							DD6												
BUDGET REF. LOCATION:							003-070-0104												
CLASS:							P												
SERIAL NO.:							709005												
SHEET REVISION:							03 OF 23												
DATE:							DD6												

امیر و کلیه نسخ این نقشه و حق انحصاری مندرک به شرکت ملی نفت ایران می باشد.  
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BINAQ OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED



SEE NEXT PAGE FOR CONTINUATION

CATEGORY	M2	M2	M2	M2	M2	M2	M2	M2
CODE	AC-2101A1	AC-2101A2	AC-2101C1	AC-2101C2	AC-2102A1	AC-2102A2	AC-2102C1	AC-2102C2
POWER (KW)	5.5KW	5.5KW	5.5KW	5.5KW	5.5KW	5.5KW	5.5KW	5.5KW
C.B TYPE/RATING	-	-	-	-	-	-	-	-
FUSE TYPE/RATING	oM/16A	oM/16A	oM/16A	oM/16A	oM/16A	oM/16A	oM/16A	oM/16A
CONTACTOR RATING (A)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)
OVER LOAD SETTING RANGE	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A
CABLE SIZE	3x10	3x10	3x10	3x10	3x10	3x10	3x10	3x10
DESCRIPTION OF FEEDER	FIRST STAGE AIR COOLER 01A1	FIRST STAGE AIR COOLER 01A2	FIRST STAGE AIR COOLER 01C1	FIRST STAGE AIR COOLER 01C2	FIRST STAGE AIR COOLER 02A1	FIRST STAGE AIR COOLER 02A2	FIRST STAGE AIR COOLER 02C1	FIRST STAGE AIR COOLER 02C2

105

NOTES

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LEGEND

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REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PSDC-120-BL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANEL	BE-CGS-PSDC-120-BL-DC-002

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KEY PLAN

DD6	DEC.2025	IPA	ELBAHER	ELJANABAN	ELJANABAN	***							
DD4	FEB.2025	IPA	ELBAHER	ELJANABAN	ELJANABAN	***							
DD5	AUG.2025	IPA	ELBAHER	ELJANABAN	ELJANABAN	***							
DD2	MAY.2025	IPA	ELBAHER	ELJANABAN	ELJANABAN	***							
DD1	APR.2025	IPA	ELBAHER	ELJANABAN	ELJANABAN	***							
DD0	DEC.2021	IPC	ELBAHER	ELJANABAN	ELJANABAN	***							
REV.	DATE	P.O.L/E	PREP.	CHK.	APP.	AUT.							

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: **IRISAN ENERGY** DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): **PETROIRAN DEVELOPMENT COMPANY**

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

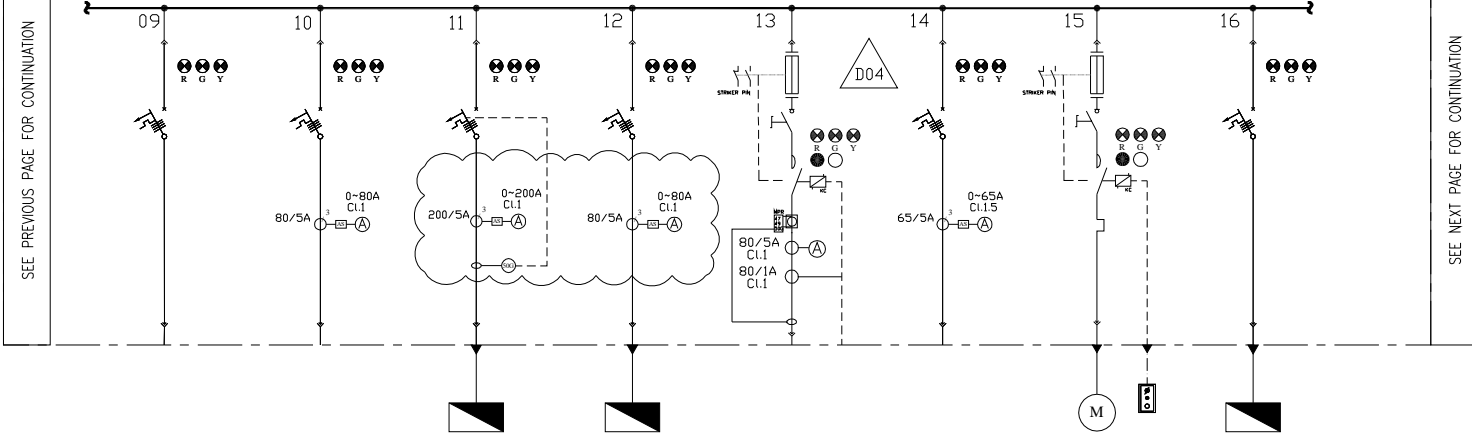
DATE: \_\_\_\_\_ SCALE: \_\_\_\_\_ DRAWING BY: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ PROJECT ENG.:

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

SCALE	SHEET	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	BE-CGS-PSDC-120-BL-DC-002	04 OF 23	DD6	003-079-0104	P	2	P	709005	04 OF 23	DD6

GCS-400-NSWG-001A, 0.4kV, 2000A, 3Ph+N+PE, 50ka/1SEC.



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION

CATEGORY	F1	F2	F3	F2	M4	F2	M1	F1
CODE	SPARE	SPARE	PK-2204	PK-2201	SPARE	SPARE	P-2103A	GCS-400-CR-02
POWER (KW)	2KW	30KW	75KW	30KW	30KW	20KW	1.5KW	5KW
C.B TYPE/RATING	16A	80A	200A	80A	-	63A	-	32A
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	aM/80A	N/A	aM/4A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	30KW <AC3>	N/A	1.5KW <AC3>	N/A
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	48 ... 65 A	N/A	2.5 ... 4 A	N/A
CABLE SIZE	-	-	2(3x120+70)	3x120+70	-	-	3x4	4x10
DESCRIPTION OF FEEDER	SPARE	SPARE	NITROGEN PACKAGE	LP FLARE PACKAGE	SPARE	SPARE	GLYCOL TRANSFER PUMP A	FIRE WATER PUMPS CRANE

D05

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PRD00-120-EL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PRD00-120-EL-DC-002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2023	IFC	ALBAHRA	ALFARHAN	ALSHARAH	** **
DD4	FEB.2023	IPA	ALBAHRA	ALFARHAN	ALSHARAH	** **
DD5	AUG.2022	IFC	ALBAHRA	ALFARHAN	ALSHARAH	** **
DD2	MAY.2022	IPA	ALBAHRA	ALFARHAN	ALSHARAH	** **
DD1	APR.2022	IPA	ALBAHRA	ALFARHAN	ALSHARAH	** **
DD0	DIS.2021	IFC	ALBAHRA	ALFARHAN	ALSHARAH	** **

REV. DATE DESCRIPTION CHECKED BY APPR. DATE

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRSHAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

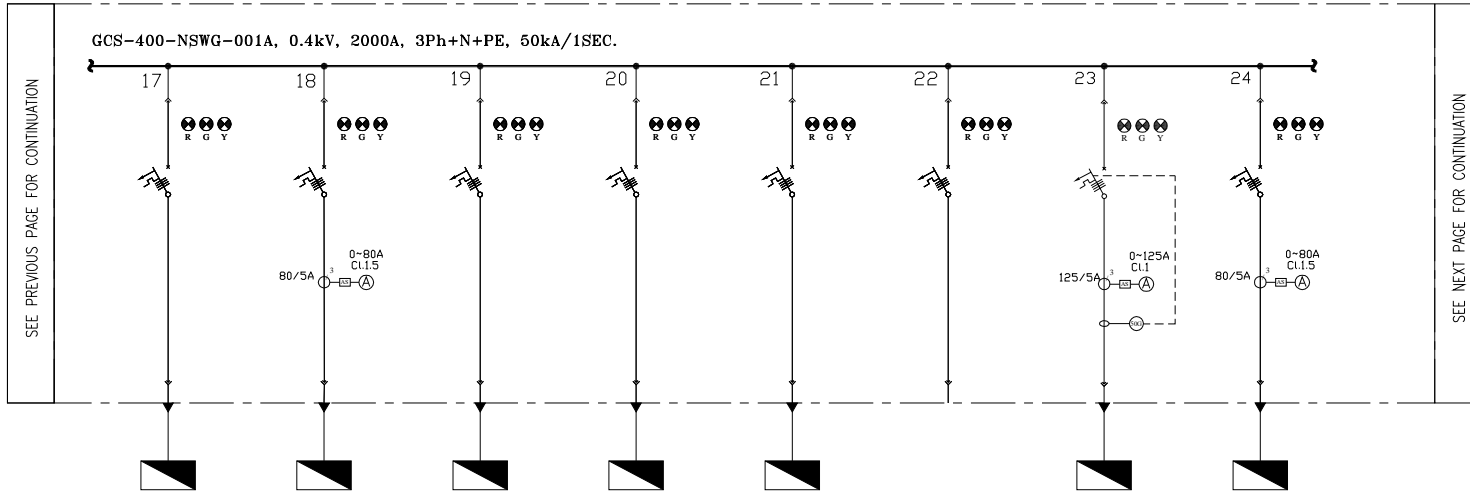
DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	BE-CGS-PRD00-120-EL-DC-002	06 OF 23	DD6	003-070-0104	P	2	P	709005	06 OF 23	DD6



CATEGORY	F1	F2	F1	F1	F1	F1	F3	F2
CODE	GCS-400-NDP-02	WS-UT-02	GCS-400-CP01	GCS-110-CHG-001	GCS-24-CHG-001	SPARE	MCC-2101A	WS-PR-03
POWER (kW)	10kW	35kW	5kW	20kW	18.5kW	2kW	50kW	35kW
C.B TYPE/RATING	32A	80A	16A	50A	50A	16A	125A	80A
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CABLE SIZE	4x25	3x50+25	4x10	4x16	4x16	-	3x35+16	3x50+25
DESCRIPTION OF FEEDER	UTILITY AREA NORMAL DISTRIBUTION PANEL	2nd WELDING RECEPTACLE (UTILITY AREA)	CATHODIC PROTECTION TRANSFORMER RECTIFIER	110VDC CHARGER 1	24VDC CHARGER 1	SPARE	AUXILIARY PANEL FOR GAS COMPRESSOR C-2101A	3rd WELDING RECEPTACLE (PROCESS AREA)

D05

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
SUBSTATION LOAD LIST	SK-CGS-PRDCO-120-EL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	SK-CGS-PRDCO-120-EL-DC-002

KEY PLAN

NO.	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
DD6	DEC.2023	IPA	REVISION			
DD4	FEB.2023	IPA	REVISION			
DD8	AUG.2022	IPA	REVISION			
DD2	MAY.2022	IPA	REVISION			
DD1	APR.2022	IPA	REVISION			
DD0	DEC.2021	IPC	REVISION			

REV.	DATE	P.O.L.S	PREP.	CHK.	APP.	AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: NIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

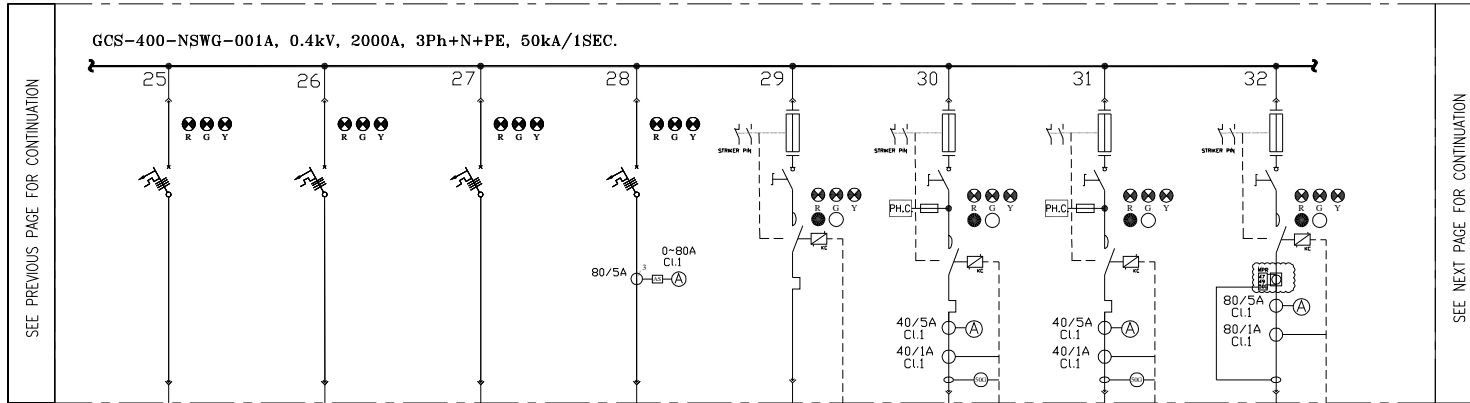
DATE:    SCALE:    DRAWING BY:    CHECKED BY:    PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

SCALE	SHEET NO.	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.S.B	A2	SK-CGS-PRDCO-120-EL-DC-002	06 OF 23	DD6	003-079-9184	P	2	P	709005	06 OF 23	DD6

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CATEGORY	F1	F1	F1	F2	M1	M3	M3	M4
CODE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
POWER (kW)	-	-	-	-	1.5KW	18.5KW	18.5KW	30KW
C.B TYPE/RATING	16A	32A	50A	80A	-	-	-	-
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	aM/4A	aM/40A	aM/40A	aM/80A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	1.5KW <AC3>	18.5KW <AC3>	18.5KW <AC3>	30KW <AC3>
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	2.5 ... 4 A	30 ... 40 A	30 ... 40 A	48 ... 65 A
CABLE SIZE	-	-	-	-	-	-	-	-
DESCRIPTION OF FEEDER	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE

NOTES

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LEGEND

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REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PBDCO-120-EL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PBDCO-120-EL-DC-0002

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KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2023	IFP	ELBAGHA	ELJUSSEIN	ELJUSSEIN	***
DD4	FEB.2023	IFP	ELBAGHA	ELJUSSEIN	ELJUSSEIN	***
DD5	AUG.2022	IFP	ELBAGHA	ELJUSSEIN	ELJUSSEIN	***
DD2	MAY.2022	IFP	ELBAGHA	ELJUSSEIN	ELJUSSEIN	***
DD1	APR.2022	IFP	ELBAGHA	ELJUSSEIN	ELJUSSEIN	***
DD0	DEC.2021	IPC	ELBAGHA	ELJUSSEIN	ELJUSSEIN	***

REV. DATE P.O.L.F. PREP. CHK. APP. AUT.

PROJECT NAME: **BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION**

PROJECT NO.: **971020**

<p>EPC CONTRACTOR:</p> <p>IRISAN ENERGY - DESIGN &amp; INSPECTION COMPANIES</p>	<p>EPD/EPC CONTRACTOR (CO):</p> <p>PETROIRAN DEVELOPMENT COMPANY</p>
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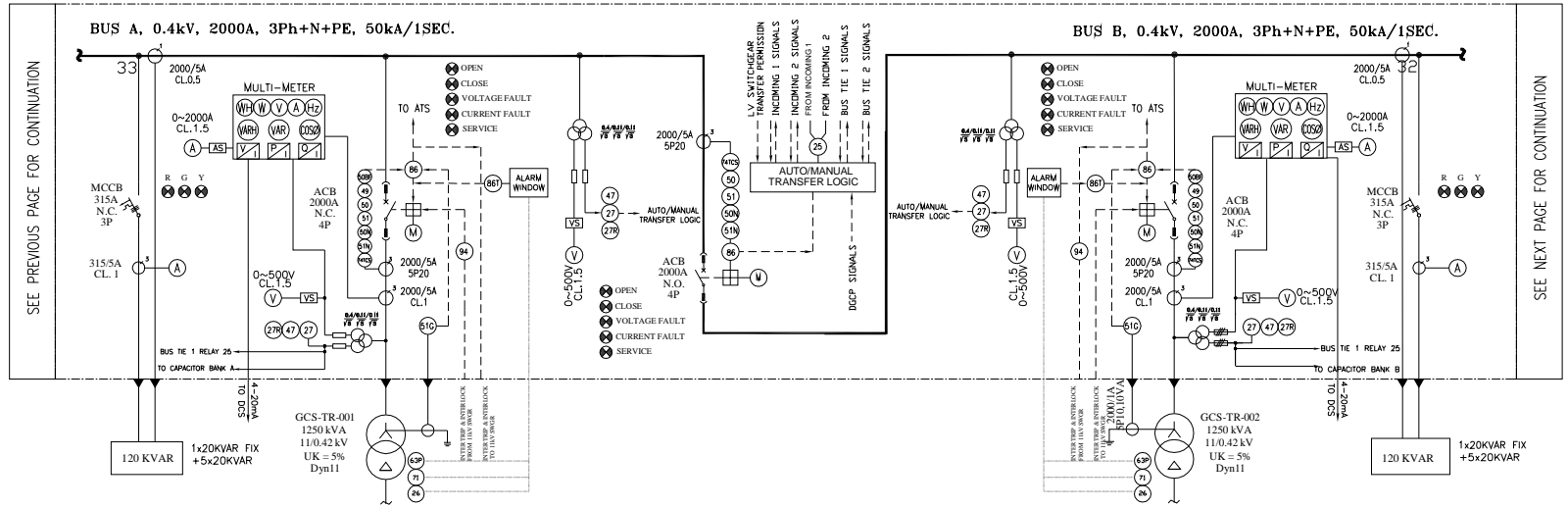
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DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.
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NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.B	A2	BE-CGS-PBDCO-120-EL-DC-0002	07 OF 23	DD6	003-070-0104	P	2	P	709005	07 OF 23	DD6



CATEGORY	F3	IN1	VOLTAGE TRANSFORMERTR	CD1	VOLTAGE TRANSFORMERTR	IN2	F3
CODE	CAP-01	GCS-TR-001	N/A	N/A	N/A	GCS-TR-001	CAP-02
POWER (kW)	120KVAR	1250KVA	250VA	N/A	250VA	1250KVA	120KVAR
C.B TYPE/RATING	MCCB-315 A	<ACB+M>/2000A	MCB 6A	<ACB+M>/2000A	MCB 6A	<ACB+M>/2000A	MCCB-315 A
FUSE TYPE/RATING	N/A	N/A	gG/4A	N/A	gG/4A	N/A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CABLE SIZE	2(3x185)	14(1x300)	N/A	N/A	N/A	14(1x300)	2(3x185)
DESCRIPTION OF FEEDER	LV CAPACITOR BANK 01	INCOMING FROM TRANSFORMER	BUS A CONTROL TRANSFORMER	COUPLING	BUS A CONTROL TRANSFORMER	INCOMING FROM TRANSFORMER	LV CAPACITOR BANK 02



NOTES  
 1-VOLTMETER SELECTOR SWITCH SHALL BE ABLE TO SHOW SINGLE PHASE VOLTAGE.  
 2-CONNECTION BETWEEN MEASURING UNIT AND DCS WILL BE RS 485 TO SEND SIGNALS BY SERIAL LINK.

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-FBDC-120-BL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANEL	BE-CGS-FBDC-120-BL-DC-002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	DEC.2023	IPA	H.MANISHA	H.JUSMAN	H.JUSMAN	***
D04	FEB.2023	IPA	H.MANISHA	H.JUSMAN	H.JUSMAN	***
D05	AUG.2022	IPA	H.MANISHA	H.JUSMAN	H.JUSMAN	***
D02	MAY.2022	IPA	H.MANISHA	H.JUSMAN	H.JUSMAN	***
D01	APR.2022	IPA	H.MANISHA	H.JUSMAN	H.JUSMAN	***
D00	DEC.2021	IPC	H.MANISHA	H.JUSMAN	H.JUSMAN	***

REV. DATE DESCRIPTION BY DATE BY DATE

REV. DATE P.O.L# PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRSHAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GO): PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	06	BE-CGS-FBDC-120-BL-DC-002	06 OF 23	D06	003-079-014	P	2	P

امیر و کلیه سنج این فیلد و سنج اکتیو سنج به شرکت ملی صنایع پتروشیمی ارسال گردد.  
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BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

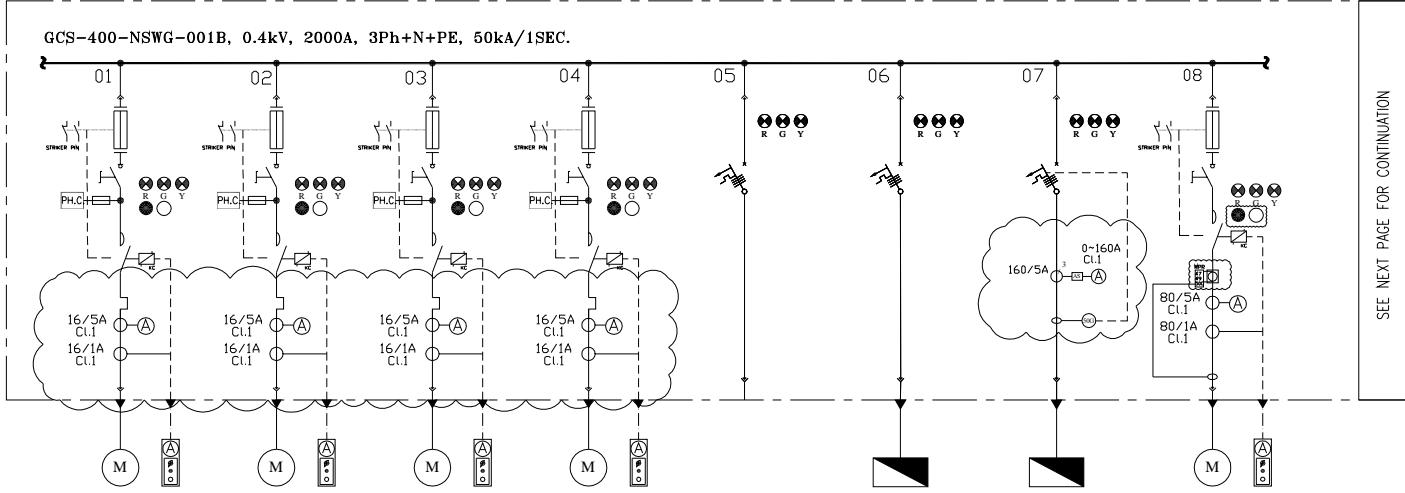
DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	06	BE-CGS-FBDC-120-BL-DC-002	06 OF 23	D06	003-079-014	P	2	P





SEE NEXT PAGE FOR CONTINUATION

CATEGORY	M2	M2	M2	M2	F1	F1	F3	M4
CODE	AC-2101B1	AC-2101B2	AC-2102B1	AC-2102B2	SPARE	PK-2207	PK-2101	SPARE
POWER (KW)	5.5KW	5.5KW	5.5KW	5.5KW	2KW	3KW	60KW	30KW
C.B TYPE/RATING	-	-	-	-	16A	16A	160A	-
FUSE TYPE/RATING	oM/16A	oM/16A	oM/16A	oM/16A	N/A	N/A	N/A	oM/80A
CONTACTOR RATING (A)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	N/A	N/A	N/A	30kW (AC3)
OVER LOAD SETTING RANGE	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A	N/A	N/A	N/A	48 ... 65 A
CABLE SIZE	3x10	3x10	3x10	3x10	-	4x10	3x95+50	-
DESCRIPTION OF FEEDER	FIRST STAGE AIR COOLER 01B1	FIRST STAGE AIR COOLER 01B2	SECOND STAGE AIR COOLER 02B1	SECOND STAGE AIR COOLER 02B2	SPARE	CORROSION INHIBITOR PACKAGE	DEHYDRATION PACKAGE	SPARE

D05

NOTES

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LEGEND

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REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PSDCO-120-BL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PSDCO-120-BL-DC-0002

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KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	DEC.2025	IPR	ELMANSOURI	ELJADIDAN	ELJADIDAN	***
D04	FEB.2025	IPR	ELMANSOURI	ELJADIDAN	ELJADIDAN	***
D05	AUG.2025	IPR	ELMANSOURI	ELJADIDAN	ELJADIDAN	***
D02	MAY.2025	IPR	ELMANSOURI	ELJADIDAN	ELJADIDAN	***
D01	APR.2025	IPR	ELMANSOURI	ELJADIDAN	ELJADIDAN	***
D00	DEC.2021	IPC	ELMANSOURI	ELJADIDAN	ELJADIDAN	***

REV. DATE P.O.L.F PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

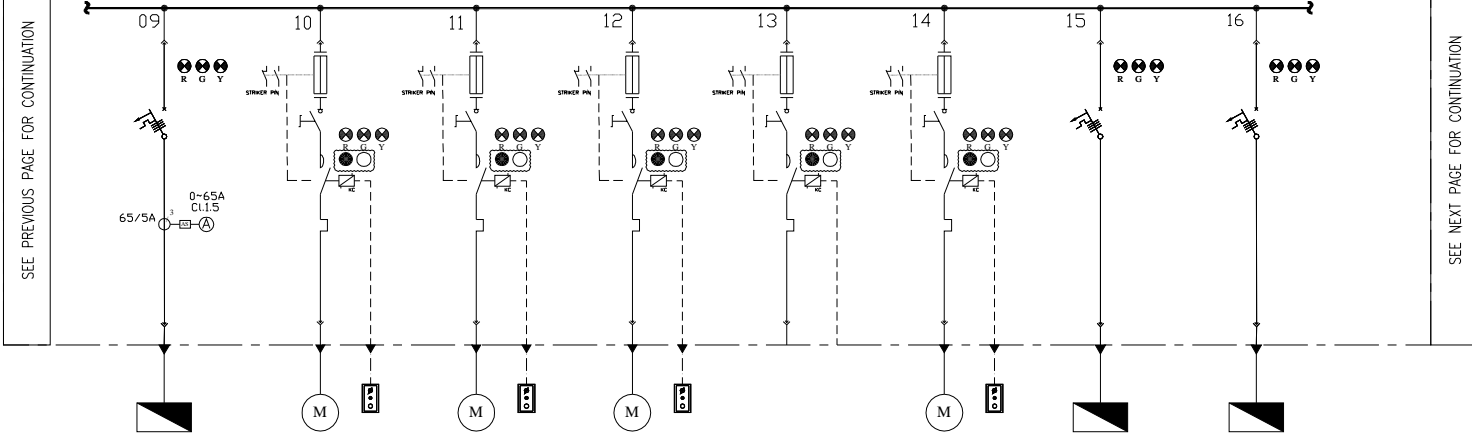
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	BE-CGS-PSDCO-120-BL-DC-0002	06 OF 23	D06	003-070-0104	P	2	P	709005	06 OF 23	D06

GCS-400-NSWG-001B, 0.4kV, 2000A, 3Ph+N+PE, 50kA/1SEC.



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION

CATEGORY	F2	M1	M1	M1	M1	M1	F1	F1
CODE	SPARE	P-2209	P-2206	P-2103B	SPARE	P-2104	GCS-400-CR-01	GCS-400-NDP-01
POWER (KW)	20KW	2.2KW	1.1KW	1.5KW	1.1KW	1.1KW	10KW	20KW
C.B TYPE/RATING	63A	-	-	-	-	-	32A	50A
FUSE TYPE/RATING	N/A	αM/6A	αM/4A	αM/4A	αM/4A	αM/4A	N/A	N/A
CONTACTOR RATING (A)	N/A	2.2KW (AC3)	1.1KW (AC3)	1.5KW (AC3)	1.1KW (AC3)	1.1KW (AC3)	N/A	N/A
OVER LOAD SETTING RANGE	N/A	4 ... 6 A	2.5 ... 4 A	2.5 ... 4 A	2.5 ... 4 A	2.5 ... 4 A	N/A	N/A
CABLE SIZE	-	3x4	3x4	-	-	3x4	3x25+16	4x50
DESCRIPTION OF FEEDER	SPARE	POTABLE WATER PUMP	DIESEL OIL PUMP	GLYCOL TRANSFER PUMP B	SPARE	GLYCOL DRAIN PUMP	MAIN COMPRESSOR CRANE	PROCESS AREA NORMAL DISTRIBUTION PANEL

D05

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PRDCC-120-EL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LF PANELS	BE-CGS-PRDCC-120-EL-DC-002

KEY PLAN

REV.	DESCRIPTION	BY	DATE	BY	DATE
D06	DEC.2025	IPA			
D04	FEB.2025	IPA			
D05	AUG.2025	IPA			
D02	MAY.2025	IPA			
D01	APR.2025	IPA			
D00	DIST.2021	IPC			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: **IRISAN ENERGY** DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): **PETROIRAN DEVELOPMENT COMPANY**

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

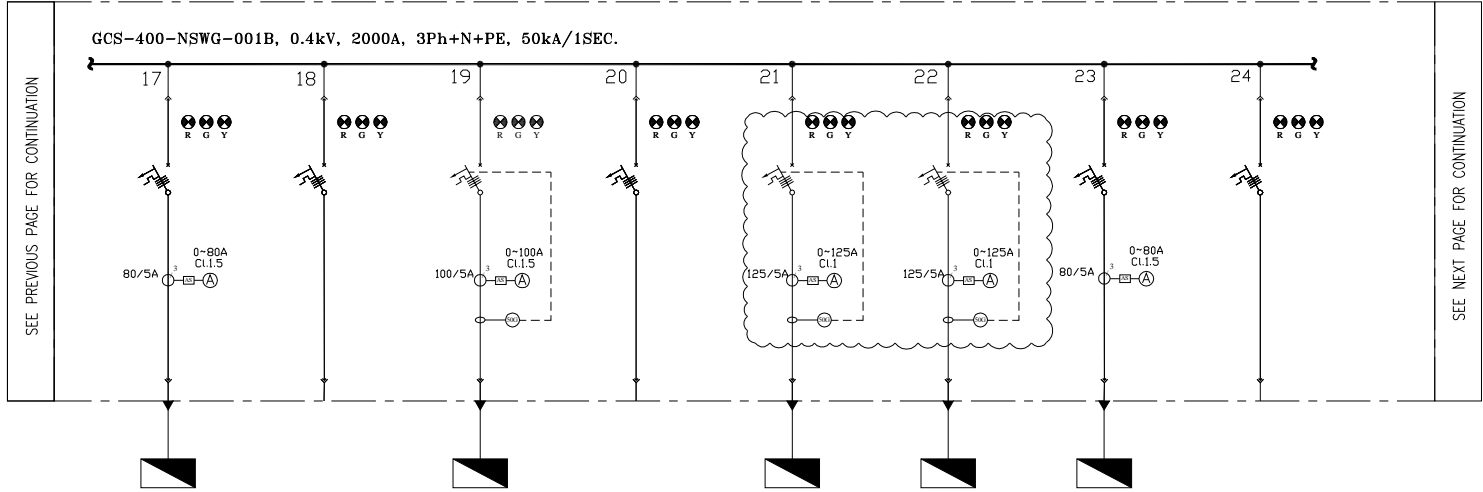
DATE: SCALE: DRAWING BY: CHECKED BY: PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N/A	A2	BE-CGS-PRDCC-120-EL-DC-002	10 OF 23	D06	003-079-0104	P	2	P	709005	10 OF 23	D06



CATEGORY	F2	F1	F3	F1	F1	F1	F2	F1
CODE	WS-PR-01	SPARE	GCS-110-UPS-001	SPARE	MCC-2101B	MCC-2101C	WS-UT-01	SPARE
POWER (kW)	35kW	10kW	36kW	2kW	50kW	50kW	35kW	-
C.B TYPE/RATING	80A	32A	100A	16A	125A	125A	80A	16A
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CABLE SIZE	3x50+25	-	3x35+16	-	3x35+16	3x35+16	3x50+25	-
DESCRIPTION OF FEEDER	1st WELDING RECEPTACLE (3PHASE) PROCESS AREA	SPARE	110VAC UPS 1	SPARE	AUXILIARY PANEL FOR GAS COMPRESSOR C-2101B	AUXILIARY PANEL FOR GAS COMPRESSOR C-2101C	1st WELDING RECEPTACLE (3PHASE) UTILITY AREA	SPARE

D05

**NOTES**

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**LEGEND**

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**KEY PLAN**

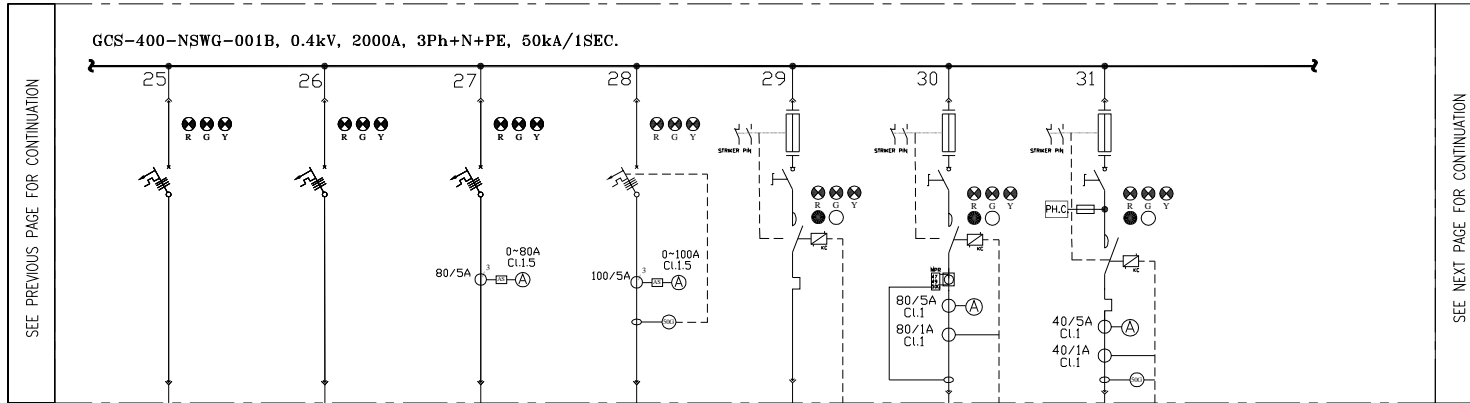
REV.	DESCRIPTION	BY	DATE	BY	DATE

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NO.	DATE	BY	CHK.	APP.	AUT.
D06	DEC.2025	IPR			
D04	FEB.2025	IPR			
D05	AUG.2025	IPR			
D02	MAY.2025	IPR			
D01	APR.2025	IPR			
D00	DEC.2021	IPC			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRSHAN ENERGY DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GO): PETROIRAN DEVELOPMENT COMPANY  
 DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM  
 NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED  
 APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.R.B	A2	BK-CGF-PBDCO-120-BL-BL-0002	11 OF 23	D06	003-079-0104	P	2	P	709005	11 OF 23	D06



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PBDC0-120-BL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PBDC0-120-BL-DC-0002

CATEGORY	F1	F1	F2	F3	M1	M4	M3
CODE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
POWER (kW)	-	-	-	-	2.2KW	30KW	18.5KW
C.B TYPE/RATING	32A	50A	80A	100A	-	-	-
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	αM/6A	αM/80A	αM/40A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	2.2KW (AC3)	30KW (AC3)	18.5KW (AC3)
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	4 ... 6 A	48 ... 65 A	30 ... 40 A
CABLE SIZE	-	-	-	-	-	-	-
DESCRIPTION OF FEEDER	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2023	IFB	UJUNISMAN	UJUNISMAN	UJUNISMAN	UJUNISMAN
DD4	FEB.2023	IFB	UJUNISMAN	UJUNISMAN	UJUNISMAN	UJUNISMAN
DD5	AUG.2022	IFB	UJUNISMAN	UJUNISMAN	UJUNISMAN	UJUNISMAN
DD2	MAY.2022	IFB	UJUNISMAN	UJUNISMAN	UJUNISMAN	UJUNISMAN
DD1	APR.2022	IFB	UJUNISMAN	UJUNISMAN	UJUNISMAN	UJUNISMAN
DD0	DEC.2021	IPC	UJUNISMAN	UJUNISMAN	UJUNISMAN	UJUNISMAN
REV.	DATE	P.O.I.F	PREP.	CHK.	APP.	AUT.

PROJECT NAME: **BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION**

PROJECT NO.: **971020**

EPC CONTRACTOR: **IRISAN ENERGY DESIGN & INSPECTION COMPANIES**

EPD/EPC CONTRACTOR (CO): **PETROIRAN DEVELOPMENT COMPANY**

**BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION**

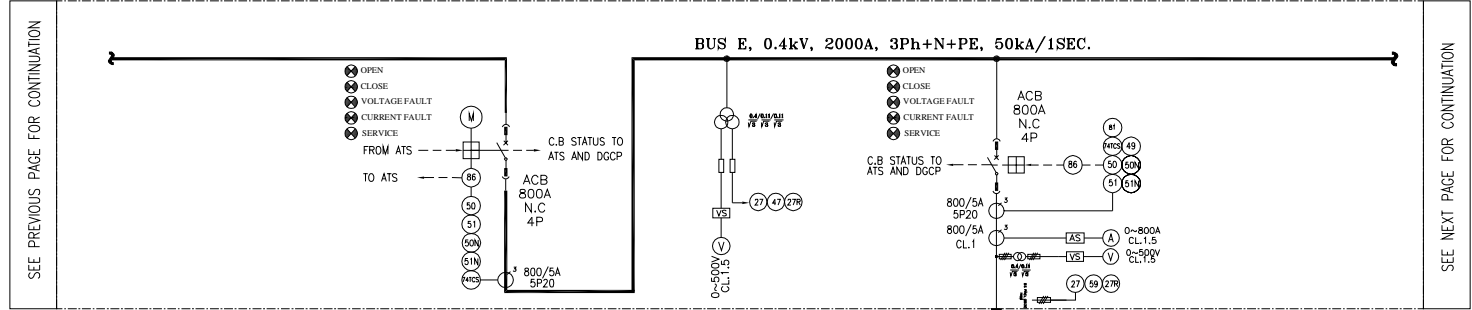
DATE: \_\_\_\_\_ SCALE: \_\_\_\_\_ DRAWING BY: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ PROJECT ENG.:

DRAWING TITLE: **LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM**

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

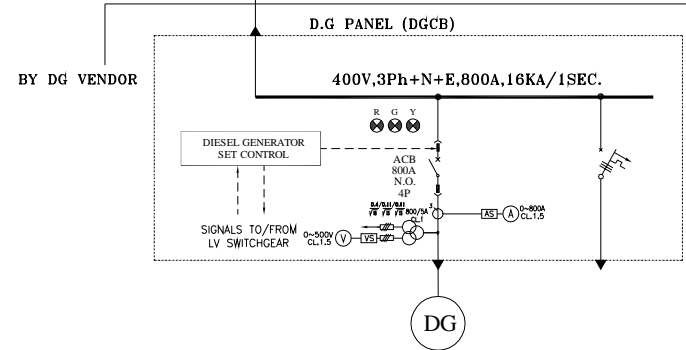
APPROVED FOR CONSTRUCTION BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.B	A2	BE-CGS-PBDC0-120-BL-0002	12 OF 23	DD6	003-070-0104	P	2	P	709005	12 OF 23	DD6



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION



CATEGORY	CD.2	VOLTAGE TRANSFORMER	IN.3	DGCB	F2
CODE	N/A	N/A	N/A	GCS-DG-001	-
CONSUMPTION	N/A	250VA	N/A	GENERATOR: 500 KVA	4KW
C.B TYPE/RATING	(ACB+M)/800A	MCB 6A	ACB 800A	ACB 800A	20A
FUSE TYPE/RATING	N/A	gG/4A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	N/A
DIVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	N/A
CABLE SIZE		N/A	-	7(1x300)	-
DESCRIPTION OF FEEDER	Coupling	Bus e Control Transformers	Incoming From Emergency d/g	Diesel Generator	Emergency Load Generation Set

D05

NOTES  
 1-VOLTMETER SELECTOR SWITCH SHALL BE ABLE TO SHOW SINGLE PHASE VOLTAGE.  
 2-CONNECTION BETWEEN MEASURING UNIT AND DCS WILL BE RS 485 TO SEND SIGNALS BY SERIAL LINK.

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD UNIT	BE-CGS-FBDC-120-BL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANEL	BE-CGS-FBDC-120-BL-DC-002

KEY PLAN

REV.	DATE	P.O.L.F.	PREP.	CHK.	APP.	AUT.	DESCRIPTION	CHECKED	REV. APPR.
DD6	DEC.2023	IPA	R.BAGHA	M.FARHANI	M.FARHANI	M.FARHANI			
DD4	FEB.2023	IPA	R.BAGHA	M.FARHANI	M.FARHANI	M.FARHANI			
DD5	AUG.2022	IPA	R.BAGHA	M.FARHANI	M.FARHANI	M.FARHANI			
DD2	MAY.2022	IPA	R.BAGHA	M.FARHANI	M.FARHANI	M.FARHANI			
DD1	APR.2022	IPA	R.BAGHA	M.FARHANI	M.FARHANI	M.FARHANI			
DD0	DEC.2021	IPC	R.BAGHA	M.FARHANI	M.FARHANI	M.FARHANI			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: IRISAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GO): PETROIRAN DEVELOPMENT COMPANY

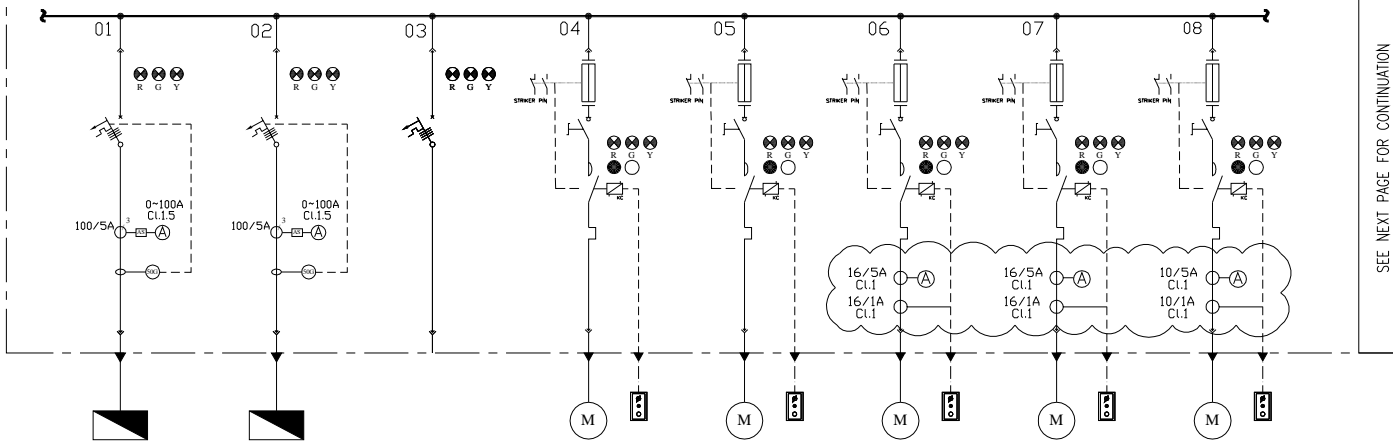
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B.B	A2	BE-CGS-FBDC-120-BL-DC-002	13 OF 23	D06	003-070-0104	P 2 P 709005 13 OF 23 D06

GCS-400-NSWG-001E, 0.4kV, 2000A, 3Ph+N+PE, 50kA/1SEC.



SEE NEXT PAGE FOR CONTINUATION

CATEGORY	F3	F3	F1	M1	M1	M2	M2	M2
CODE	PK-C-2203A	PK-C-2203B	SPARE	P-2203A	P-2203B	P-2202A	P-2202B	P-2201A
POWER (kW)	80kW	80kW	2kW	2.2kW	2.2kW	7.5kW	7.5kW	4kW
C.B TYPE/RATING	200A	200A	16A	-	-	-	-	-
FUSE TYPE/RATING	N/A	N/A	N/A	oM/6A	oM/6A	oM/16A	oM/16A	oM/10A
CONTACTOR RATING (A)	N/A	N/A	N/A	2.2kW (AC3)	2.2kW (AC3)	7.5kW (AC3)	7.5kW (AC3)	4kW (AC3)
OVER LOAD SETTING RANGE	N/A	N/A	N/A	4 ... 6 A	4 ... 6 A	12 ... 18 A	12 ... 18 A	7 ... 10 A
CABLE SIZE	2(3x120+70)	2(3x120+70)	-	3x10	3x10	3x25	3x25	3x16
DESCRIPTION OF FEEDER	INSTRUMENT & PLANT AIR PACKAGE A	INSTRUMENT & PLANT AIR PACKAGE B	SPARE	SUMP PUMP A	SUMP PUMP B	CLOSED DRAIN PUMP A	CLOSED DRAIN PUMP B	LP FLARE K.O. DRUM PUMP A

D05

NOTES

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LEGEND

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REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PRD00-120-EL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PRD00-120-EL-DC-002

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KEY PLAN

DD6	DEC.2025	IPA	ELMAGHA	ELJOSHARIAN	ELSHARAFI	***								
DD4	FEB.2025	IPA	ELMAGHA	ELJOSHARIAN	ELSHARAFI	***								
DD5	AUG.2022	IPA	ELMAGHA	ELJOSHARIAN	ELSHARAFI	***								
DD2	MAY.2022	IPA	ELMAGHA	ELJOSHARIAN	ELSHARAFI	***								
DD1	APR.2022	IPA	ELMAGHA	ELJOSHARIAN	ELSHARAFI	***								
DD0	NOV.2021	IPC	ELMAGHA	ELJOSHARIAN	ELSHARAFI	***	REV.	DESCRIPTION	BY	DATE	BY	DATE	BY	DATE
REV.	DATE	P.O.Lf	PREP.	CHK.	APP.	AUT.								

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE: SCALE: DRAWING BY: CHECKED BY: PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

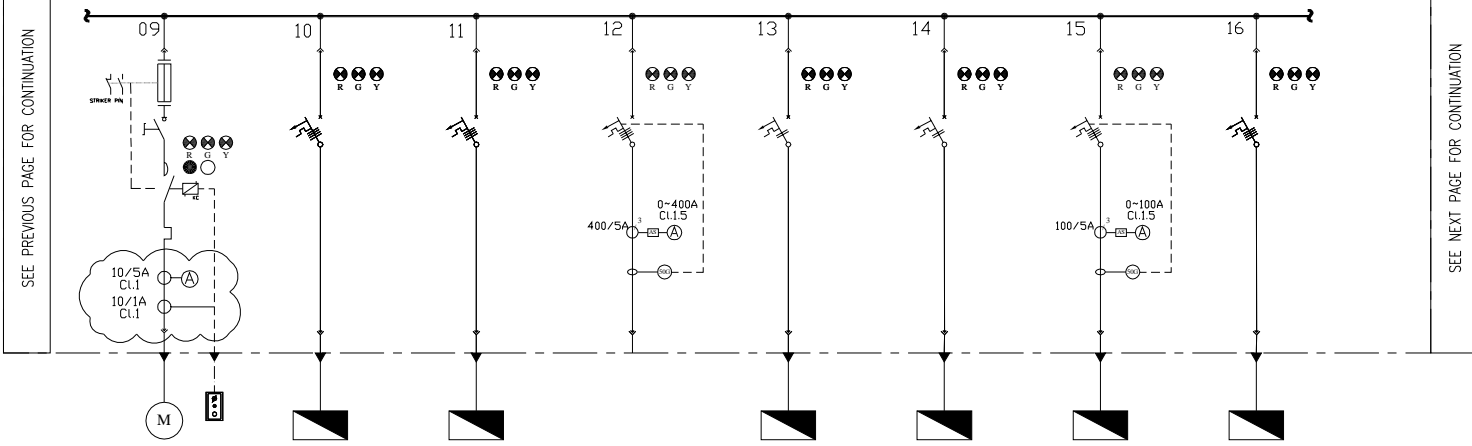
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APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	DRIVING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	BE-CGS-PRD00-120-EL-UL-002	14 OF 23	D06	003-070-0104	P	2	P	709005	14 OF 23	D06

NOTES

GCS-400-NSWG-001E, 0.4kV, 2000A, 3Ph+N+PE, 50kA/1SEC.



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PBDC-120-BL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PBDC-120-BL-DC-002

CATEGORY	M2	F1	F1	F3	F1	F1	F3	F1
CODE	P-2201B	GCS-400-EDP-01	GCS-400-EDP-02	SPARE	GCS-110-CHG-002	GCS-24-CHG-002	GCS-110-UPS-002	GCS-110-UPS-Bypass
POWER (KW)	4KW	10KW	5KW	140KW	20KW	18.5KW	36KW	20KW
C.B TYPE/RATING	-	32A	16A	400A	50A	50A	100A	50A
FUSE TYPE/RATING	aM/10A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CONTACTOR RATING (A)	4KW (AC3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	7 ... 10 A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CABLE SIZE	3x16	4x25	4x10	-	4x16	4x16	3x35+16	3x25+16
DESCRIPTION OF FEEDER	LP FLARE K.I. DRUM PUMP B	PROCESS AREA EMERGENCY DISTRIBUTION PANEL	UTILITY AREA EMERGENCY DISTRIBUTION PANEL	SPARE	110VDC CHARGER 2	24VDC CHARGER 2	110VAC UPS 2	110VAC UPS BYPASS

D05

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2025	IPR	IPR			
DD4	FEB.2025	IPR	IPR			
DD5	AUG.2025	IPR	IPR			
DD2	MAY.2025	IPR	IPR			
DD1	APR.2025	IPR	IPR			
DD0	DIS.2021	IPC	IPC			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

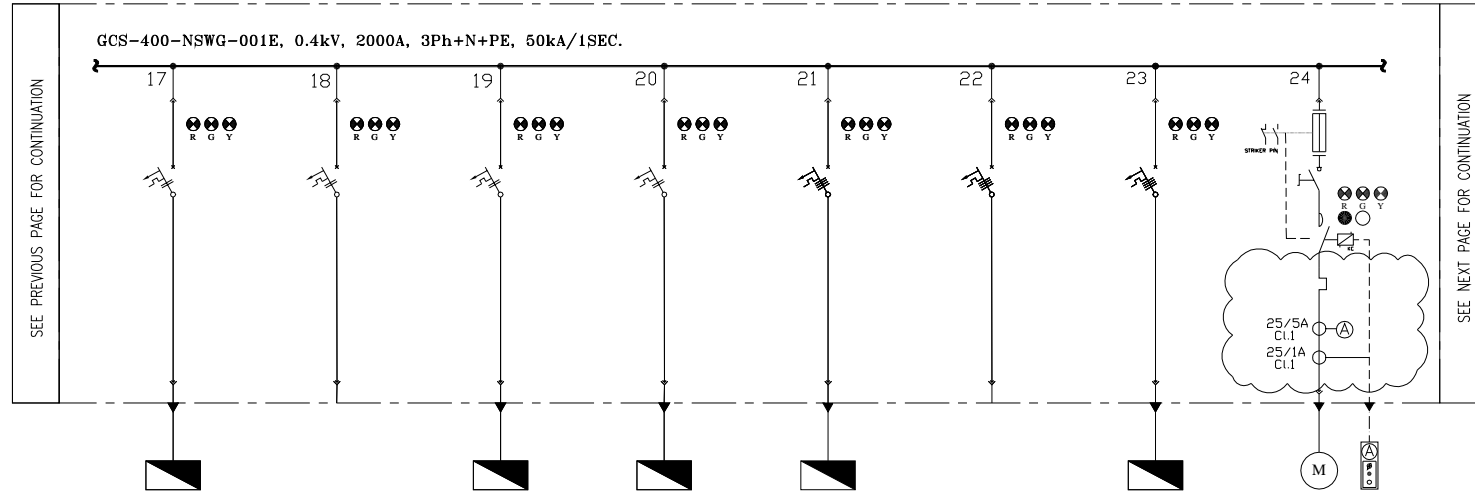
BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE: SCALE: DRAWING BY: CHECKED BY: PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION	
N.B	A2	BE-CGS-PBDC-120-BL-002	15	OF 23	DD6	003-079-0104	P	2	P	709005	15	OF 23



CATEGORY	F7	F7	F7	F7	F1	F1	F1	M2
CODE	GCS-230-FDP 01	SPARE	SPH-01	SPH-02	GCS-400-EDP-CRM	SPARE	GCS-400-NDN UPS	P-2101A
POWER (KW)	1KW	1KW	2KW	2KW	23KW	10KW	8KW	11KW
C.B TYPE/RATING	16A	16A	16A	16A	50A	50A	32A	-
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	oM/25A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11KW (AC3)
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16 ... 24 A
CABLE SIZE	4x4	-	4x4	4x4	4x25	-	4x10	3x16
DESCRIPTION OF FEEDER	FIRE DIESEL PANEL 01 (ELECTRICAL MAIN MOTOR)	SPARE	SPACE HEATER & LIGHTING FOR NEW LV SWITCHGEAR	SPACE HEATER & LIGHTING FOR NEW MV SWITCHGEAR	CONTROL ROOM EMERGENCY LIGHTING PANEL	CCTV CONTROL BUILDING	NDN-UPS LOAD FOR INSTRUMENT	SLUG PUMP A

NOTES

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LEGEND

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KEY PLAN

REV.	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2025	IPR			
DD4	FEB.2025	IPR			
DD5	AUG.2025	IPR			
DD2	MAY.2025	IPR			
DD1	APR.2025	IPR			
DD0	DEC.2024	IPC			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPD CONTRACTOR: **IRISAN** (IRISAN ENERGY - DESIGN & INSPECTION COMPANIES)

EPD/EPC CONTRACTOR (CO): **PETROIRAN DEVELOPMENT COMPANY**

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE: \_\_\_\_\_ SCALE: \_\_\_\_\_ DRAWING BY: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ PROJECT ENG.:

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

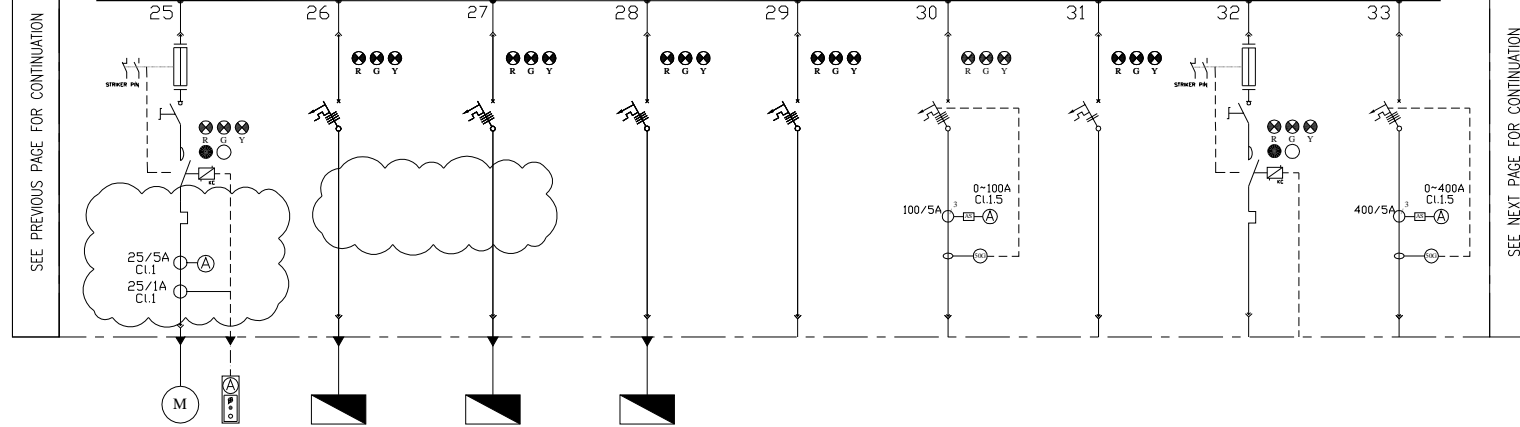
APPROVED FOR CONSTRUCTION BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE	SHEET NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.R.B	A2	16 OF 23	DD6	003-079-9184	P	2	P	709005	16 OF 23	DD6

امیر و کلیه نسخ این نقشه و سواش نقشه متعلق به شرکت ملی نفت ایران می باشد.  
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GCS-400-NSWG-001E, 0.4kV, 2000A, 3Ph+N+PE, 50ka/1SEC.



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PBDCO-120-BL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PBDCO-120-BL-DC-0002

CATEGORY	M2	F1	F1	F1	F1	F3	F7	M1	F3
CODE	P-2101B	P-2302A	P-2302B	EHTC	SPARE	SPARE	SPARE	SPARE	SPARE
POWER (kW)	11kW	15KW	15KW	-	-	-	2KW	1.1KW	-
C.B TYPE/RATING	-	40A	40A	32A	50A	100A	16A	-	400A
FUSE TYPE/RATING	αM/25A	N/A	N/A	N/A	N/A	N/A	N/A	αM/6A	N/A
CONTACTOR RATING (A)	11kW (AC3)	N/A	N/A	N/A	N/A	N/A	N/A	2.2KW (AC3)	N/A
OVER LOAD SETTING RANGE	16 ... 24 A	N/A	N/A	N/A	N/A	N/A	N/A	2.5 ... 4 A	N/A
CABLE SIZE	3x16	3x35+16	3x35+16	-	-	-	-	-	-
DESCRIPTION OF FEEDER	SLUG PUMP B	FIRE WATER JOCKEY PUMP A	FIRE WATER JOCKEY PUMP B	ELECTRICAL HEAT TRACING	SPARE	SPARE	SPARE	SPARE	SPARE

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2025	IPR	IPR	IPR	IPR	IPR
DD4	FEB.2025	IPR	IPR	IPR	IPR	IPR
DD5	AUG.2022	IPR	IPR	IPR	IPR	IPR
DD2	MAY.2022	IPR	IPR	IPR	IPR	IPR
DD1	APR.2022	IPR	IPR	IPR	IPR	IPR
DD0	DEC.2021	IPC	IPR	IPR	IPR	IPR

REV. DATE P.O.I.F PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

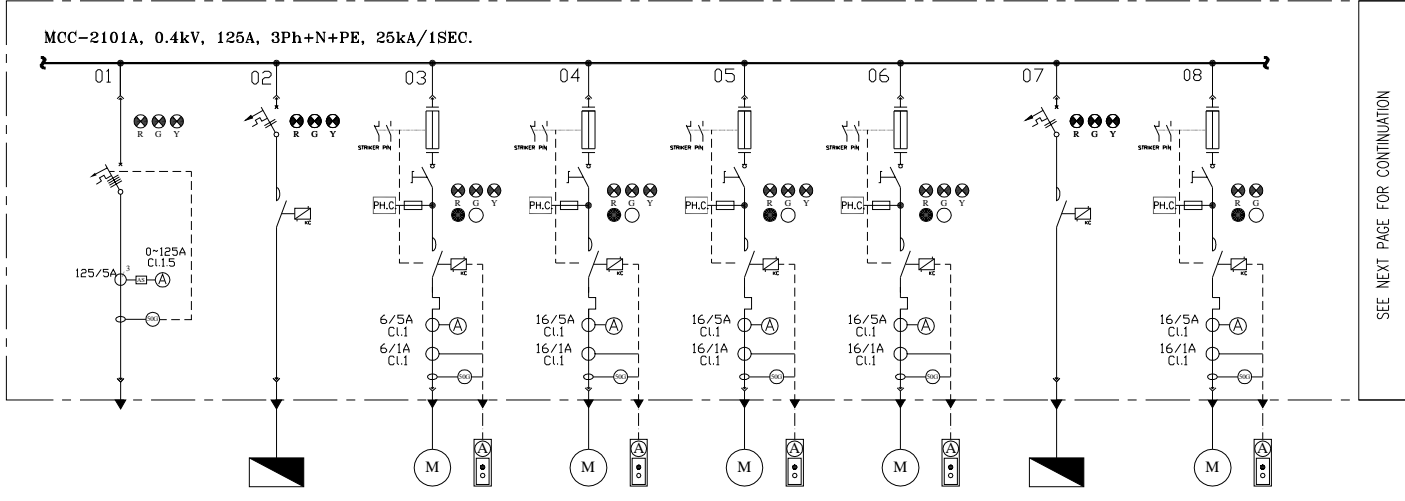
DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION		
N.B	A2	BE-CGS-PBDCO-120-BL-0002	17	OF 23	DD6	003-079-0104	P	2	P	709005	17	OF 23	DD6



NOTES

LEGEND

REFERENCE DRAWING      DRG. No.

ELECTRICAL LOAD LIST      BK-CGS-PBDC-120-BL-U-001

ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS      BK-CGS-PBDC-120-BL-DC-002

KEY PLAN

CATEGORY	F3	F8	M5	M5	M5	M5	F8	M5
CODE	INCOMING	OIL HEATER A	BARRING DEVICE A	P-2101-AP A	AE-2101-DC A	M-2101-LP A	LUBRICATOR HEATER	P-2101-AX A
POWER (KW)	50KW	1.5KW	2.2KW	7.5KW	5.5KW	0.55KW	0.4KW	7.5KW
C.B TYPE/RATING	125	16A	-	-	-	-	16A	-
FUSE TYPE/RATING	-	N/A	oM/6A	oM/16A	oM/16A	oM/2A	N/A	oM/16A
CONTACTOR RATING (A)	-	N/A	2.2KW (AC3)	7.5KW (AC3)	5.5KW (AC3)	0.55KW (AC3)	N/A	7.5KW (AC3)
OVER LOAD SETTING RANGE	-	N/A	04 ... 06 A	12 ... 18 A	9 ... 13 A	1.7 ... 2 A	N/A	12 ... 18 A
CABLE SIZE	3x35+16	2x16	3x6	3x16	3x10	3x4	2x4	3x16
DESCRIPTION OF FEEDER	FROM FEEDER 23 OF SWITCHGEAR A	OIL HEATER FOR GAS COMPRESSOR C-2101A	BARRING DEVICE COMPRESSOR C-2101A	AUX OIL PUMP COMPRESSOR C-2101A	LUBE OIL COOLER COMPRESSOR C-2101A	CYLINDER LUBRICATOR COMPRESSOR C-2101A	CYLINDER LUBRICATOR OIL HEATER	AUXILIARY PUMP MOTOR COMPRESSOR C-2101A

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2025	IPK	ELBAGHA	ELJUSSEIN	ELSHARAVI	***
DD4	FEB.2025	IPK	ELBAGHA	ELJUSSEIN	ELSHARAVI	***
DD5	AUG.2022	IPK	ELBAGHA	ELJUSSEIN	ELSHARAVI	***
DD2	MAY.2022	IPK	ELBAGHA	ELJUSSEIN	ELSHARAVI	***
DD1	APR.2022	IPK	ELBAGHA	ELJUSSEIN	ELSHARAVI	***
DD0	DEC.2021	IPC	ELBAGHA	ELJUSSEIN	ELSHARAVI	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: IRISAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE      SCALE      DRAWING BY      CHECKED BY      PROJECT ENG.

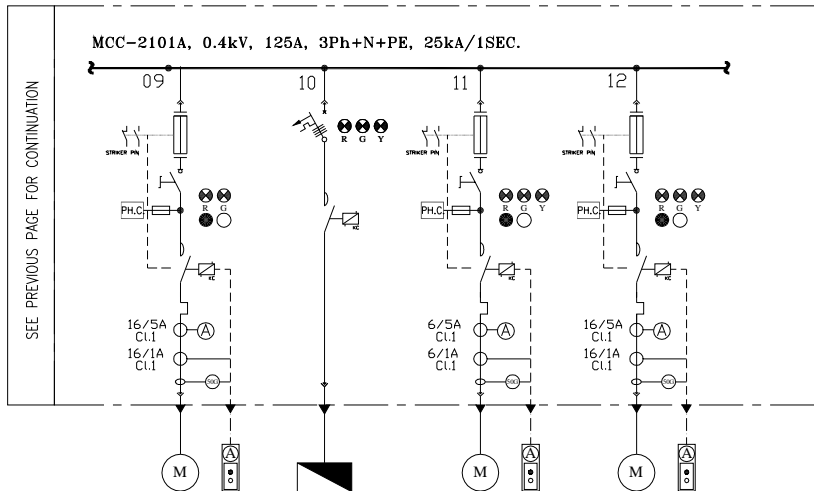
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY:      DATE:

SCALE	SHEET NO.	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	BK-CGS-PBDC-120-BL-DC-002	18 OF 23	DD6	003-079-0104	P	2	P	709005	18 OF 23	DD6

SEE PREVIOUS PAGE FOR CONTINUATION



CATEGORY	M5	F9	M5	M5
CODE	P-2101-WP A	H-2101-WH A	AE-2101-WC A	SPARE
POWER (KW)	7.5KW	12KW	4KW	7.5KW
C.B TYPE/RATING	-	32A	-	-
FUSE TYPE/RATING	αM/16A	N/A	αM/10A	αM/16A
CONTACTOR RATING (A)	7.5kW (AC3)	N/A	4kW (AC3)	7.5kW (AC3)
OVER LOAD SETTING RANGE	12 ... 18 A	N/A	07 ... 10 A	12 ... 18 A
CABLE SIZE	3x16	3x70+35	3x10	-
DESCRIPTION OF FEEDER	MAIN PUMP WATER COMPRESSOR C-2101A	ELECTRIC HEATER COMPRESSOR C-2101A	WATER CONSOLE COMPRESSOR C-2101A	SPARE

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PBDC-120-EL-U-001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LF PANEL	BE-CGS-PBDC-120-EL-DC-002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	DEC.2025	IPR	ELMAGHERA	ELJANABAN	ELJANABAN	** **
D04	FEB.2025	IPR	ELMAGHERA	ELJANABAN	ELJANABAN	** **
D05	AUG.2025	IPR	ELMAGHERA	ELJANABAN	ELJANABAN	** **
D02	MAY.2025	IPR	ELMAGHERA	ELJANABAN	ELJANABAN	** **
D01	APR.2025	IPR	ELMAGHERA	ELJANABAN	ELJANABAN	** **
D00	DEC.2021	IPC	ELMAGHERA	ELJANABAN	ELJANABAN	** **

REV. DATE P.O.L.F PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: HIRSHAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

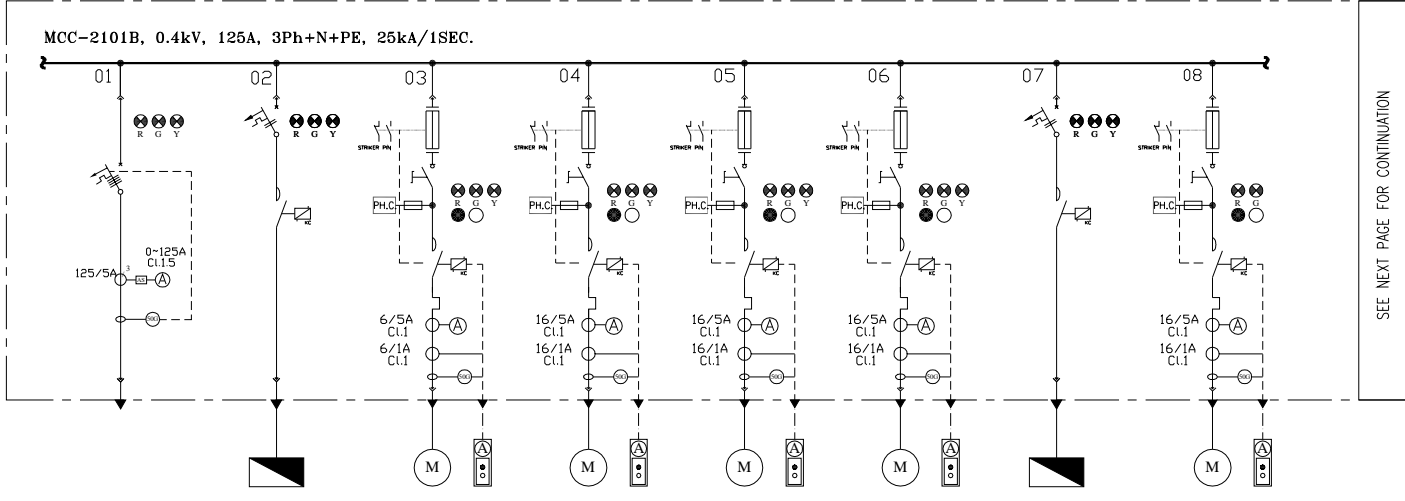
DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION			
N.T.B	A2		BE-CGS-PBDC-120-EL-DC-002	18 OF 23	D06	003-079-0104	P	2	P	709005	18 OF 23	D06



SEE NEXT PAGE FOR CONTINUATION



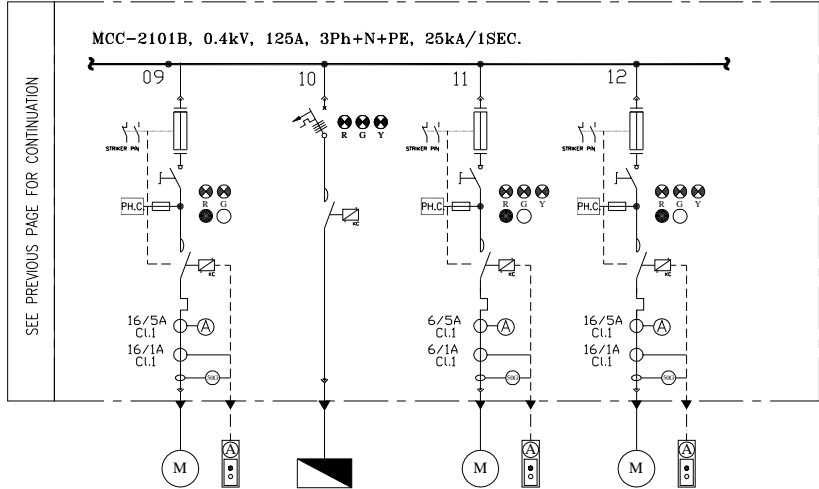
NOTES	
LEGEND	
REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PSDCO-120-BL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PSDCO-120-BL-DC-0002
KEY PLAN	

CATEGORY	F3	F8	M5	M5	M5	M5	F8	M5
CODE	INCOMING	OIL HEATER B	BARRING DEVICE B	P-2101-AP B	AE-2101-DC B	M-2101-LP B	LUBRICATOR HEATER	P-2101-AX B
POWER (KW)	50KW	1.5KW	2.2KW	7.5KW	5.5KW	0.55KW	0.4KW	7.5KW
C.B TYPE/RATING	125	16A	-	-	-	-	16A	-
FUSE TYPE/RATING		N/A	oM/6A	oM/16A	oM/16A	oM/2A	N/A	oM/16A
CONTACTOR RATING (A)	-	N/A	2.2KW (AC3)	7.5KW (AC3)	5.5KW (AC3)	0.55KW (AC3)	N/A	7.5KW (AC3)
OVER LOAD SETTING RANGE	-	N/A	04 ... 06 A	12 ... 18 A	9 ... 13 A	1.7 ... 2 A	N/A	12 ... 18 A
CABLE SIZE	3x35+16	2x16	3x6	3x16	3x10	3x4	2x4	3x16
DESCRIPTION OF FEEDER	FROM FEEDER 21 OF SWITCHGEAR B	OIL HEATER FOR GAS COMPRESSOR C-2101B	BARRING DEVICE COMPRESSOR C-2101B	AUX OIL PUMP COMPRESSOR C-2101B	LUBE OIL COOLER COMPRESSOR C-2101B	CYLINDER LUBRICATOR COMPRESSOR C-2101B	CYLINDER LUBRICATOR OIL HEATER	AUXILIARY PUMP MOTOR COMPRESSOR C-2101B

NO.	DATE	BY	DESCRIPTION	CHECKED	REV. APPR.
DD6	DEC.2025	IPA	REVISION	REVISION	***
DD4	FEB.2025	IPA	REVISION	REVISION	***
DD5	AUG.2022	IPA	REVISION	REVISION	***
DD2	MAY.2022	IPA	REVISION	REVISION	***
DD1	APR.2022	IPA	REVISION	REVISION	***
DD0	DEC.2021	IPC	REVISION	REVISION	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRKAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GO): PETROIRAN DEVELOPMENT COMPANY  
 DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM  
 NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED  
 APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2		BE-CGS-PSDCO-120-BL-0002	20 OF 23	DD6	003-079-0104	P	2	P



CATEGORY	M5	F9	M5	M5
CODE	P-2101-WP B	H-2101-WH B	AE-2101-WC B	SPARE
POWER (KW)	7.5KW	12KW	4KW	7.5KW
C.B TYPE/RATING	-	32A	-	-
FUSE TYPE/RATING	αM/16A	N/A	αM/10A	αM/16A
CONTACTOR RATING (A)	7.5kW (AC3)	N/A	4kW (AC3)	7.5kW (AC3)
OVER LOAD SETTING RANGE	12 ... 18 A	N/A	07 ... 10 A	12 ... 18 A
CABLE SIZE	3x16	3x70+35	3x10	-
DESCRIPTION OF FEEDER	MAIN PUMP WATER COMPRESSOR C-2101B	ELECTRIC HEATER COMPRESSOR C-2101B	WATER CONSOLE COMPRESSOR C-2101B	SPARE

NOTES

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LEGEND

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REFERENCE DRAWING      DRC. No.

ELECTRICAL LOAD LIST      BK-CGS-PBDC-120-EL-U-001

ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LF PANEL      BK-CGS-PBDC-120-EL-DC-002

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KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	DEC.2025	IPA	ALBAEBA	ALJADHARIAN	ALJADHARIAN	** **
D04	FEB.2025	IPA	ALBAEBA	ALJADHARIAN	ALJADHARIAN	** **
D05	AUG.2025	IPA	ALBAEBA	ALJADHARIAN	ALJADHARIAN	** **
D02	MAY.2025	IPA	ALBAEBA	ALJADHARIAN	ALJADHARIAN	** **
D01	APR.2025	IPA	ALBAEBA	ALJADHARIAN	ALJADHARIAN	** **
D00	DEC.2021	IPC	ALBAEBA	ALJADHARIAN	ALJADHARIAN	** **

REV. DATE P.O.L.F PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

IRISAN ENERGY DESIGN & INSPECTION COMPANIES

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

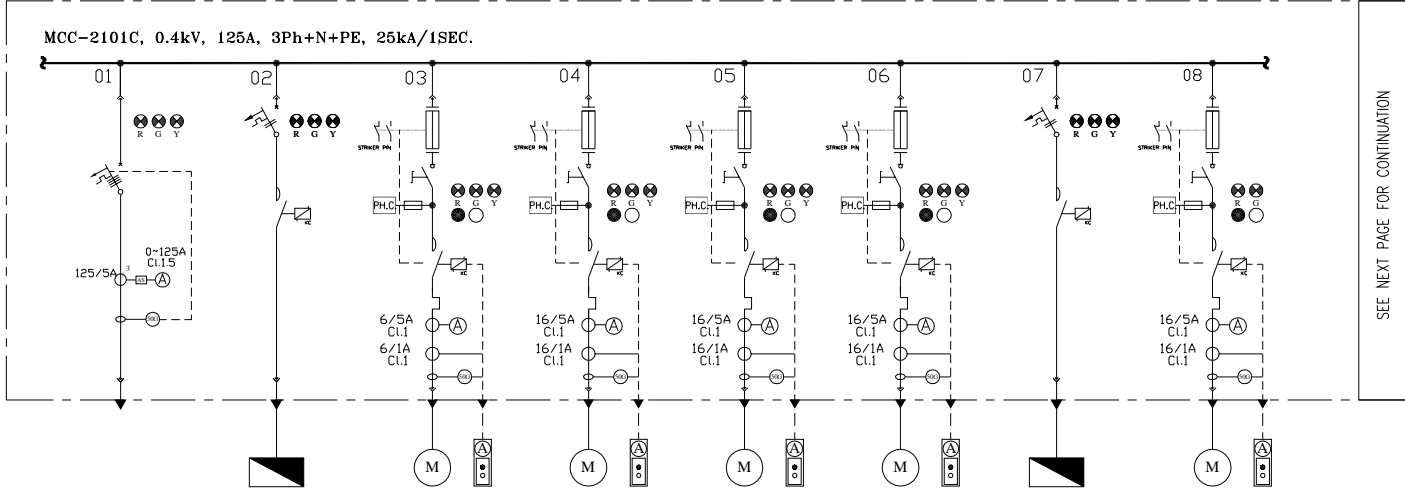
DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.B	A2	BK-CGS-PBDC-120-EL-DC-002	21 OF 23	D06	003-079-014	P	2	P 709005 21 OF 23 D06



NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CGS-PSDC-120-BL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LV PANELS	BE-CGS-PSDC-120-BL-DC-0002

KEY PLAN

CATEGORY	F3	F8	M5	M5	M5	M5	F8	M5
CODE	INCOMING	OIL HEATER C	BARRING DEVICE C	P-2101-AP C	AE-2101-DC C	M-2101-LP C	LUBRICATOR HEATER	P-2101-AX C
POWER (KW)	50KW	1.5KW	2.2KW	7.5KW	5.5KW	0.55KW	0.4KW	7.5KW
C.B TYPE/RATING	125	16A	-	-	-	-	16A	-
FUSE TYPE/RATING		N/A	oM/6A	oM/16A	oM/16A	oM/2A	N/A	oM/16A
CONTACTOR RATING (A)	-	N/A	2.2KW (AC3)	7.5KW (AC3)	5.5KW (AC3)	0.55KW (AC3)	N/A	7.5KW (AC3)
OVER LOAD SETTING RANGE	-	N/A	04 ... 06 A	12 ... 18 A	9 ... 13 A	1.7 ... 2 A	N/A	12 ... 18 A
CABLE SIZE	3x35+16	2x16	3x6	3x16	3x10	3x4	2x4	3x16
DESCRIPTION OF FEEDER	FROM FEEDER 22 OF SWITCHGEAR B	OIL HEATER FOR GAS COMPRESSOR C-2101C	BARRING DEVICE COMPRESSOR C-2101C	AUX OIL PUMP COMPRESSOR C-2101C	LUBE OIL COOLER COMPRESSOR C-2101C	CYLINDER LUBRICATOR COMPRESSOR C-2101C	CYLINDER LUBRICATOR OIL HEATER	AUXILIARY PUMP MOTOR COMPRESSOR C-2101C

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
DD6	DEC.2025	IPK	UJUSMAN	UJUSMAN	UJUSMAN	***
DD4	FEB.2025	IPK	UJUSMAN	UJUSMAN	UJUSMAN	***
DD5	AUG.2022	IPK	UJUSMAN	UJUSMAN	UJUSMAN	***
DD2	MAY.2022	IPK	UJUSMAN	UJUSMAN	UJUSMAN	***
DD1	APR.2022	IPK	UJUSMAN	UJUSMAN	UJUSMAN	***
DD0	DEC.2021	IPC	UJUSMAN	UJUSMAN	UJUSMAN	***

REV. DATE P.O.L.F PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR:

EPD/EPC CONTRACTOR (GO):

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

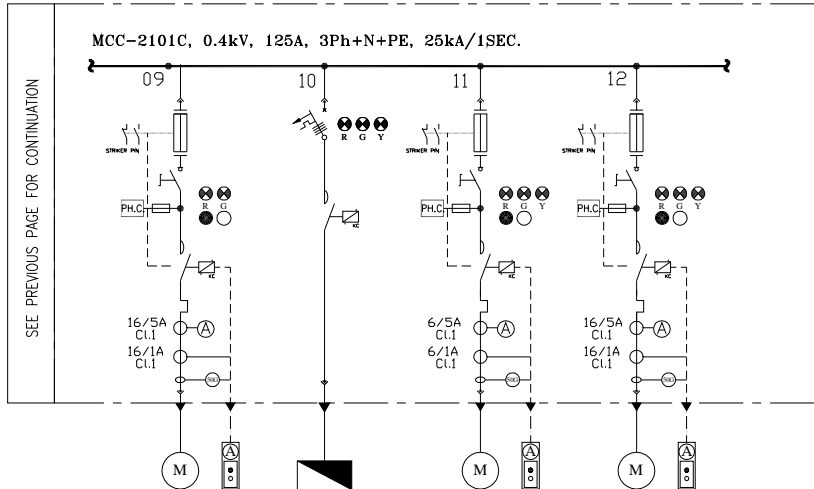
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SHEET NO.	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.B	A2	BE-CGS-PSDC-120-BL-U-0002	22 OF 23	DD6	003-079-0104	P	2	P	709005	22 OF 23	DD6

SEE PREVIOUS PAGE FOR CONTINUATION



CATEGORY	M5	F9	M5	M5
CODE	P-2101-WP C	H-2101-WH C	AE-2101-WC C	SPARE
POWER (KW)	7.5KW	12KW	4KW	7.5KW
C.B TYPE/RATING	-	32A	-	-
FUSE TYPE/RATING	αM/16A	N/A	αM/10A	αM/16A
CONTACTOR RATING (A)	7.5kW (AC3)	N/A	4kW (AC3)	7.5kW (AC3)
OVER LOAD SETTING RANGE	12 ... 18 A	N/A	07 ... 10 A	12 ... 18 A
CABLE SIZE	3x16	3x70+35	3x10	-
DESCRIPTION OF FEEDER	MAIN PUMP WATER COMPRESSOR C-2101C	ELECTRIC HEATER COMPRESSOR C-2101C	WATER CONSOLE COMPRESSOR C-2101C	SPARE

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BE-CCS-PRDCC-120-EL-U-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAM FOR LF PANEL	BE-CCS-PRDCC-120-EL-DC-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	DEC.2025	IFP	EL/BAHBA	EL/JANSHARIAN	EL/SHARAFPOUR	** **
D04	FEB.2025	IFP	EL/BAHBA	EL/JANSHARIAN	EL/JANSHARIAN	** **
D05	AUG.2025	IFP	EL/BAHBA	EL/JANSHARIAN	EL/JANSHARIAN	** **
D02	MAY.2025	IFP	EL/BAHBA	EL/JANSHARIAN	EL/JANSHARIAN	** **
D01	APR.2025	IFP	EL/BAHBA	EL/JANSHARIAN	EL/JANSHARIAN	** **
D00	DEC.2021	IPC	EL/BAHBA	EL/JANSHARIAN	EL/JANSHARIAN	** **

REV. DATE P.O.L.F. PREP. CHK. APP. AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION

PROJECT NO.: 971020

EPC CONTRACTOR: IRISAN ENERGY DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (CO): PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.F.B	A2	BE-CCS-PRDCC-120-EL-DC-0002	23 OF 23	D06	003-079-0104	P 2 P 709005 23 OF 23 D06

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