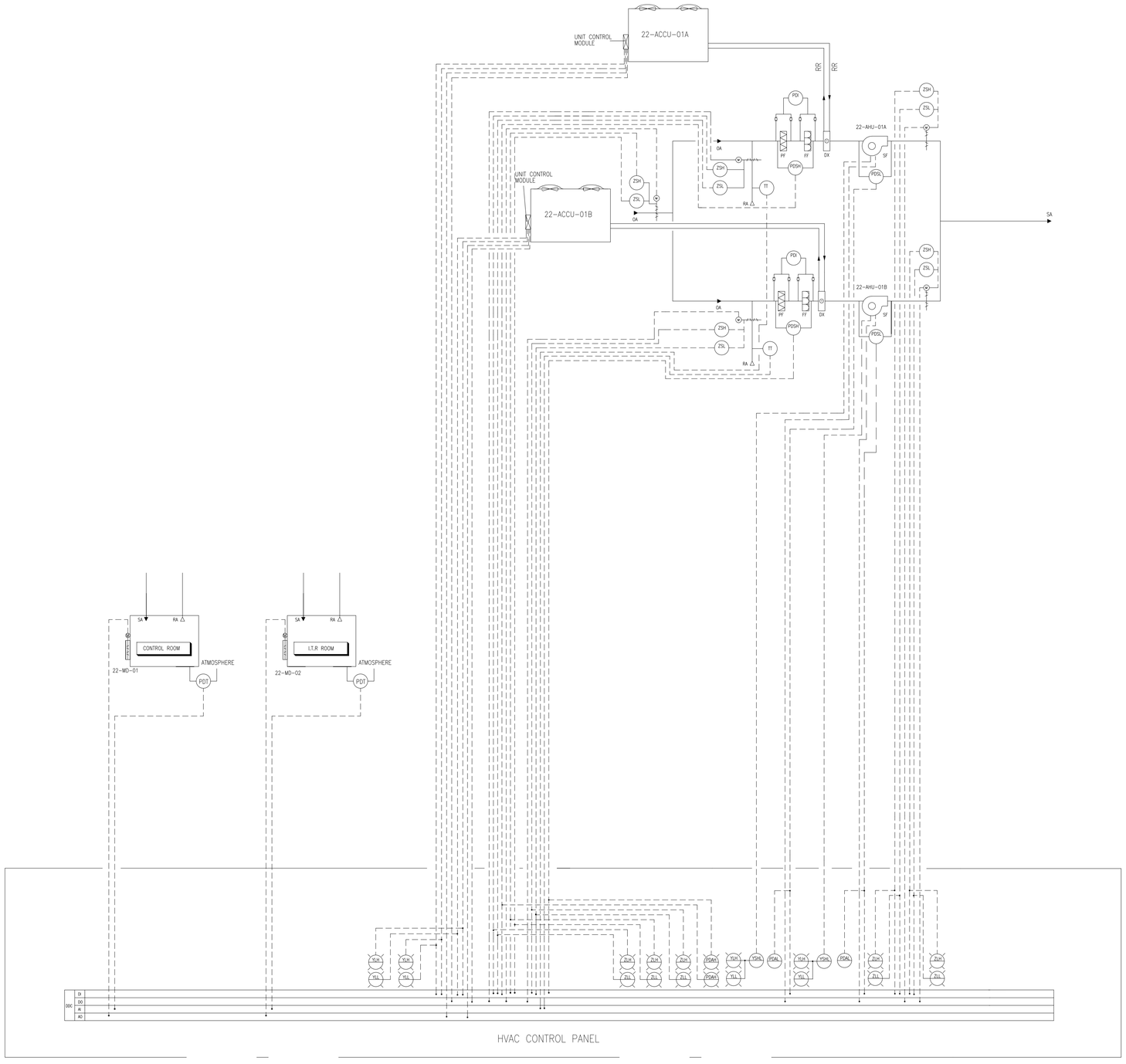


DUTY/STAND-BY AIR HANDLING UNIT AND AIR-COOLED CONDENSING UNIT CONTROL

NOTES

OPERATION DESCRIPTION

OPERATION OF DUTY/STAND BY AIR HANDLING UNIT AND AIR COOLED CONDENSING UNIT:

- DUAL POSITION MOTORIZED DAMPERS AT THE AIR HANDLING UNITS SHALL BE INTERLOCKED WITH THE RESPECTIVE SUPPLY FAN AND SHALL OPEN 100 % AT THE START OF THE UNIT. LIMIT SWITCHES SHALL PREVENT THE FAN FROM RUNNING IN CASE THE DAMPERS REMAIN CLOSED.

- WHENEVER AIR HANDLING UNIT IS DE-ENERGIZED, THE RESPECTIVE MOTORIZED DAMPERS SHALL RETURN TO 100 % CLOSED POSITION.

- IN THE EVENT OF FAILURE OF DUTY AIR HANDLING UNIT OR RELATED AIR COOLED CONDENSING UNIT, STANDBY SYSTEM SHALL BE OPERATED AUTOMATICALLY.

- TEMPERATURE AND HUMIDITY SWITCHES OR TRANSMITTERS SHALL REGULATE THE DUTY AIR COOLED CONDENSING UNIT ACCORDING TO COOLING AND DEHUMIDIFICATION DEMAND.

- WHEN THE HVAC ELECTRICAL PANEL RECEIVES AN ACTIVATION SIGNAL FROM F&G PANEL, THE WHOLE HVAC SYSTEM SHALL SHUT DOWN. ALL MOTORIZED DAMPERS AND FIRE DAMPERS SHALL RETURN TO 100% CLOSED POSITION.

- IN CASE OF FLAMMABLE TOXIC GAS DETECTION AT THE FRESH AIR INLET, MOTORIZED DAMPER FRESH AIR INTAKE SHALL BE CLOSED AND ON DISCHARGE OUTLETS MOTORIZED DAMPERS (22-MD-01/02) WILL CLOSE AND ALL EXHAUST FANS WILL BE SHUT DOWN, AND HVAC WILL CONTINUE TO RUN IN RECIRCULATING MODE.

- THE VENDOR OF HVAC CONTROL AND INSTRUMENT SHOULD CONSIDER ALL HVAC SYSTEM EFFECT INTERFACING TO FIRE, GAS, TOXIC GAS & ... ACCORDING TO DOCUMENT "F&G SYSTEM CAUSE & EFFECT FOR BUILDING.

- AUTO CHANGE OVER(SWITCH) SHALL BE PROVIDED FOR AIR HANDLING UNIT AND AIR COOLED CONDENSING UNITS ("22-AHU-01-A, 22-ACCU-01-A " AND "22-AHU-01-B, 22-ACCU-01-B").

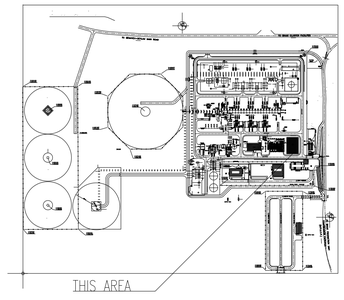
- DIFFERENTIAL PRESSURE SWITCH (ΔP= 30 Pa) FOR INSIDE/OUTSIDE OF THE CONTROL ROOM & ITR ROOM SHALL BE PROVIDED TO CONTROL PRESSURE VIA MOTORIZED DAMPER IN THESE ROOMS.

FIRE DAMPER OPERATION:
FIRE DAMPERS SHALL BE FULLY OPEN WHEN ENERGIZED. DAMPERS SHALL RETURN TO 100 % CLOSED POSITION IN THE FOLLOWING CASES:
(1) ON RECEIVING A SHUT-DOWN SIGNAL FROM F&G PANEL.
(2) WHENEVER DE-ENERGIZED

LEGEND

REFERENCE DRAWING	DRG. No.
STANDARD DRAWING FOR HVAC & PLUMBING	BK-GNRAL-PEDCO-000-HV-DW-0001
SYMBOL & LEGEND FOR HVAC & PLUMBING	BK-GNRAL-PEDCO-000-HV-DW-0002
HVAC FLOW DIAGRAM FOR CONTROL BUILDING	BK-GCS-PEDCO-120-HV-DG-0001

KEY PLAN



REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUL.2022	IFC	H. ADINEH	M.PAKHARIAN	M.Mehrshad	**.**

REV.	DESCRIPTION	BY	DATE	BY	DATE
***	**********	**.**	***.****	**.**	***.****
		CHECKED		REV. APPR.	

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

PROJECT NO.: 971020

اصل و کلیه 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

EPC CONTRACTOR: HIRGAN ENERGY – DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PEDCO

PETROIRAN DEVELOPMENT CLIENT

BINAK OILFIELD DEVELOPMENT
SURFACE FACILITIES
GAS COMPRESSOR STATION

DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

DRAWING TITLE: HVAC I&C Diagram For Control Building

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
AS SHOWN	A1	BK-GCS-PEDCO-120-HV-DG-0002	01 OF 01	D00	053-073-9184	F	4	B	708874	01 OF 01	D00