




# LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	** **								
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **								
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **								
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **								
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **	***	*****	** **	*** **	** **	*** **	*** **	*** **
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **			BY	DATE	BY	DATE		
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **	REV.	DESCRIPTION	CHECKED		REV. APPR.			
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اصل و کاپی نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد. THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS							
PROJECT NAME:							BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION							
PROJECT NO.:							971020							
EPC CONTRACTOR:				EPD/EPC CONTRACTOR (GC):			BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION							
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES				 PETROIRAN DEVELOPMENT COMPANY										
DRAWING TITLE:							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED							
LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM							APPROVED FOR CONSTRUCTION							
SCALE	SIZE	DRAWING NO.			SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION	
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002			01 OF 23	D06	053-073-9184	F	2	P	709035	01 OF 23	D06	

**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 ≤ 18.5 (ONLY FOR HAVAYAR)  
(SWITCH FUSE + CONTACTOR + BIMETAL + R/L SIGNALING+ R/L AMMETER)

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. IN OTHER WORDS FOR 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 EQUIPPED WITH ROTARY SWITCH

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

16- VENDOR SHALL USE KEY LOCK FOR INCOMING ACB TO PREVENT ON/OFF MANUALLY.

NOTES

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ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

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PROJECT NO.:							971020												
EPC CONTRACTOR:							EPD/EPC CONTRACTOR (GC):							BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION					
DRAWING TITLE:							LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM												
SCALE							DRAWING NO.							SHEET NO.					
N.T.S							A2							BK-GCS-PEDCO-120-EL-SL-0002					
BUDGET REF.							LOCATION							SERIAL NO.					
053-073-9184							F							2 P 709035					
DATE							BY:							DATE:					
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# 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
	25 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
	51 TIME DELAYED OVER CURRENT RELAY		LED TYPE SIGNAL LAMP
	50N INSTANTANEOUS EARTH FAULT RELAY		TRANSFORMER
	51N INVERSE TIME EARTH FAULT RELAY		CURRENT TRANSFORMER
	50G INSTANTANEOUS EARTH FAULT RELAY (BY ZERO SEQUENCE CT)		MOTOR
	51G 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		MECHANICAL INTERLOCK
	86 LOCK OUT RELAY		POWER CABLE
	94 INTERTRIP RECEIVE RELAY		CONTROL CABLE
	MOTOR PROTECTION RELAY		START PUSH BUTTON
	EMERGENCY STOP, MUSHROOM TYPE		
	THERMAL OVERLOAD RELAY (49)		
	PHASE SEQUENCE OR PHASE BALANCE RELAY (47)		

NOTES

LEGEND

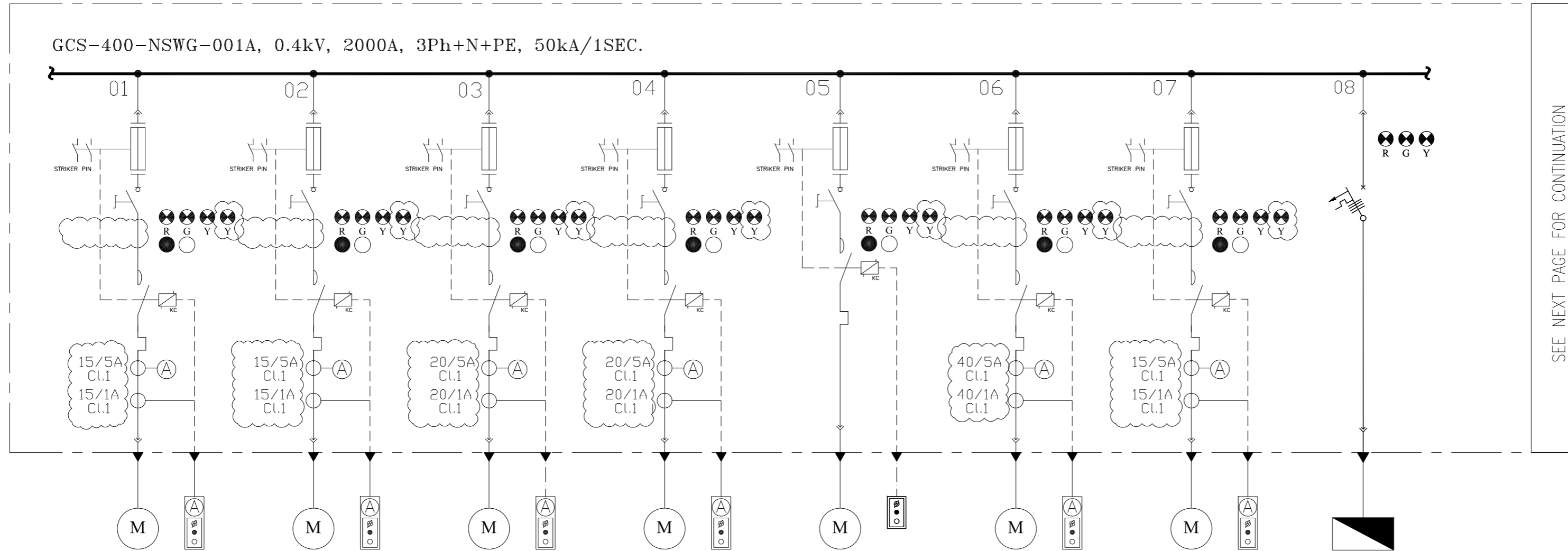
REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	** **
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D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION						
PROJECT NO.: 971020						
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):			
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY			
DRAWING TITLE:			BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION			
SCALE			DATE			
SIZE			SCALE			
DRAWING NO.			DRAWING BY			
SHEET NO.			CHECKED BY			
REV.			PROJECT ENG.			
BUDGET REF.			NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED			
LOCATION			APPROVED FOR CONSTRUCTION			
SIZE CLASS			BY:			
SERIAL NO.			DATE:			
SHEET			BUDGET REF.			
REVISION			LOCATION			
D06			SIZE CLASS			
03 OF 23			SERIAL NO.			
D06			SHEET			
053-073-9184			REVISION			
F			D06			
2			03 OF 23			
P			D06			
709035			03 OF 23			

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D06



CATEGORY	M2	M2	M2	M2	M1	M2	M2	F1
CODE	AE-2121A	AE-2122A	AE-2131A	AE-2132A	P-2203B	P-2101A	P-2103A	GCS-400-CR-02
POWER (kW)	5.5kW	5.5kW	7.5kW	7.5kW	3kW	15kW	5.5kW	5kW
C.B TYPE/RATING	-	-	-	-	-	-	-	32A
FUSE TYPE/RATING	aM/16A	aM/16A	aM/16A	aM/16A	aM/8A	aM/40A	aM/16A	N/A
CONTACTOR RATING (A)	5.5kW (AC3)	5.5kW (AC3)	7.5kW (AC3)	7.5kW (AC3)	4kW (AC3)	15kW (AC3)	5.5kW (AC3)	N/A
OVER LOAD SETTING RANGE	9 ... 13 A	9 ... 13 A	12 ... 18 A	12 ... 18 A	5.5 ... 8 A	30 ... 40 A	9 ... 13 A	N/A
CABLE SIZE	3x10	3x10	3x10	3x10	3x10	3x16	3x4	4x10
DESCRIPTION OF FEEDER	FIRST STAGE AIR COOLER TRAIN A	FIRST STAGE AIR COOLER TRAIN A	SECONDND STAGE AIR COOLER TRAIN A	SECONDND STAGE AIR COOLER TRAIN A	SUMP PUMP B	SLUG PUMP A	GLYCOL TRANSFER PUMP A	FIRE WATER PUMPS CRANE

NOTES

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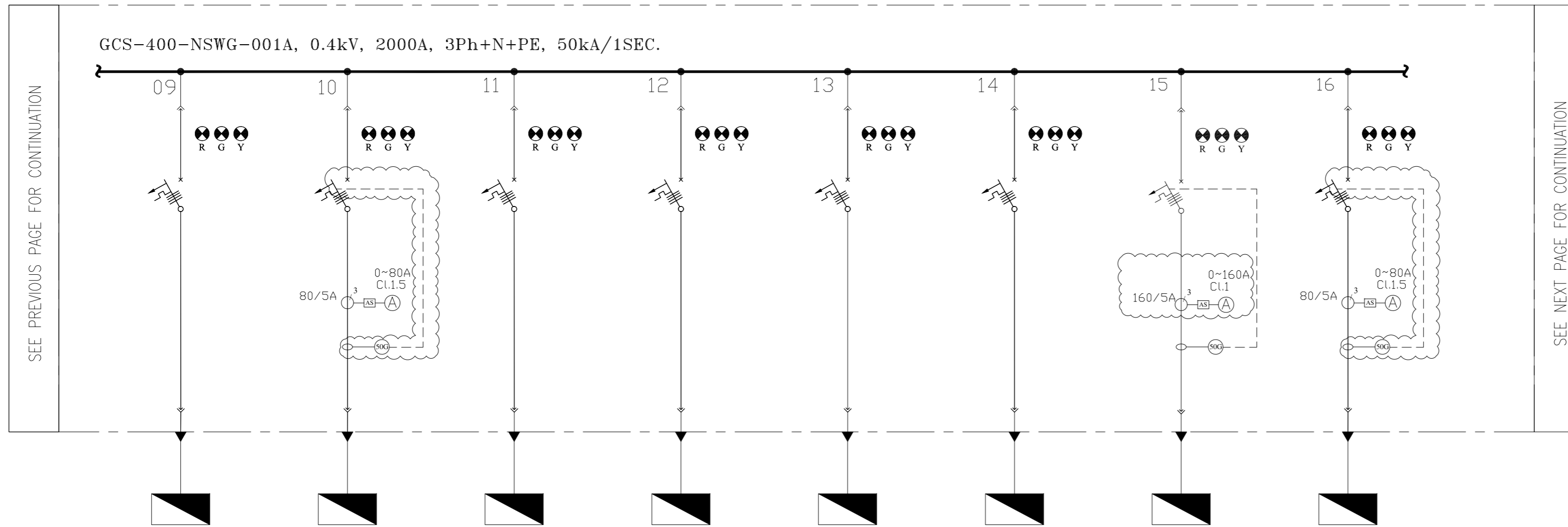
KEY PLAN

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PROJECT NAME:	BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION			
PROJECT NO.:	971020			
EPC CONTRACTOR:	HIRGAN ENERGY	DESIGN & INSPECTION COMPANIES	TE	
EPD/EPC CONTRACTOR (GC):	PETROIRAN DEVELOPMENT COMPANY	PEDCO		
DRAWING TITLE:	LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM			
SCALE	SIZE	DRAWING NO.	SHEET NO. REV.	
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	04 OF 23 D06	
BUDGET REF.	LOCATION	SIZE CLASS	SERIAL NO.	
053-073-9184	F	2 P	709035	
DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED				
APPROVED FOR CONSTRUCTION		BY:	DATE:	
SCALE	SIZE	DRAWING NO.	SHEET NO. REV.	
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	04 OF 23 D06	

D06



CATEGORY	F1	F3	F1	F1	F1	F1	F3	F3
CODE	GCS-400-NDP-02	WS-UT-02	GCS-400-CP01	GCS-110-CHG-001	GCS-24-CHG-001	-----	MCC-2101A	WS-PR-03
POWER (kW)	6.6KW	35KW	5KW	20KW	16.2KW	2KW	43.9KW	35KW
C.B TYPE/RATING	32A	80A	16A	50A	40A	16A	160A	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	4x10	3x35+16	3x50+25
DESCRIPTION OF FEEDER	UTILITY AREA NORMAL DISTRIBUTION PANEL	2nd WELDING RECEPTACLE (UTILITY AREA)	CATHODIC PROTECTION TRANSFORMER RECTIFIER1	110VDC CHARGER 1	24VDC CHARGER 1	MDV 1	AUXILIARY PANEL FOR GAS COMPRESSOR C-2101A	3rd WELDING RECEPTACLE (3PHASE)(PROCESS AREA)

NOTES

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PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

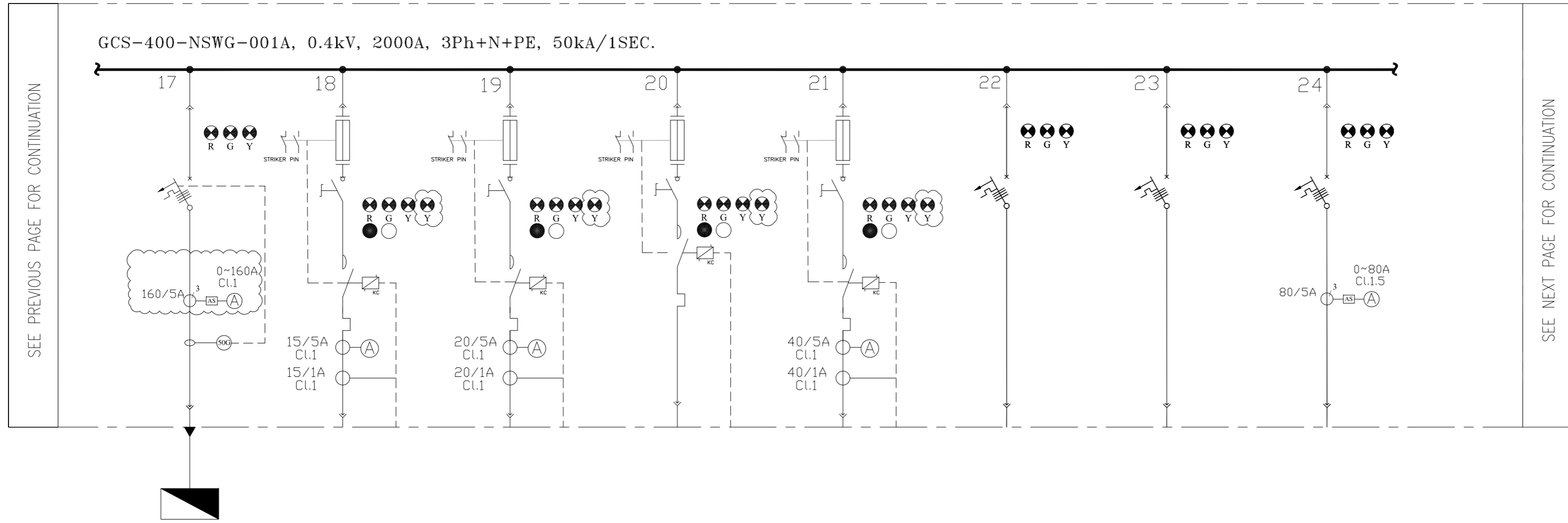
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D06



CATEGORY	F3	M2	M2	M1	M2	F1	F1	F2
CODE	PK-C-2204	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
POWER (kW)	75kW	5.5kW	7.5kW	3kW	15kW	-	-	-
C.B TYPE/RATING	160A	-	-	-	-	32A	50A	80A
FUSE TYPE/RATING	N/A	aM/16A	aM/16A	aM/8A	aM/40A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	5.5kW (AC3)	7.5kW (AC3)	4kW (AC3)	15kW (AC3)	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	9 ... 13 A	12 ... 18 A	5.5 ... 8 A	30 ... 40 A	N/A	N/A	N/A
CABLE SIZE	3x70+35	-	-	-	-	-	-	-
DESCRIPTION OF FEEDER	AIR COMPRESSOR FOR N2 PACKAGE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE

NOTES

LEGEND

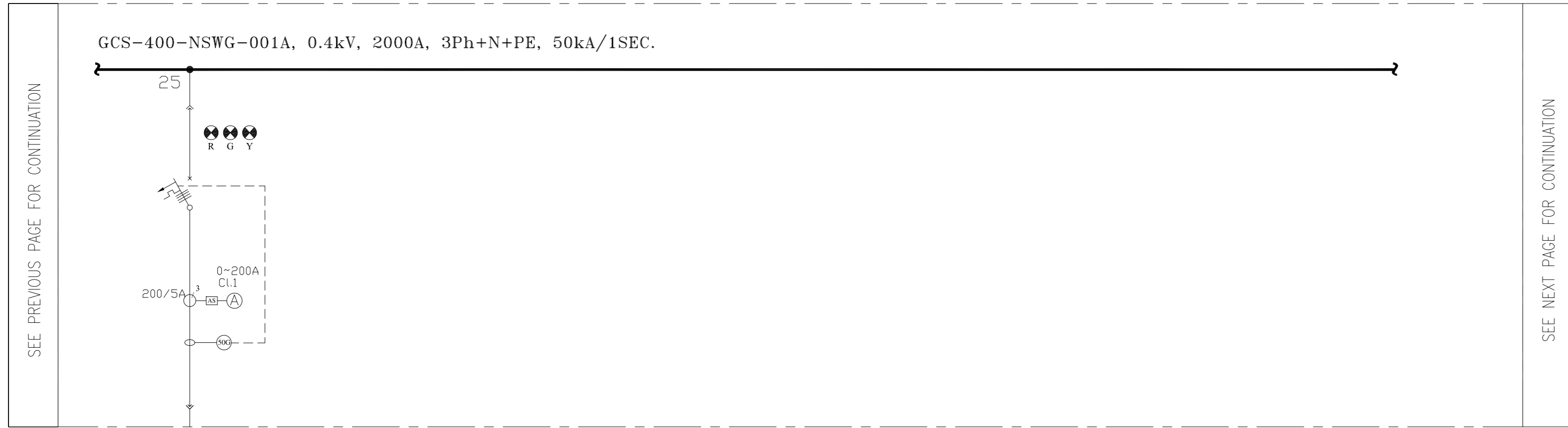
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N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	06 OF 23	D06	053-073-9184	F	2	P	709035	06 OF 23	D06



CATEGORY	F3
CODE	SPARE
POWER (kW)	-
C.B TYPE/RATING	160A
FUSE TYPE/RATING	N/A
CONTACTOR RATING (A)	N/A
OVER LOAD SETTING RANGE	N/A
CABLE SIZE	-
DESCRIPTION OF FEEDER	SPARE

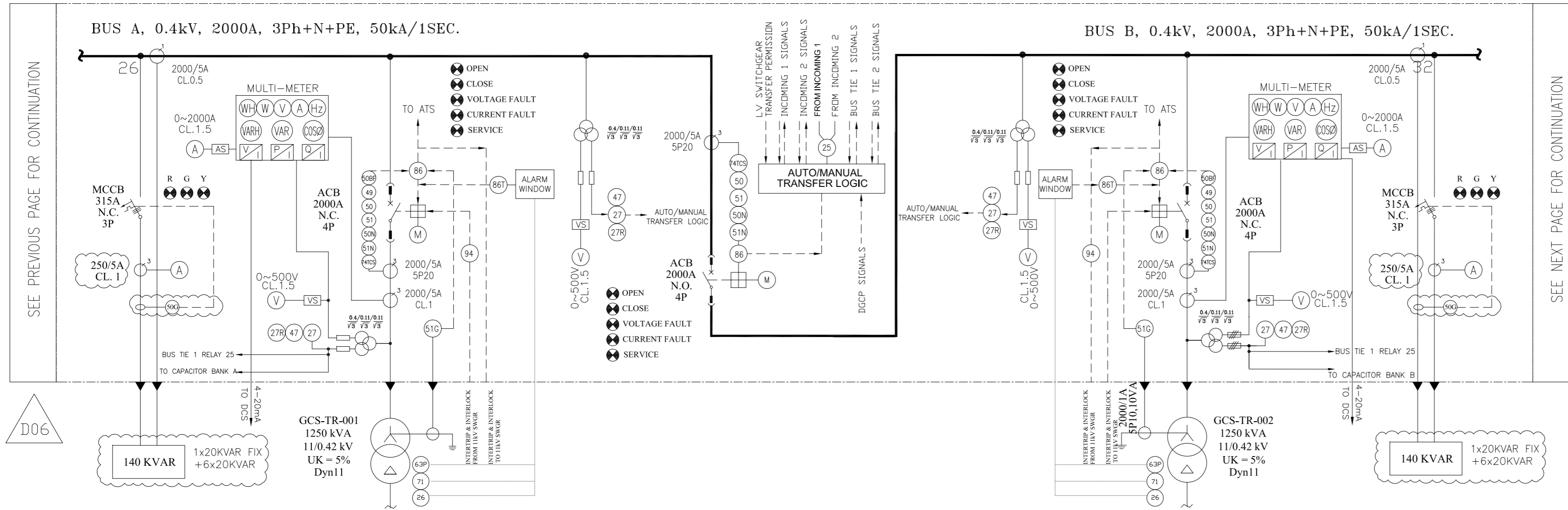
NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRIGHAN	** **							
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **							
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	DESCRIPTION	BY	DATE	BY	DATE	REV.	APPR.
PROJECT NAME:							BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION						
PROJECT NO.:							971020						
EPC CONTRACTOR:				EPD/EPC CONTRACTOR (GC):				BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION					
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES				 PETROIRAN DEVELOPMENT COMPANY				 THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS					
DRAWING TITLE:							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED						
LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM							APPROVED FOR CONSTRUCTION						
SCALE	SIZE	DRAWING NO.		SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION	
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002		07 OF 23	D06	053-073-9184	F	2	P	709035	07 OF 23	D06	



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

D06

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

CATEGORY	F3	IN.1	VOLTAGE TRANSFORMATOR	CO.1	VOLTAGE TRANSFORMATOR	IN.2	F3
CODE	CAP-01	GCS-TR-001	N/A	N/A	N/A	GCS-TR-001	CAP-02
POWER (kW)	140KVAR	1250KVA	250VA	N/A	250VA	1250KVA	140KVAR
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

KEY PLAN

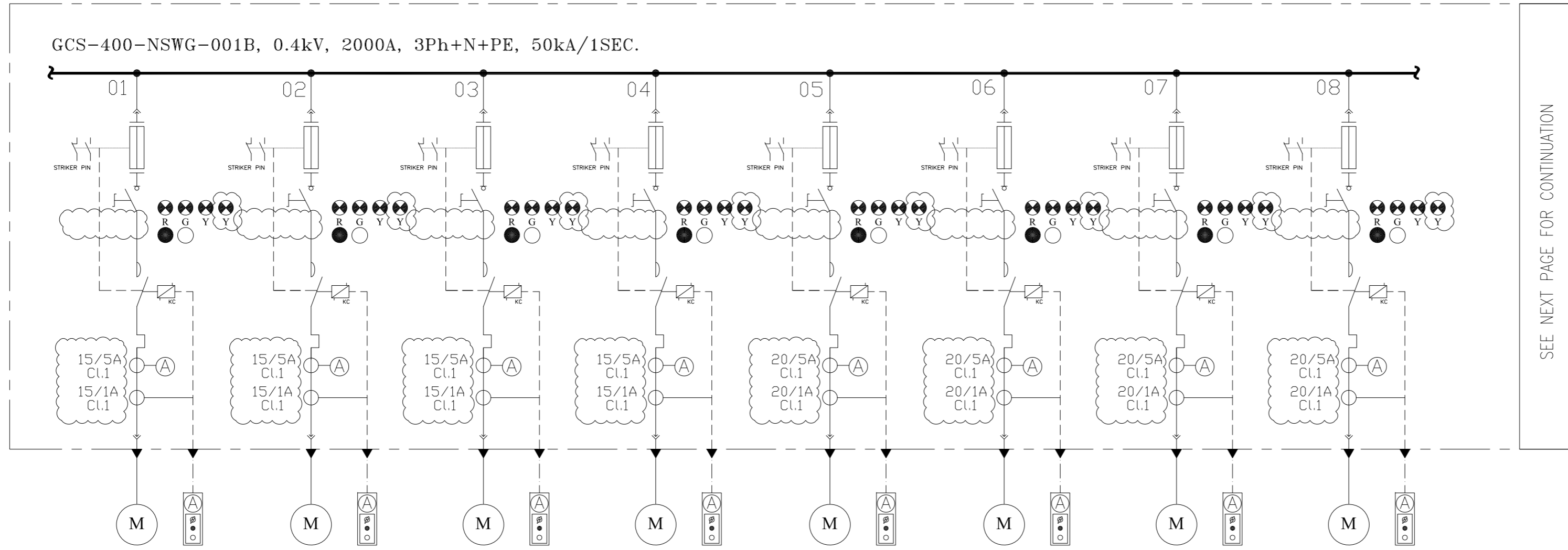
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	**
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	**
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**
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D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**

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REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	BY	DATE
REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	BY	DATE
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION							
PROJECT NO.: 971020							
EPC CONTRACTOR: HIRGAN ENERGY				EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY			
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
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	08 OF 23	D06	053-073-9184	F	2 P
				SERIAL NO.	DATE:		
				709035	08 OF 23 D06		



D06



CATEGORY	M2	M2	M2	M2	M2	M2	M2	M2
CODE	AE-2121B	AE-2122B	AE-2121C	AE-2122C	AE-2131B	AE-2132B	AE-2131C	AE-2132C
POWER (kW)	5.5kW	5.5kW	5.5kW	5.5kW	7.5kW	7.5kW	7.5kW	7.5kW
C.B TYPE/RATING	-	-	-	-	-	-	-	-
FUSE TYPE/RATING	aM/16A	aM/16A	aM/16A	aM/16A	aM/16A	aM/16A	aM/16A	aM/16A
CONTACTOR RATING (A)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	5.5kW (AC3)	7.5kW (AC3)	7.5kW (AC3)	7.5kW (AC3)	7.5kW (AC3)
OVER LOAD SETTING RANGE	9 ... 13 A	9 ... 13 A	9 ... 13 A	9 ... 13 A	12 ... 18 A	12 ... 18 A	12 ... 18 A	12 ... 18 A
CABLE SIZE	3x10	3x10	3x10	3x10	3x10	3x10	3x10	3x10
DESCRIPTION OF FEEDER	FIRST STAGE AIR COOLER TRAIN B	FIRST STAGE AIR COOLER TRAIN B	FIRST STAGE AIR COOLER TRAIN C	FIRST STAGE AIR COOLER TRAIN C	SECOND STAGE AIR COOLER TRAIN B	SECOND STAGE AIR COOLER TRAIN B	SECOND STAGE AIR COOLER TRAIN C	SECOND STAGE AIR COOLER TRAIN C

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***

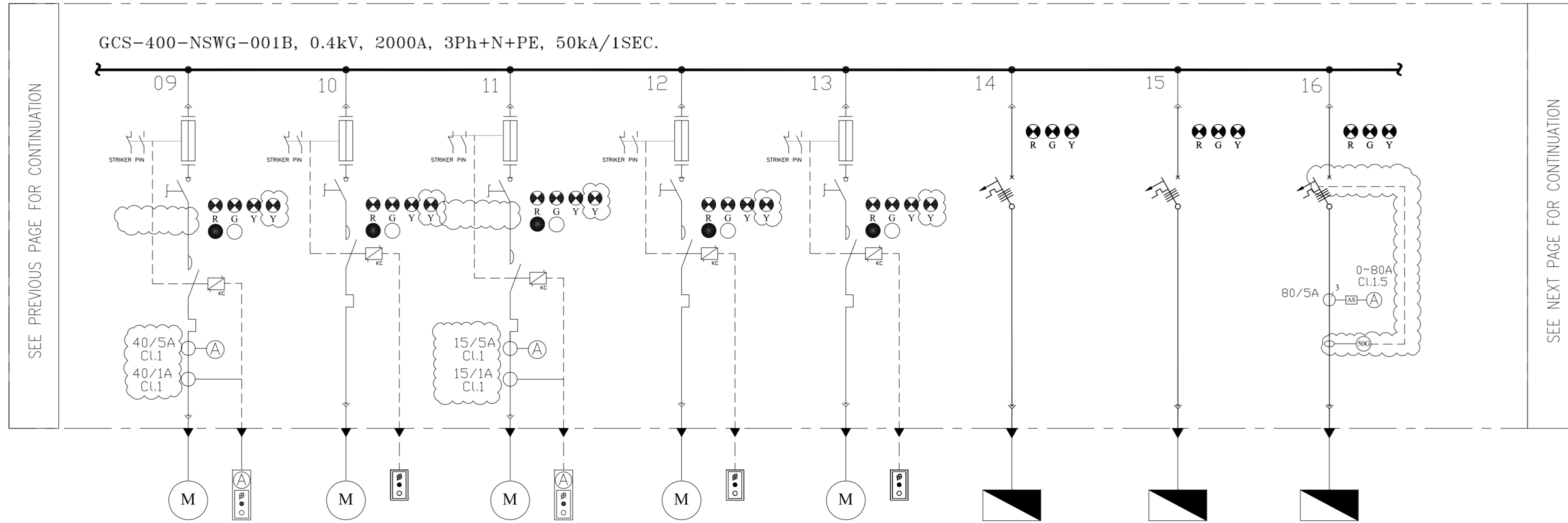
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION										
PROJECT NO.: 971020										
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY							
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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	09 OF 23	D06	053-073-9184	F	2	P	709035	09 OF 23 D06

NOTES	
LEGEND	
REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002
KEY PLAN	

D06



CATEGORY	M2	M1	M2	M1	M1	F1	F1	F3
CODE	P-2101B	P-2209	P-2103B	P-2102	P-2104	GCS-400-CR-01	GCS-400-NDP-01	WS-PR-01
POWER (kW)	15KW	3KW	5.5KW	1.1KW	3KW	10KW	13.7KW	35KW
C.B TYPE/RATING	-	-	-	-	-	32A	32A	80A
FUSE TYPE/RATING	aM/40A	aM/8A	aM/16A	aM/4A	aM/8A	N/A	N/A	N/A
CONTACTOR RATING (A)	15KW (AC3)	4KW (AC3)	5.5KW (AC3)	4KW (AC3)	4KW (AC3)	N/A	N/A	N/A
OVER LOAD SETTING RANGE	30 ... 40 A	5.5 ... 8 A	9 ... 13 A	2.5 ... 4 A	5.5 ... 8 A	N/A	N/A	N/A
CABLE SIZE	3x16	3x4	3x10	3x4	3x10	3x25+16	4x50	3x50+25
DESCRIPTION OF FEEDER	SLUG PUMP B	POTABLE WATER PUMP	GLYCOL TRANSFER PUMP B	GLYCOL MANUAL PUMP	GLYCOL DRAIN PUMP	MAIN COMPRESSOR CRANE	PROCESS AREA NORMAL DISTRIBUTION PANEL	1st WELDING RECEPTACLE (3PHASEXPROCESS AREA)

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRIGHAN	***	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***	***
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب می باشد.  
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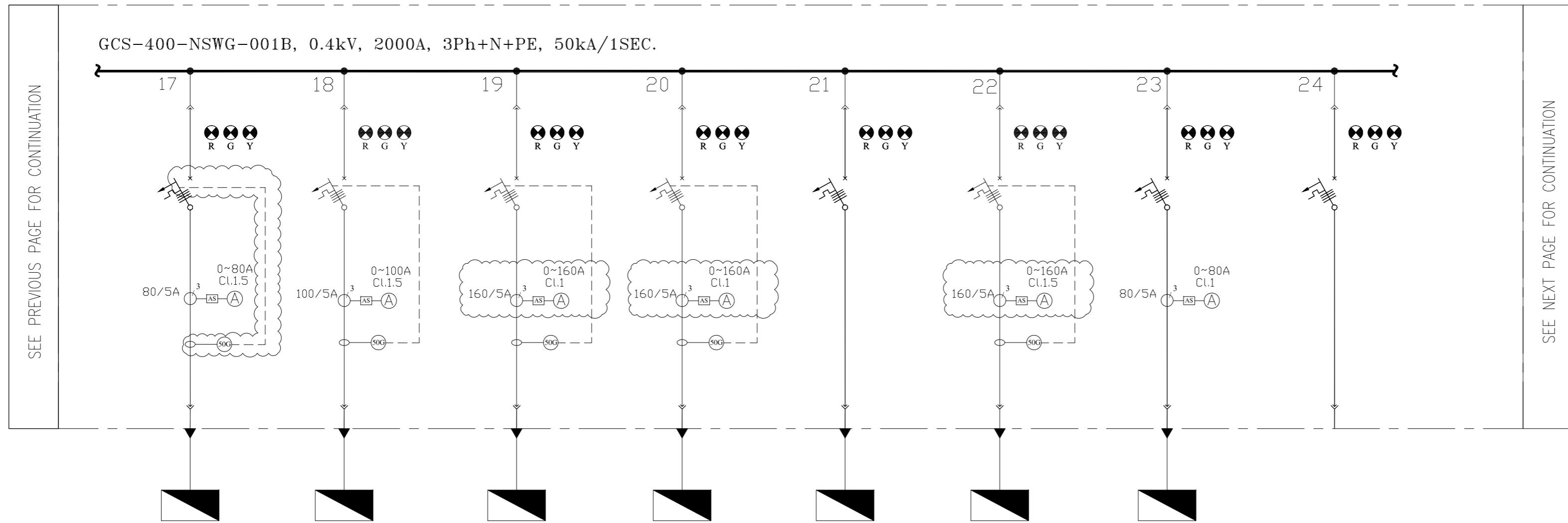
DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	10 OF 23	D06	053-073-9184	F	2	P	709035	10 OF 23 D06

D06



CATEGORY	F3	F3	F3	F3	F1	F3	F2	F1
CODE	WS-UT-01	GCS-110-UPS-001	MCC-2101B	MCC-2101C	PK-2101	PK-C-2203B	PK-2201	-----
POWER (kW)	35kW	43.41kW	43.9kW	43.9kW	4.4kW	75kW	30kW	2kW
C.B TYPE/RATING	80A	100A	160A	160A	16A	160A	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	3x95+50	2(3x120+70)	3x120+70	4x10
DESCRIPTION OF FEEDER	1st WELDING RECEPTACLE (3PHASE) UTILITY AREA	110VAC UPS 1	AUXILIARY PANEL FOR GAS COMPRESSOR C-2101B	AUXILIARY PANEL FOR GAS COMPRESSOR C-2101C	DEHYDRATION PACKAGE	INSTRUMENT & PLANT AIR PACKAGE B	LP FLARE PACKAGE	MDV 2

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

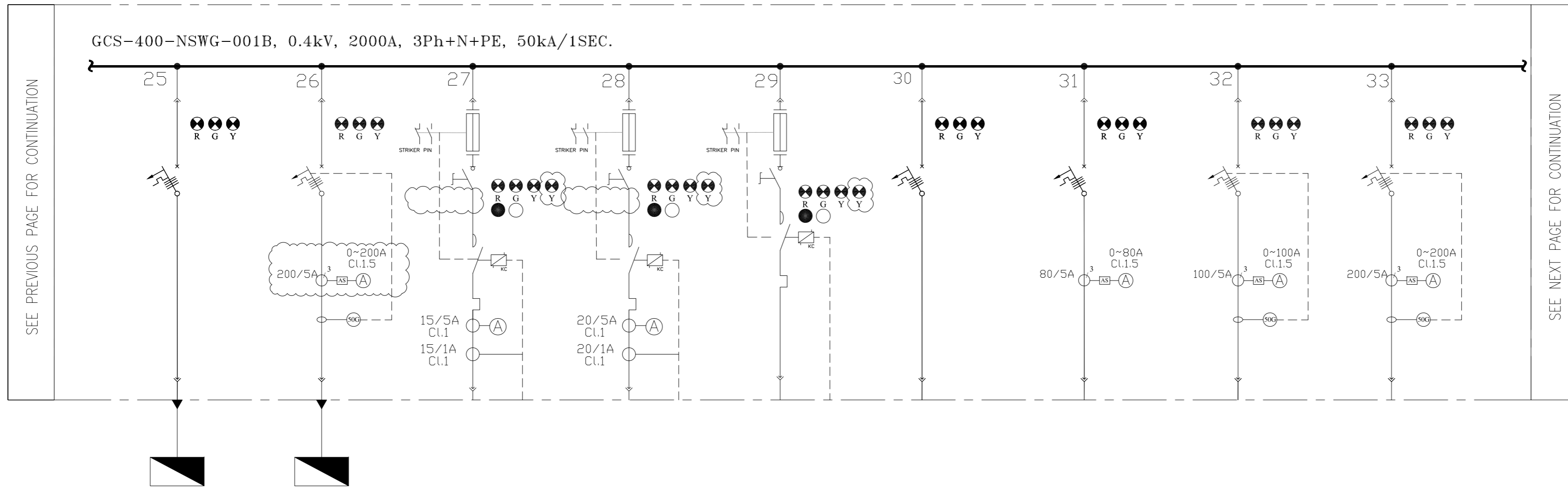
KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***
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D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY  
 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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	11 OF 23	D06	053-073-9184	F	2	P	709035	11 OF 23	D06

D06



SEE PREVIOUS PAGE FOR CONTINUATION

SEE NEXT PAGE FOR CONTINUATION

CATEGORY	F1	F3	M2	M2	M1	F1	F2	F3	F3
CODE	PK-2207	GCS-400-HVAC-CRM2	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE
POWER (kW)	1.85kW	97.9kW	5.5kW	7.5kW	3kW	13.7kW	35kW	43.41kW	97.9kW
C.B TYPE/RATING	16A	200A	-	-	-	32A	80A	100A	200A
FUSE TYPE/RATING	N/A	N/A	aM/16A	aM/16A	aM/8A	N/A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	N/A	5.5kW (AC3)	7.5kW (AC3)	4kW (AC3)	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	N/A	9 ... 13 A	12 ... 18 A	5.5 ... 8 A	N/A	N/A	N/A	N/A
CABLE SIZE	4x4	2(3x120+70)	-	-	-	-	-	-	-
DESCRIPTION OF FEEDER	CHEMICAL INJECTION PACKAGE	CONTROL ROOM NORMAL DISTRIBUTION PANEL FOR HVAC 2	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

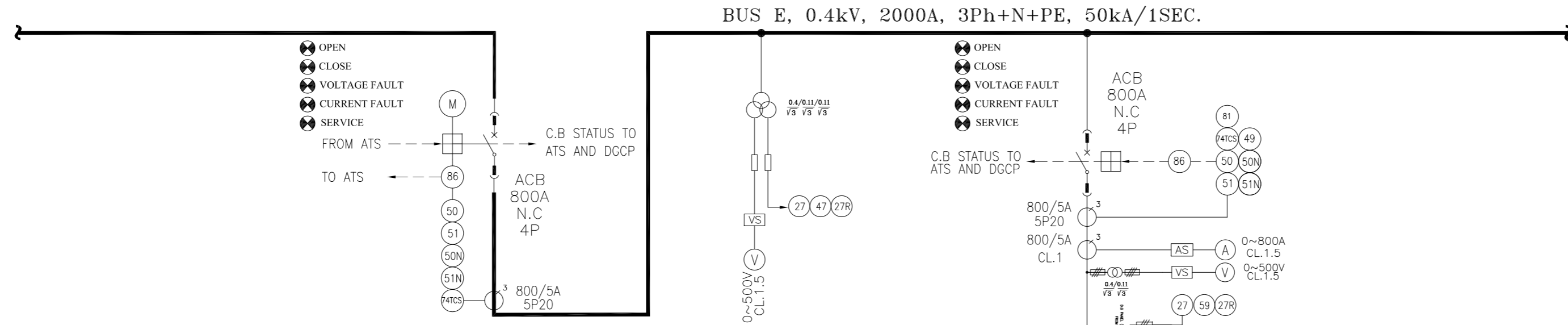
KEY PLAN

REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	REV.	APPR.	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***			
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***			
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D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***			

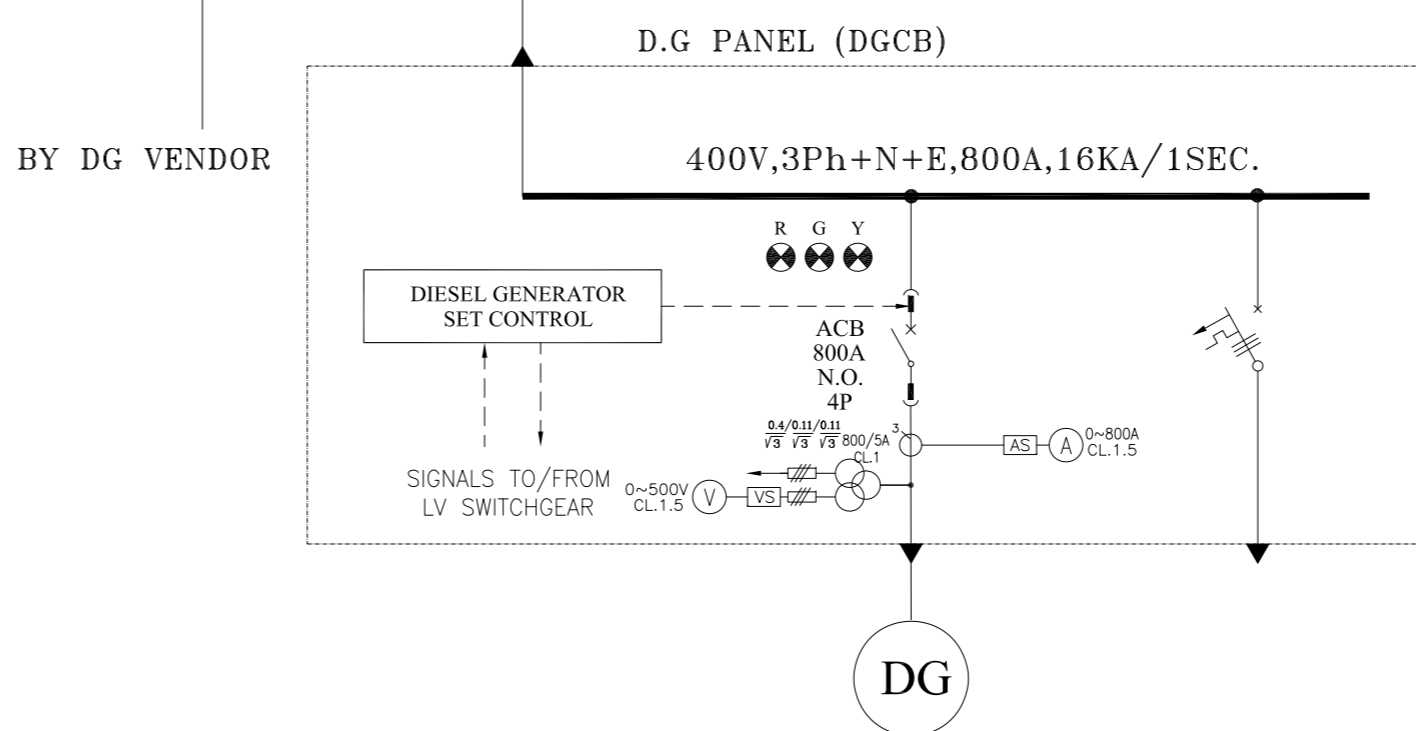
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY  
 DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM  
 NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED  
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SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	12 OF 23	D06	053-073-9184	F	2	P	709035	12 OF 23 D06

SEE PREVIOUS PAGE FOR CONTINUATION



SEE NEXT PAGE FOR CONTINUATION



CATEGORY	CD.2	VOLTAGE TRANSFORMATOR	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
OVER 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 DG	Diesel Generator	Emergency Load Generation Set

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	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	** **
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
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D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **

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

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY (Logo) / PEDCO (Logo)

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (Logo)

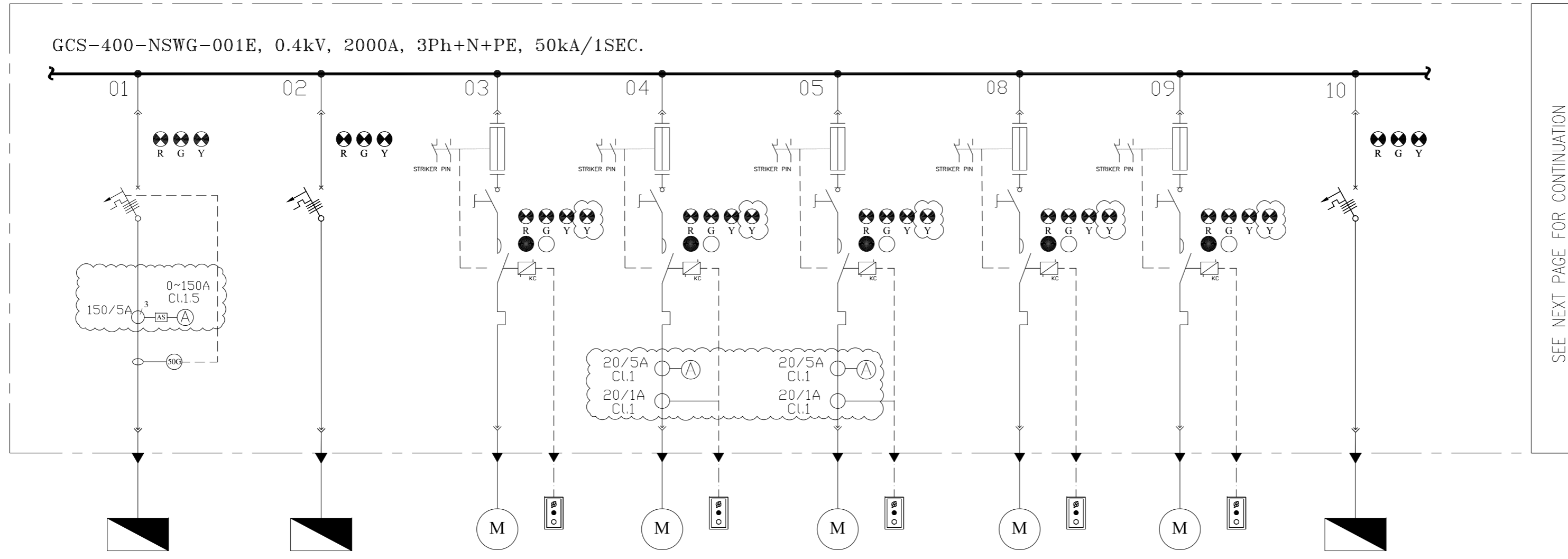
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	13 OF 23	D06	053-073-9184	F	2	P	709035	13 OF 23 D06

D06



SEE NEXT PAGE FOR CONTINUATION

CATEGORY	F3	F1	M1	M2	M2	M1	M1	F1
CODE	PK-C-2203A	IG-2201	P-2203A	P-2202A	P-2202B	P-2201A	P-2201B	GCS-400-EDP-01
POWER (kW)	75kW	1kW	3kW	9kW	9kW	1.1kW	1.1kW	3.92kW
C.B TYPE/RATING	160A	16A	-	-	-	-	-	16A
FUSE TYPE/RATING	N/A	N/A	αM/8A	αM/25A	αM/25A	αM/4A	αM/4A	N/A
CONTACTOR RATING (A)	N/A	N/A	4KW (AC3)	11KW (AC3)	11KW (AC3)	4KW (AC3)	4KW (AC3)	N/A
OVER LOAD SETTING RANGE	N/A	N/A	5.5 ... 8 A	16 ... 24 A	16 ... 24 A	2.5 ... 4 A	2.5 ... 4 A	N/A
CABLE SIZE	2(3x120+70)	4x10	3x10	3x25	3x25	3x16	3x16	4x25
DESCRIPTION OF FEEDER	INSTRUMENT & PLANT AIR PACKAGE A	LP FLARE IGNITION PACKAGE	SUMP PUMP A	CLOSED DRAIN PUMP A	CLOSED DRAIN PUMP B	LP FLARE K.O. DRUM PUMP A	LP FLARE K.O. DRUM PUMP B	PROCESS AREA EMERGENCY DISTRIBUTION PANEL

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

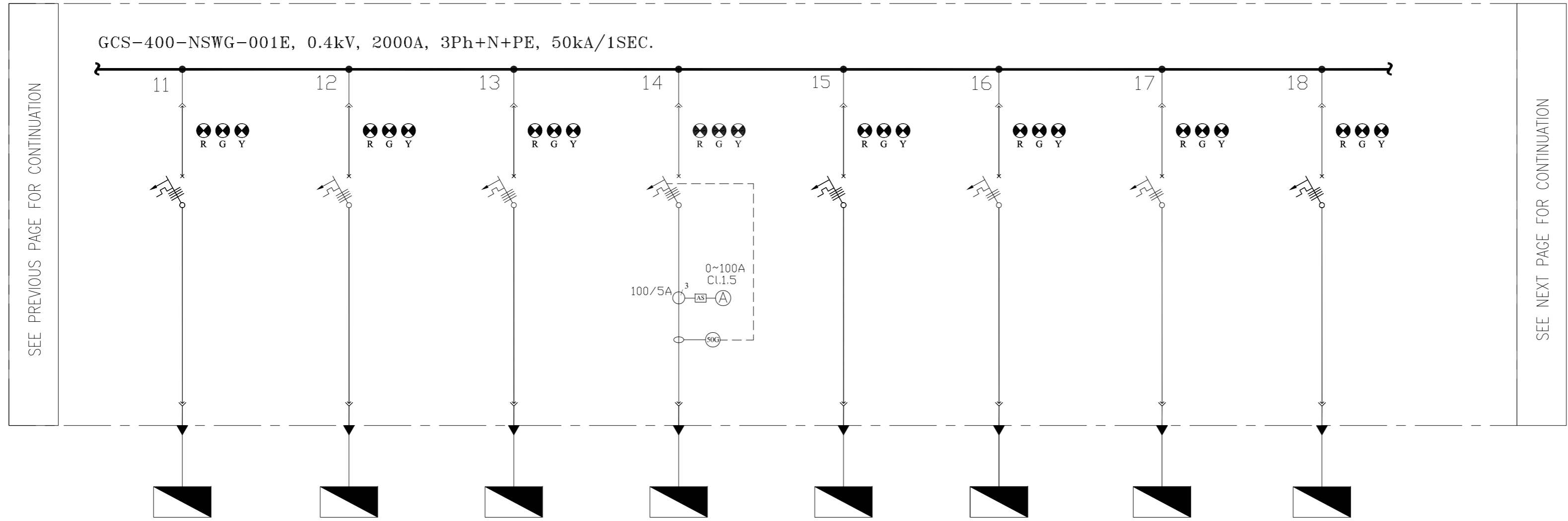
KEY PLAN

REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***	***
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY  
 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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	14 OF 23	D06	053-073-9184	F	2	P	709035	14 OF 23	D06

D06



CATEGORY	F1	F1	F1	F3	F1	F7	F7	F1
CODE	GCS-400-EDP-02	GCS-110-CHG-002	GCS-24-CHG-002	GCS-110-UPS-002	GCS-110-UPS-Bypass	GCS-230-FDP 01	GCS-230-FDP 02	P-2302A
POWER (kW)	3.2KW	20KW	16.2KW	43.41KW	19.8KW	1KW	1KW	18.5KW
C.B TYPE/RATING	16A	50A	40A	100A	50A	16A	16A	50A
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	4x10	4x16	4x16	3x35+16	3x25+16	4x4	4x4	3x35+16
DESCRIPTION OF FEEDER	UTILITY AREA EMERGENCY DISTRIBUTION PANEL	110VDC CHARGER 2	24VDC CHARGER 2	110VAC UPS 2	110VAC UPS BYPASS	FIRE DIESEL PANEL 01 (ELECTRICAL MAIN MOTOR)	FIRE DIESEL PANEL 02 (DIESEL ENGINE)	FIRE WATER JOCKEY PUMP A

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

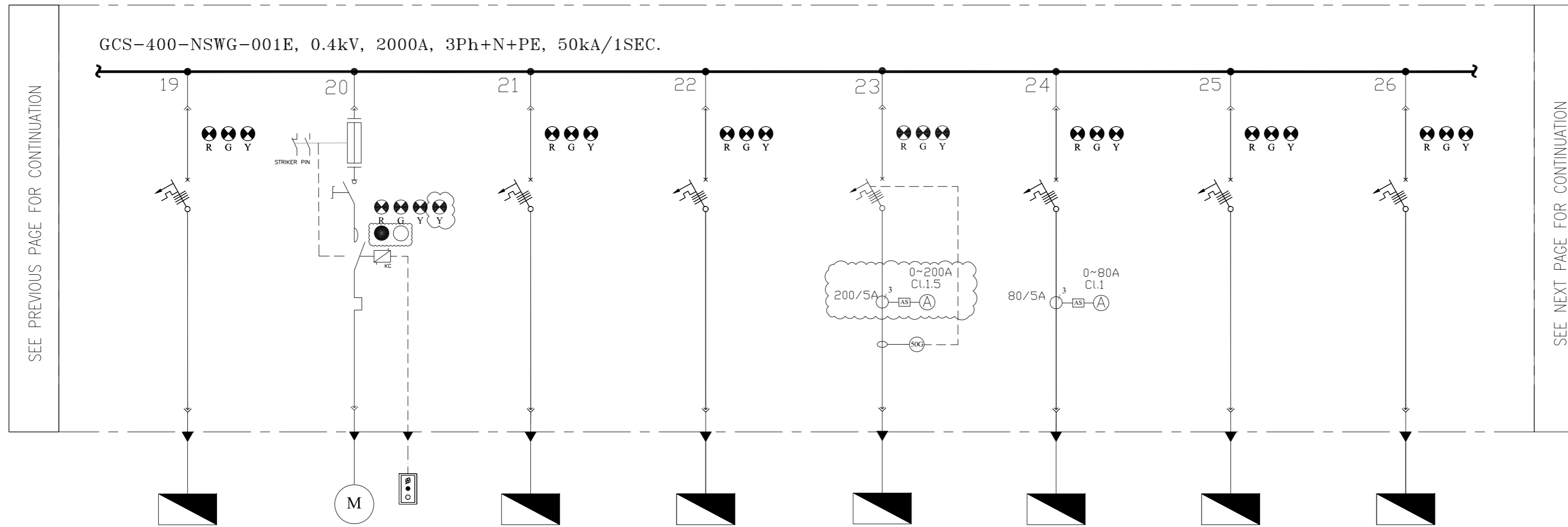
REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY (DESIGN & INSPECTION COMPANIES)  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)  
 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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	15 OF 23	D06	053-073-9184	F	2	P	709035	15 OF 23 D06

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D06



CATEGORY	F1	M1	F1	F1	F3	F2	F1	F1
CODE	P-2302B	P-2206	GCS-400-EDP-CRM	GCS-400-NDN UPS	GCS-400-HVAC-CRM1	GCS-400-EDP-SWHVAC	GCS-400-EDP-CCTV	GCS-400-EDP-WARE
POWER (kW)	18.5KW	1.5KW	10KW	19.2KW	97.9KW	30KW	21.36KW	10.2KW
C.B TYPE/RATING	50A	-	20A	50A	200A	80A	50A	32A
FUSE TYPE/RATING	N/A	aM/4A	N/A	N/A	N/A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	4KW (AC3)	N/A	N/A	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	2.5 ... 4 A	N/A	N/A	N/A	N/A	N/A	N/A
CABLE SIZE	3x35+16	3x4	4x25	4x10	2(3x120+70)	3x120+70	4x35	4x10
DESCRIPTION OF FEEDER	FIRE WATER JOCKEY PUMP B	DIESEL OIL PUMP	CONTROL ROOM EMERGENCY LIGHTING PANEL	NON-UPS EMERGENCY DISTRIBUTION PANEL	CONTROL ROOM EMERGENCY DISTRIBUTION PANEL FOR HVAC1	SWITCHGEAR EMERGENCY DISTRIBUTION PANEL & HVAC	GCS CCTV EMERGENCY DISTRIBUTION PANEL & HVAC	WAREHOUSE EMERGENCY DISTRIBUTION PANEL & HVAC

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY

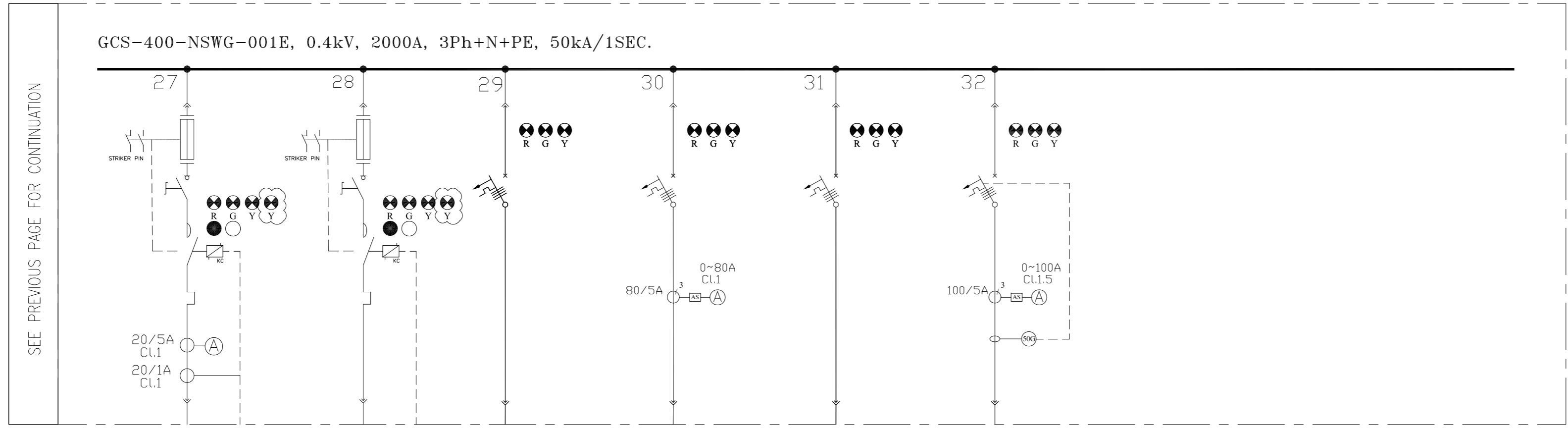
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	16 OF 23	D06	053-073-9184	F	2	P	709035	16 OF 23	D06



D06



CATEGORY	M2	M1	F1	F2	F1	F3			
CODE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE			
POWER (kW)	-	-	-	-	-	-			
C.B TYPE/RATING	-	-	16A	80A	50A	100A			
FUSE TYPE/RATING	aM/20A	aM/4A	N/A	N/A	N/A	N/A			
CONTACTOR RATING (A)	11KW (AC3)	4KW (AC3)	N/A	N/A	N/A	N/A			
OVER LOAD SETTING RANGE	12 ... 18 A	2.5 ... 4 A	N/A	N/A	N/A	N/A			
CABLE SIZE	-	-	-	-	-	-			
DESCRIPTION OF FEEDER	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE			

NOTES

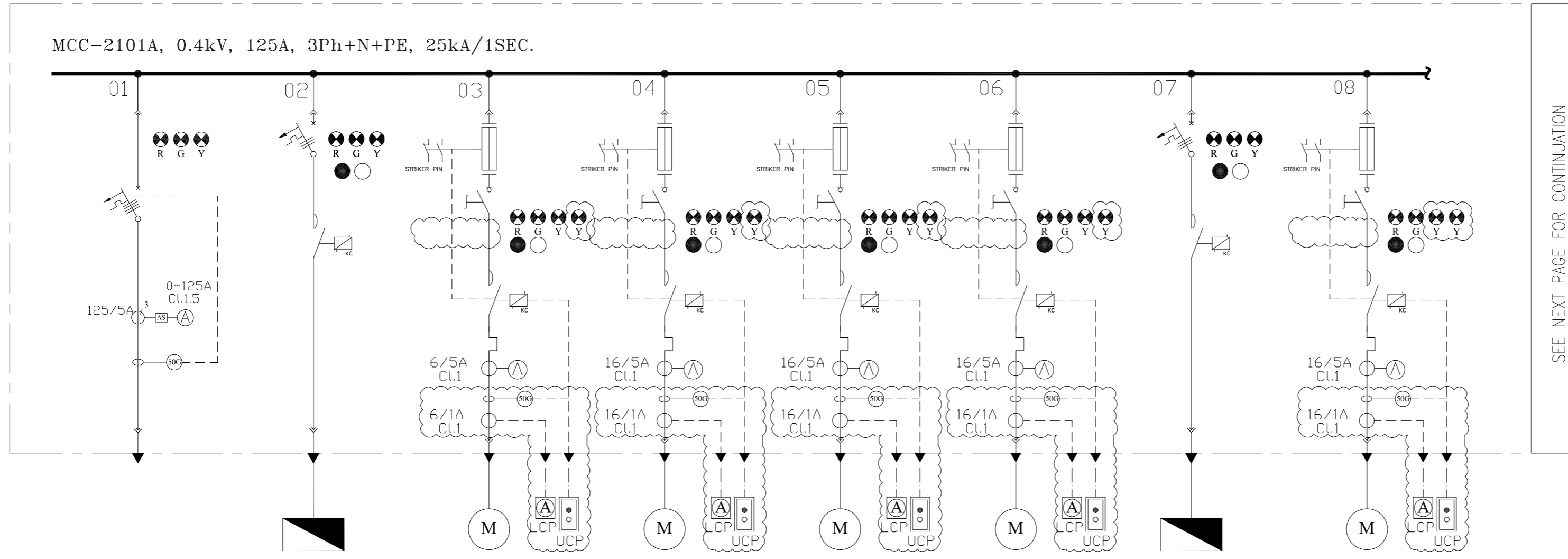
LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	** **							
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **							
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **							
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	DESCRIPTION	BY	DATE	BY	DATE	REV.	APPR.
PROJECT NAME:							BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION						
PROJECT NO.:							971020						
EPC CONTRACTOR:							EPD/EPC CONTRACTOR (GC):						
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES							 PETROIRAN DEVELOPMENT COMPANY						
DRAWING TITLE:							BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION						
SCALE							NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED						
SIZE							APPROVED FOR CONSTRUCTION						
DRAWING NO.							BY:						
SHEET NO.							DATE:						
REV.							BUDGET REF. LOCATION SIZE CLASS SERIAL NO. SHEET REVISION						
N.T.S							A2 BK-GCS-PEDCO-120-EL-SL-0002 17 OF 23 D06 053-073-9184 F 2 P 709035 17 OF 23 D06						

D06



SEE NEXT PAGE FOR CONTINUATION

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	aM/6A	aM/16A	aM/16A	aM/2A	N/A	aM/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 OF SWITCHGEAR A	OIL HEATER FOR GAS COMPRESSOR C-2101A	BARRING DEVICDE 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

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

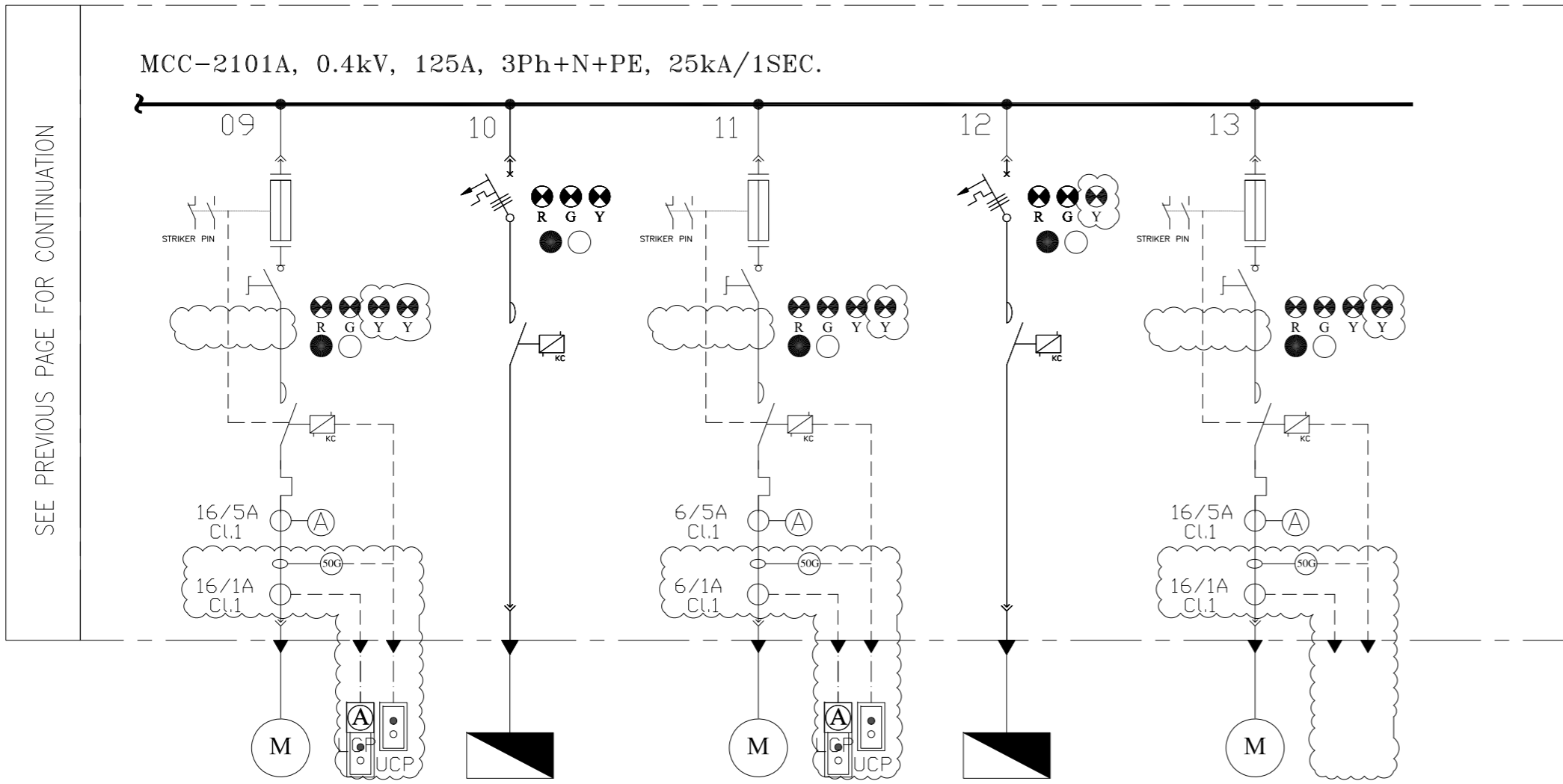
REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	***	***
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***	***
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***	***

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY  
 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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	18 OF 23	D06	053-073-9184	F	2	P	709035	18 OF 23	D06

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D06



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

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	** **
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **

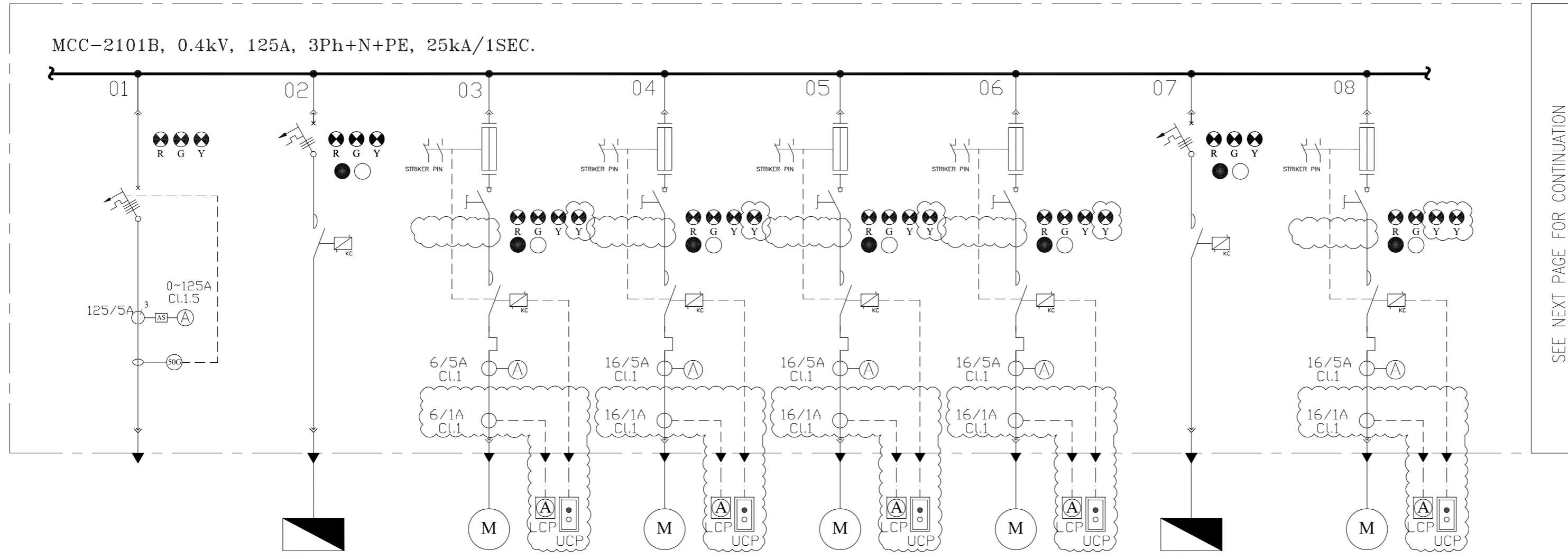
امل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب می باشد.  
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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY  
 BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION

DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM  
 NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	19 OF 23	D06	053-073-9184	F	2	P	709035	19 OF 23	D06

D06



SEE NEXT PAGE FOR CONTINUATION

CATEGORY	F3	F8	M5	M5	M5	M5	F8	M5
CODE	INCOMING	OIL HEATER B	BARRING DEVICDE COMPRESSOR C-2101B	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	aM/6A	aM/16A	aM/16A	aM/2A	N/A	aM/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 OF SWITCHGEAR B	OIL HEATER FOR GAS COMPRESSOR C-2101B	BARRING DEVICDE 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

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-L1-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

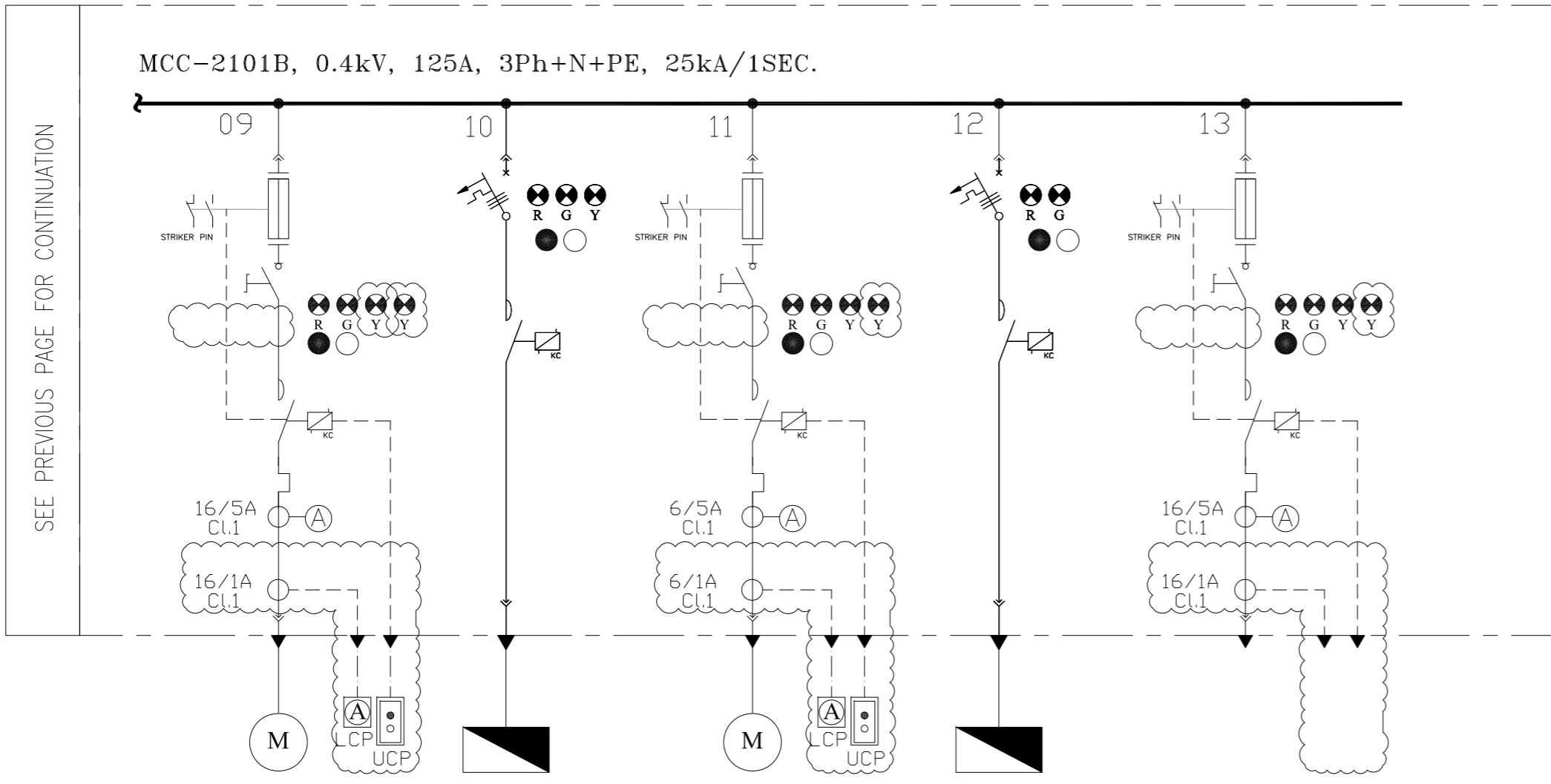
KEY PLAN

REV.	DATE	DESCRIPTION	CHECKED	BY	DATE	BY	DATE
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRIGHAN	**	**
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	**	**
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**	**
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**	**
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**	**
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**	**
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**	**

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION  
 PROJECT NO.: 971020  
 EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES  
 EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY  
 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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	20 OF 23	D06	053-073-9184	F	2	P	709035	20 OF 23	D06

D06



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

NOTES

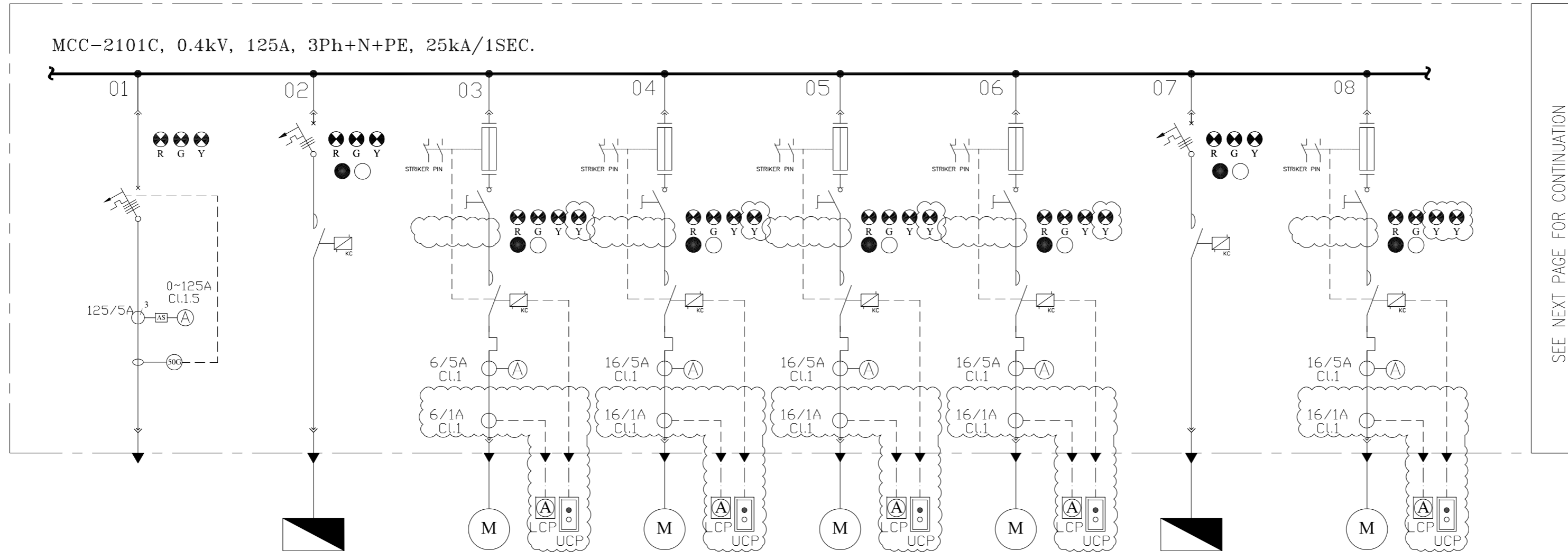
LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	BY	DATE					
D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRIGHAN	** **					
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **					
D04	FEB.2023	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **					
D03	AUG.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **					
D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **					
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **					
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	** **					
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.					
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS COMPRESSOR STATION											
PROJECT NO.: 971020											
EPC CONTRACTOR:			EPD/EPC CONTRACTOR (GC):		BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS COMPRESSOR STATION						
 HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES			 PETROIRAN DEVELOPMENT COMPANY		 N.I.S.O.C./ FIELDS						
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.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	21 OF 23	D06	053-073-9184	F	2	P	709035	21 OF 23	D06

D06



CATEGORY	F3	F8	M5	M5	M5	M5	F8	M5
CODE	INCOMING	OIL HEATER C	BARRING DEVICDE COMPRESSOR C-2101C	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	aM/6A	aM/16A	aM/16A	aM/2A	N/A	aM/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 OF SWITCHGEAR B	OIL HEATER FOR GAS COMPRESSOR C-2101C	BARRING DEVICDE 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

NOTES

LEGEND

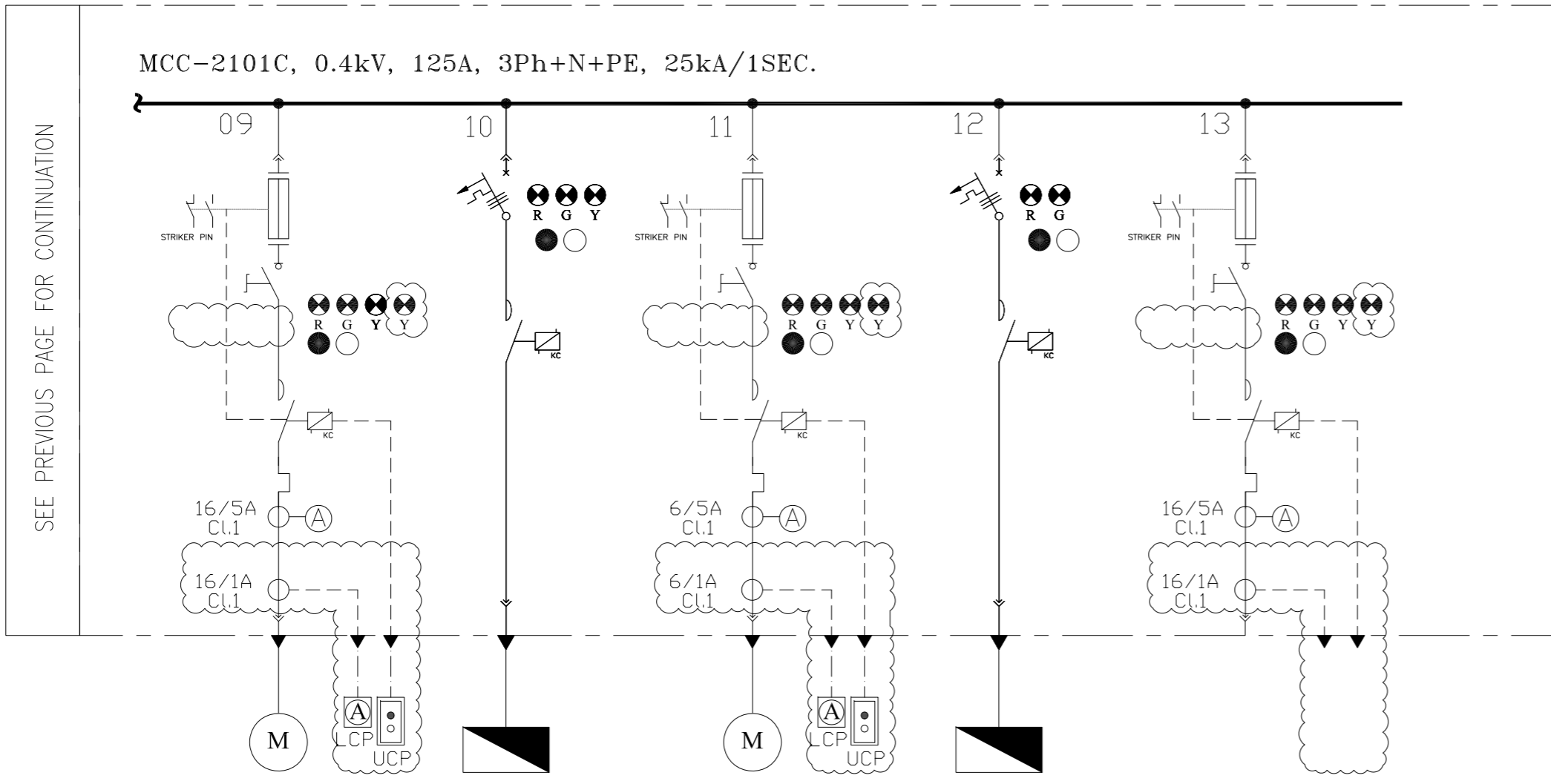
REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRIGHAN	***					
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	***					
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D02	MAY.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***					
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***					
D00	DEC.2021	IPC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	***					
REV.	DATE	P.O.I.S	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 (GC): PETROIRAN DEVELOPMENT COMPANY								
DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM											
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APPROVED FOR CONSTRUCTION BY: DATE:											
SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	22 OF 23	D06	053-073-9184	F	2	P	709035	22 OF 23	D06

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D06



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

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST	BK-GCS-PEDCO-120-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANEL	BK-GCS-PEDCO-120-EL-DG-0002

KEY PLAN

D06	SEP.2024	IFA	H.SHAKIBA	M.FAKHARIAN	M.SADRGHIAN	** **
D05	DEC.2023	IFA	H.SHAKIBA	M.FAKHARIAN	S.FARAMARZPOUR	** **
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PROJECT NO.: 971020						
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DRAWING TITLE: LV SWITCHGEAR/MCC SINGLE LINE DIAGRAM						
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APPROVED FOR CONSTRUCTION BY: DATE:						
SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION
N.T.S	A2	BK-GCS-PEDCO-120-EL-SL-0002	23 OF 23	D06	053-073-9184	F
CLASS	SERIAL NO.	SHEET	REVISION			
P	709035	23 OF 23	D06			

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