

UPS SINGLE LINE DIAGRAM EXTENSION OF BINAK B/C MANIFOLD

NOTES

LEGEND



REFERENCE DRAWING	DRG. No.
SPECIFICATION FOR UPS SYSTEM	BK-ONRAL-PECCO-000-BL-SP-0003
CALCULATION FOR UPS SYSTEM EXTENSION OF BINAK B/C MANIFOLD	BK-W0078-PECCO-110-BL-CN-0002
DATA SHEETS FOR UPS EXTENSION OF BINAK B/C MANIFOLD	BK-W0078-PECCO-110-BL-DT-0002


KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	REV.	DATE	DESCRIPTION	BY	DATE
DO1	SEP.2022	IPA	U.S.MUDA	U.FUJIMARU	U.MICROMARU	01.04			
DOO	MAR.2022	IPC	U.S.MUDA	U.FUJIMARU	U.MICROMARU	01.04			
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W0078 WHF & EXTENSION OF BINAK B/C

PROJECT NO.: 071030

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


 THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREON ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS

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
NTS	A3	BK-W0078-PECCO-110-BL-SL-0002	01 OF 04	001	003-073-0184	P	2	P	706028	01 OF 04	001

TABULATION OF REVISED PAGES

PAGE	REV. 00	REV. 01	REV. 02	REV. 03
1	X	X		
2	X	X		
3	X	X		
4		X		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

PAGE	REV. 00	REV. 01	REV. 02	REV. 03
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

NOTES

LEGEND


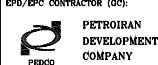
REFERENCE DRAWING	DRG. No.
SPECIFICATION FOR UPS SYSTEM	BK-ONRAL-PECCO-000-BL-SP-0003
CALCULATION FOR UPS SYSTEM	BK-W0078-PECCO-110-BL-CN-0002
EXTENSION OF BINAK B/C MANIPOLD	BK-W0078-PECCO-110-BL-07-0002
DATA SHEETS FOR UPS	
EXTENSION OF BINAK B/C MANIPOLD	BK-W0078-PECCO-110-BL-07-0002

KEY PLAN

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
DO1	SEP.2022	IPA		DO1	MAR.2022	IPC	
DO2	MAR.2022	IPC		DO2	MAR.2022	IPC	
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W0078 WHF & EXTENSION OF BINAK B/C

PROJECT NO.: 071080

<p>EPC CONTRACTOR:</p> 	<p>EPD/EPC CONTRACTOR (GC):</p> 
--	---

BINAK OILFIELD DEVELOPMENT
SUB-SURFACE WORK PACKAGES
W0078 WHF & EXTENSION OF BINAK B/C

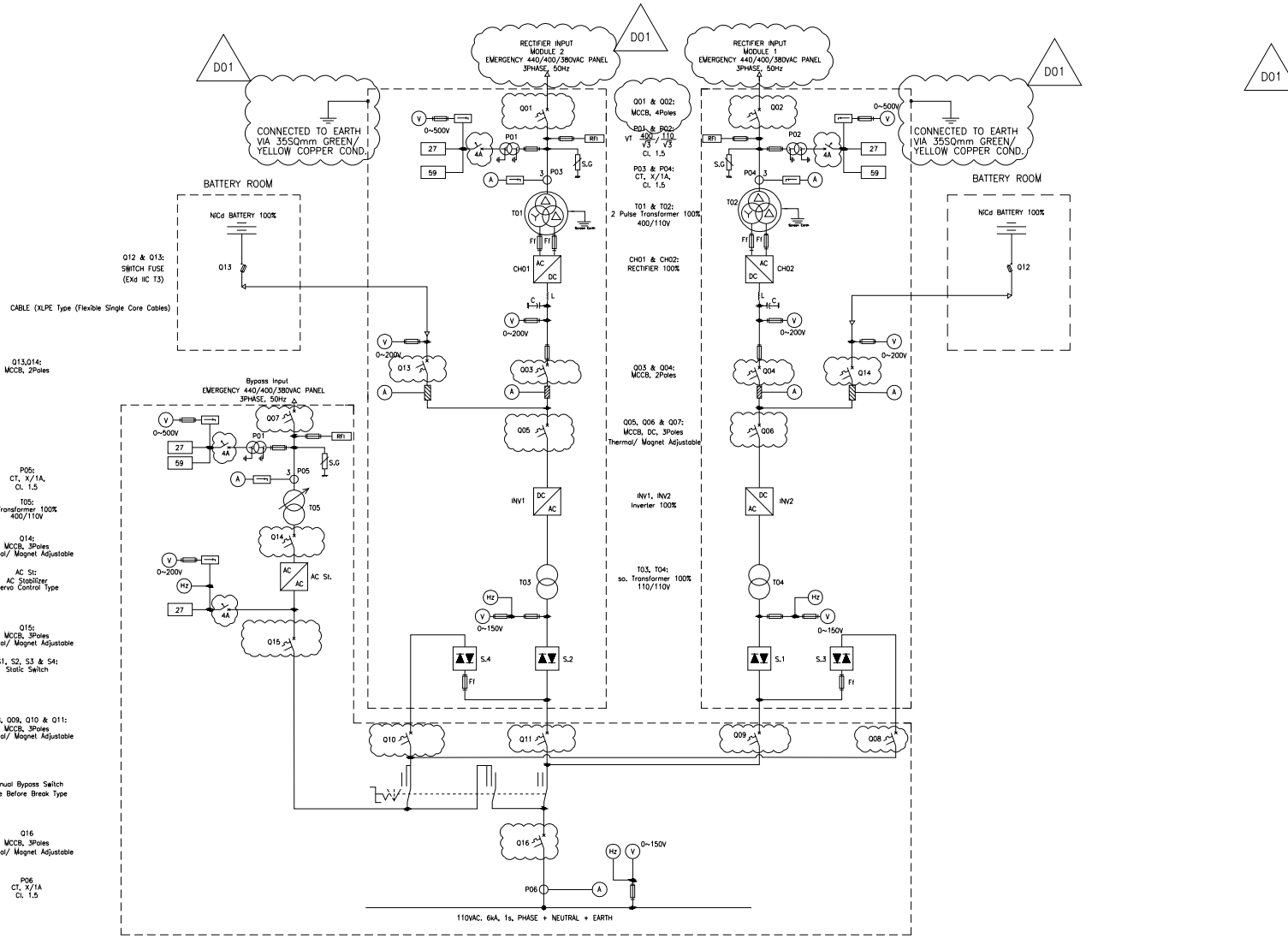
DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

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
NTS	A3	BK-W0078-PECCO-110-BL-SL-0002	02 OF 04	001	003-073-0184	P	2	P	766028	02 OF 04	001

(VENDOR TITLE BLOCK)*



- O13, O14: MCCB, 2Poles
- P05: CT, X/1A, Cl. 1.5
- T05: Transformer 100% 400/110V
- O14: MCCB, 3Poles Thermal/ Magnet Adjustable
- AC St: AC Stabilizer Servo Control Type
- O15: MCCB, 3Poles Thermal/ Magnet Adjustable
- S1, S2, S3 & S4: Static Switch
- O08, O09, O10 & O11: MCCB, 3Poles Thermal/ Magnet Adjustable
- Manual Bypass Switch Make Before Break Type
- O16: MCCB, 3Poles Thermal/ Magnet Adjustable
- P06: CT, X/1A Cl. 1.5

- NOTES**
- 1- MANUAL BYPASS SWITCH SHALL BE CONSIDERED MAKE BEFORE BREAK TYPE.
 - 2- THE OVERALL ALARM/FAULT SIGNAL SHALL BE SENT TO PROCESS CONTROL SYSTEM (PCS) PANEL BY DRY CONTACT.
 - 3- OUTPUT FEEDERS TO PCS PANEL SHALL BE CONSIDERED DOUBLE AND SEPARATE.
 - 4- AC STABILIZER SHALL BE CONSIDERED SERVO CONTROL TYPE.
 - 5- UPS SHALL BE CONSIDERED 12 PULSE.
 - 6- CABLE SIZES SHALL BE CONSIDERED AFTER FINALIZING ELECTRICAL POWER & CONTROL CABLE LIST - EXTENSION OF BINAK B/C MANIFOLD. NO. BK-W0078-PIDCO-110-EL-LL-0002"
 - 7- THIS SINGLE LINE DIAGRAM IS VALID FOR 110 VAC UPS.
 - 8- ALL DEVICES SHALL BE SIZED BY VENDOR.
 - 9- INTERLOCKS WILL BE PROVIDED TO INHIBIT BATTERY BOOST CHARGE IF BATTERY ROOM VENTILATION IS OUT OF SERVICE.
 - 10- AUTOMATIC BATTERY ISOLATION SWITCH SHALL BE PROVIDED FOR INCOMING MCCB OF BATTERY BANK. INCOMING MCCB OF BATTERY BANK SHALL BE OPEN WHEN FAS SYSTEM SEND BATTERY ISOLATION SIGNAL TO THE UPS.
 - 11- AN EARTH FAULT MONITORING SHALL BE CONSIDERED FOR EVERY 10 FEEDERS FOR EASY OF FINDING FAULTY BRANCH.
 - 12- METERING AND PROTECTION SYSTEM SHALL BE COMPLETED BASED ON AC UPS SPECIFICATION AND DETAILED INFORMATION SHALL BE INDICATED ON VENDOR DRAWING.
 - 13- THE BODY OF PANELS SHALL BE EARTHED DIRECTLY FROM TWO POINT
 - 14- SINCE 1.5 KW OF 110 VAC UPS WILL SUPPLY 24 VDC EXISTING MARSHALLING SYSTEM THEREFORE A CONVERTER 110 VAC TO 24 VDC SHALL BE CONSIDERED BY VENDOR ON DISTRIBUTION PANEL OF UPS.

- LEGEND**
- SHUNT
 - INVERTER
 - CHARGER
 - AC STABILIZER
 - STATIC SWITCH
 - BATTERY
 - SWITCH FUSE
 - MOULDED CASE CIRCUIT BREAKER
 - MINIATURE CIRCUIT BREAKER
 - FUSE
 - DIODE
 - CONTRACTOR
 - CABLE
 - ELECTRICAL CONNECTION
 - AMMETER
 - VOLTMETER
 - CURRENT TRANSFORMER
 - EARTH FAULT RELAY
 - OVER VOLTAGE RELAY
 - UNDER VOLTAGE RELAY
 - TRANSFORMER
 - FREQUENCY METER (DIGITAL TYPE)
 - SURGE ARRESTER
 - RADIO FREQUENCY INTERFACE

REFERENCE DRAWING	DRG. No.
SPECIFICATION FOR UPS SYSTEM	BK-ONRAL-PIDCO-000-BU-SP-0003
CALCULATION FOR UPS SYSTEM EXTENSION OF BINAK B/C MANIFOLD	BK-W0078-PIDCO-110-EL-LL-0002
DATA SHEETS FOR UPS EXTENSION OF BINAK B/C MANIFOLD	BK-W0078-PIDCO-110-EL-LL-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	REV.	DATE	DESCRIPTION	BY	DATE
001	SEP.2022	IPB	ILNABWA	ILFALMABAN	ILMURRODAD	09.24			
002	MAR.2022	IPC	ILNABWA	ILFALMABAN	ILMURRODAD	09.24			

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES 70078 WHP & EXTENSION OF BINAK B/C

PROJECT NO.: 071030

EPC CONTRACTOR: BIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY

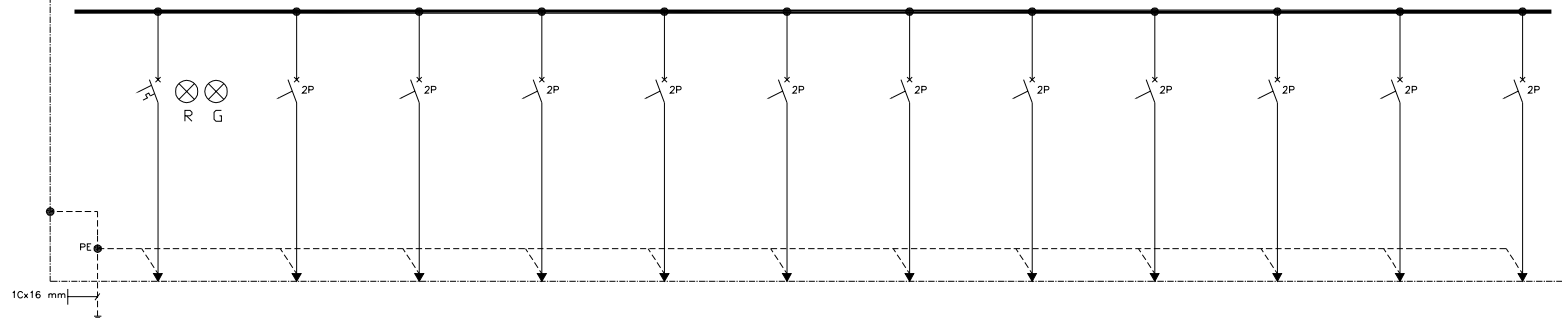
DRAWING TITLE: UPS SINGLE LINE DIAGRAM - EXTENSION OF BINAK B/C MANIFOLD

APPROVED FOR CONSTRUCTION BY: DATE:

SCALE	SIZE	DRAWING NO.	SHIBET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	BY	DATE	REVISION
N/A	A3	BK-W0078-PIDCO-110-EL-LL-0002	03 OP 04	001	003-073-0164	P	2	P	706028	03 OP 04	001

D01

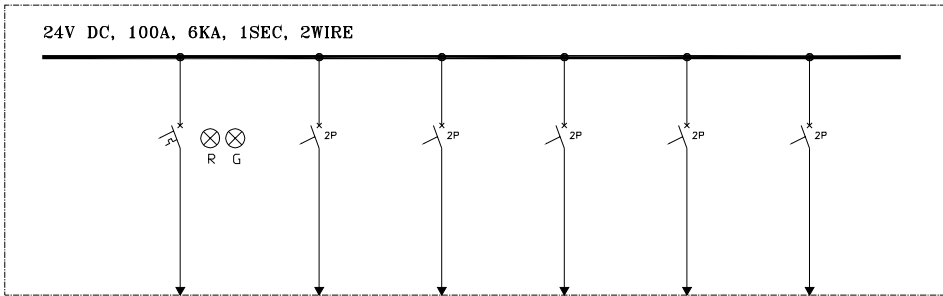
110V AC, 80A, 6KA, 1SEC, 1PH+N+PE



CATEGORY

CODE	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
P (KW)	6.72 KW	1 KW	1 KW	0.7 KW	0.7 KW	0.6 KW	0.6 KW	0.6 KW	0.6 KW	1.5 KW	1 KW	1 KW
CB TYPE/RATING	MCCB/80A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A	MCB/16A
CABLE SIZE	NOTE 6	2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6	-	-
DESCRIPTION OF FEEDER	INCOMING FROM 110VAC UPS (INVERTER)	DCS SYSTEM & MARSHALING PANEL	DCS SYSTEM & MARSHALING PANEL (Redundant)	ESD SYSTEM & MARSHALING PANEL	ESD SYSTEM & MARSHALING PANEL (Redundant)	OPERATOR WORKSTATION MARSHALING PANEL	DCS ENGINEERING WORKSTATION	ESD ENGINEERING WORKSTATION	PRINTERS	TO 24 VDC CONVERTOR	SPARE	SPARE

24V DC, 100A, 6KA, 1SEC, 2WIRE



CATEGORY

CODE	F1	F2	F3	F4	F5	F6
P (KW)	1.5 KW	1 KW	1 KW	-	-	-
CB TYPE/RATING	MCCB/100A	MCB/50A	MCB/50A	MCB/50A	MCB/50A	MCB/50A
CABLE SIZE	NOTE 6	2x25	2x25	2x25	2x25	2x25
DESCRIPTION OF FEEDER	INCOMING FROM 24 VDC CONVERTOR	EXITING 1	EXITING 2	EXITING 1 REDUNDANT	EXITING 2 REDUNDANT	SPARE

- NOTES**
- MANUAL BYPASS SWITCH SHALL BE CONSIDERED MAKE BEFORE BREAK TYPE.
 - THE OVERALL ALARM/FAULT SIGNAL SHALL BE SENT TO PROCESS CONTROL SYSTEM (PCS) PANEL BY DRY CONTACT.
 - OUTPUT FEEDERS TO PCS PANEL SHALL BE CONSIDERED DOUBLE AND SEPARATE.
 - AC STABILIZER SHALL BE CONSIDERED SERVO CONTROL TYPE.
 - UPS SHALL BE CONSIDERED 12 PULSE.
 - CABLE SIZES SHALL BE CONSIDERED AFTER FINALIZING ELECTRICAL POWER & CONTROL CABLE LIST - EXTENSION OF BINAK B/C MANIFOLD TAG: NO. BK-W0078-PBDCO-110-EL-LI-0002"
 - THIS SINGLE LINE DIAGRAM IS VALID FOR 110 VAC UPS.
 - ALL DEVICES SHALL BE SIZED BY VENDOR.
 - INTERLOCKS WILL BE PROVIDED TO INHIBIT BATTERY BOOST CHARGE IF BATTERY ROOM VENTILATION IS OUT OF SERVICE.
 - AUTOMATIC BATTERY ISOLATION FACILITY SHALL BE PROVIDED FOR INCOMING MCCB OF BATTERY BANK. INCOMING MCCB OF BATTERY BANK SHALL BE OPEN WHEN FAC-SYSTEM SEND BATTERY ISOLATION SIGNAL TO THE UPS.
 - AN EARTH FAULT MONITORING SHALL BE CONSIDERED FOR EVERY 10 FEEDERS FOR EASY OF FINDING FAULTY BRANCH.
 - METERING AND PROTECTION SYSTEM SHALL BE COMPLETED BASED ON AC UPS SPECIFICATION AND DETAILED INFORMATION SHALL BE INDICATED ON VENDOR DRAWING.
 - THE BODY OF PANELS SHALL BE EARTHED DIRECTLY FROM TWO POINT
 - SINCE 1.5 KW OF 110 VAC UPS WILL SUPPLY 24 VDC EXISTING MARSHALING SYSTEM, THEREFORE A CONVERTOR 110 VAC TO 24 VDC SHALL BE CONSIDERED BY VENDOR ON DISTRIBUTION PANEL OF UPS.

LEGEND

- SHUNT
- INVERTER
- CHARGER
- AC STABILIZER
- STATIC SWITCH
- BATTERY
- SWITCH FUSE
- MOULDED CASE CIRCUIT BREAKER
- MINIATURE CIRCUIT BREAKER
- FUSE
- DIODE
- CONTRACTOR
- CABLE
- ELECTRICAL CONNECTION
- AMMETER
- VOLTMETER
- CURRENT TRANSFORMER
- EARTH FAULT RELAY
- OVER VOLTAGE RELAY
- UNDER VOLTAGE RELAY
- TRANSFORMER
- FREQUENCY METER (DIGITAL TYPE)
- SURGE ARRESTER
- RADIO FREQUENCY INTERFACE

REFERENCE DRAWING	DRG. No.
SPECIFICATION FOR UPS SYSTEM	BK-ONRAL-PBDCO-000-BU-SP-0003
CALCULATION FOR UPS SYSTEM EXTENSION OF BINAK B/C MANIFOLD	BK-W0078-PBDCO-110-EL-CN-0002
DATA SHEETS FOR UPS DATA SHEETS FOR UPS EXTENSION OF BINAK B/C MANIFOLD	BK-W0078-PBDCO-110-EL-DT-0002

KEY PLAN

REV.	DATE	DESCRIPTION	BY	DATE	REV.	DATE
D01	SEP.2022	IPA	ILMUBA	ILFUMBAK	ILMORNOG	01.24
D00	MAR.2022	IPC	ILMUBA	ILFUMBAK	ILMORNOG	01.24

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W0078 WHP & EXTENSION OF BINAK B/C

PROJECT NO.: 071080

EPC CONTRACTOR: MORGAN PETROIRAN DEVELOPMENT COMPANY

EPD/EPIC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY

DRAWING TITLE: UPS SINGLE LINE DIAGRAM - EXTENSION OF BINAK B/C MANIFOLD

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	BY:	DATE:
N/A	A3	BK-W0078-PBDCO-110-EL-SL-0002	04	04	D01	003-073-0184	P	2	P	706028 04 04 04