

DC CHARGER SINGLE LINE DIAGRAM  
EXTENSION OF BINAK B/C MANIFOLD

NOTES	
LEGEND	
REFERENCE DRAWING	DRG. No.
SPERKHOFF FOR DC CHARGER	BR - CHRGAL - PBDCC - 000 - IS - SP - 0006
CALCULATION NOTES FOR DC CHARGER	BR - R007F - PBDCC - 110 - IS - CH - 0001
SYSTEM - EXTENSION OF INRAK B/C MANIFOLD	BR - R007F - PBDCC - 110 - IS - CH - 0001
DATA - EXTENSION FOR DC CHARGER	BR - R007F - PBDCC - 110 - IS - CH - 0001
EXTENSION OF INRAK B/C MANIFOLD	BR - R007F - PBDCC - 110 - IS - CH - 0001
KEY PLAN	

[illegible]


























(VENDOR TITLE BLOCK)\*\*

## INDEX SHEET

SHEET No.	DESCRIPTION	D00	D01	D02	D03	D04
01	COVER SHEET	✓	✓	✓	✓	
02	INDEX SHEET	✓	✓	✓	✓	
03	SYMBOL	✓	✓		✓	
04	NOTES	✓		✓	✓	
05	24V DC BATTERY CHARGER CONFIGURATION	✓	✓	✓	✓	
06	24V DC CHARGER DISTRIBUTION BOARD	✓	✓	✓	✓	

[illegible][illegible]

(VENDOR TITLE BLOCK)\*\*\*

LEGEND		
	AMMETER	 MINIATURE CIRCUIT BREAKER
	VOLTMETER	 MOULDED CASE CIRCUIT BREAKER (MCCB)
	FREQUENCY METER	 DC GROUND FAULT RELAY
	CABLE GLAND	 SHUNT CONNECTION FOR AMMETER
	TRANSFORMER, TWO WINDING	 BATTERY
	CURRENT TRANSFORMER	 POWER LINE FILTER
	VOLT METER SELECTOR	 EARTH LEAKAGE MONITORING SYSTEM
	AMPERE METER SELECTOR	 INDUCATOR
	UNDER VOLTAGE RELAY	 CAPACITOR
	OVER VOLTAGE RELAY	 SURGE ARRESTER
	FUSE	 TWO POLE MINIATURE CIRCUIT BLEAKER (MCB) WITH EARTH FAULT PROTECTION
	FF (FAST ACT FUSE)	
	RECTIFIER	 MCB WITH BUILT-IN EARTH LEAKAGE RELAY (RCBO)



D03

NOTES

LEGEND

REFERENCE DRAWING	DRG. No.
DESCRIPTION FOR DC CHARGER	IR-CHRGAL-PSDCO-000-EL-07-0000
CALCULATION NOTE FOR DC CHARGER SYSTEM-EXTENSION OF BINAK B/C MANFOLD	IR-W007S-PSDCO-110-EL-CN-0001
DATA SHEET FOR DC CHARGER-EXTENSION OF BINAK B/C MANFOLD	IR-W007S-PSDCO-110-EL-07-0001





KEY PLAN

DOO	MAY.2020	IPA	K.SHAHIN	E.FARHANI	A.K.MOHSEN	***													
DOO	MAR.2020	IPA	K.SHAHIN	E.FARHANI	A.K.MOHSEN	***	***	*****	REV. 01	2020-03-01	REV. 01	2020-03-01	REV. 01	2020-03-01	REV. 01	2020-03-01	REV. 01	2020-03-01	REV. 01
DOO	SEP.2020	IPA	K.SHAHIN	E.FARHANI	A.K.MOHSEN	***	REV.	DESCRIPTION	BY	DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE	BY
DOO	MAR.2020	IPC	K.SHAHIN	E.FARHANI	A.K.MOHSEN	***	REV.	DESCRIPTION	CHECKED	DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE	BY
REV.	DATE	P.O.I.F	PREP.	CHK.	APP.	AUT.	امیر و کلیه دستگیر شده و حق انحصاری مملکت به شرکت ملی نفت ایران و وزارت نفت میسرند.												
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES/ W007S WHF & EXTENSION OF BINAK B/C																			
PROJECT NO.: 971020																			
EPC CONTRACTOR:  HIRASAN ENERGY - DESIGN & INSPECTION COMPANIES										EPD/EPC CONTRACTOR (GO):  PETROIRAN DEVELOPMENT COMPANY									
DRAWING TITLE: DC CHARGER SINGLE LINE DIAGRAM - EXTENSION OF BINAK B/C MANFOLD										NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED									
(VENDOR TITLE BLOCK)**										APPROVED FOR CONSTRUCTION BY: DATE:									
SCALE	SIZE	DRAWING NO.				SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION					
NW	A3	IR-W007S-PSDCO-110-EL-0000				08 OF 06	D03	008-070-0104	P	2	P	700029	03 OF 06	D03					

NOTES:

- 01- ALL METERING, PROTECTION AND ALARM SYSTEM SHALL BE CONSIDERED BASED ON IPS M-EL-174(2) & SPECIFICATION FOR BATTERY & BATTERY CHARGER SYSTEM & DETAILED INFORMATION SHALL BE INDICATED IN THE VENDOR DRAWINGS. (VENDOR SHALL SPECIFY THE SIZE OF DEVICES).
- 02- CABLE SIZES SHALL BE CONSIDERED AFTER FINALIZING "CALCULATION NOTE FOR CABLE SIZING OF WELL PADS" DOC. NO "BK-SSGRL-PEDCO-110-EL-CN-0005" IN ADDITION THE INCOMING CABLE FOR BOTH FEEDERS SHALL BE 4 CORES.
- 03- INTERLOCKS WILL BE PROVIDED TO INHIBIT BATTERY BOOST CHARGE IF BATTERY ROOM VENTILATION IS OUT OF SERVICE.
- 04- AUTOMATIC BATTERY ISOLATION FACILITY SHALL BE PROVIDED FOR INCOMING MCCB OF BATTERY BANK. INCOMING MCCB OF BATTERY BANK SHALL BE OPEN WHEN F&G SYSTEM SEND BATTERY INSULATION SIGNAL TO THE UPS.
- 05- AN EARTH FAULT MONITORING SHALL BE CONSIDERED FOR EVERY 10 FEEDERS FOR EASY OF FINDING FAULTY BRANCH.
- 06- METERING & PROTECTION SYSTEM SHALL BE COMPLETED BASED ON UPS SPECIFICATION & DETAILED INFORMATION SHALL BE INDICATED ON VENDOR DRAWING.
- 07- ALL INCOMING & OUTGOING CONNECTIONS TO DISTRIBUTION BOARD SHALL BE FROM BOTTOM OF PANEL.
- 08- VENDOR SHALL USE THIS DRAWING AS BASIS ONLY & SHALL DEVELOP SINGLE LINE DIAGRAMS TO ENSURE PROPER OPERATION AS PER SPECIFICATION.
- 09- NUMBER OF DROPPER DIODE SHALL BE SPECIFIED BY MANUFACTURER CONSIDERING FLOAT CHARGE MODE. MANUFACTURER SHALL REGULATE LOAD VOLTAGE SUCH WAY TO KEEP CHARGE NORMAL VOLTAGE IN THE RANGE OF +10%
- 10- THE BATTERY FUSE/CIRCUIT BREAKER BOXES IS INSTALLED IN BATTERY ROOM AND SHALL HAVE AN EXPLOSION PROTECTION EXD IIC T3 ACCORDING TO IEC 60079-14.
- 11- ALL CALCULATION IN DC UPS SCOPE OF WORK SHALL BE CHECKED & CONFIRMED BY VENDOR.
- 12- BATTERY ISOLATED SIGNAL SHALL BE PROVIDED IN DC CHARGER SYSTEM.
- 13- BATTERY AMMETER SHALL BE ZERO-CENTER TYPE.
- 14- DISTRIBUTION PANEL (DP-01) FOR 24VDC WHICH WILL BE INSTALLED IN CONTROL ROOM, SHALL BE MANUFACTURED & CONSIDERED BY VENDOR.
- 15- FOR OUTGOING FEEDER OF DP-01, SUITABLE CB WITH EARTH LEAKAGE SHALL BE CONSIDERED BY VENDOR.

**D03**

D09	MAY 2009	IFA	K.SAMIR	E.YAMANEH	A.ALMONDJI	00.00																	
D08	MAR 2009	IFA	K.SAMIR	E.YAMANEH	M.MOHERAB	00.00	***	*****	00.00	00.00	00.00	00.00											
D01	SEP 2002	IFA	K.SAMIR	E.YAMANEH	M.MOHERAB	00.00					BY	DATE	BY	DATE									
D00	MAR 2002	IFA	K.SAMIR	E.YAMANEH	M.MOHERAB	00.00					CHECKED				REV. APPRO.								
REV. DATE			P.O.I.F			PREP.		CHK.		APP.		AUT.											
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACES WORK PACKAGES 7007S WHF & EXTENSION OF BINAK B/C														 THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT RIGHTS ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS									
PROJECT NO.:						071020																	
EPC CONTRACTOR:						EPD/EPC CONTRACTOR (GC):						BINAK OILFIELD DEVELOPMENT SUB-SURFACE WORK PACKAGES 7007S WHF & EXTENSION OF BINAK B/C											
 						 PETROIRAN DEVELOPMENT COMPANY																	
HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES						PEDCO																	
DRAWING TITLE: DC CHARGER SINGLE LINE DIAGRAM - EXTENSION OF BINAK B/C MAINFOLD														NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED									
APPROVED FOR CONSTRUCTION														SERIAL NO.		DATE							
BUDGET REF.		LOCATION		SHEET CLASS		BY		Z P		708029					04 OF 06		D03						
050-079-0184		7		2		P		P															
(VENDOR TITLE BLOCK)**																							
ISCAL		SRZS		DRAWING NO.				SHEET NO.		REV.													
NVE		AS		BK-7007S-PB200-110-EL-SL-C003				04 OF 06		D03													



(VENDOR TITLE BLOCK)**	DRAWING TITLE: DC CHARGER SINGLE LINE DIAGRAM - EXTENSION OF BINAK B-C MANIFOLD						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
	NYS	A3	BK-W0078-PDCO-110-BL-SL-0008		05 OF 06	D03	0088-073-9184	F	2	P	700029	06 OF 06	D03

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