

GEMINI OBSERVATORY HILO BASE FACILITY EXPANSION

HILO, HAWAII

15901 – CONTROL SYSTEM

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REVISIONS	BY	DATE
SHOW NEW DWGS		

GEMINI OBSERVATORY
HILO BASE FACILITY EXPANSION
HILO, HAWAII

American Controls

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JOB NO: 270410
REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410T1R3
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: TITLE SHEET
SHEET NO. T1

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EMS CONTROLS SYMBOLS AND ABBREVIATIONS

ABBREVIATION	DESCRIPTION
CPT	CONTROL POWER TRANSFORMER
N.O.	NORMALLY OPEN CONTACT/POSITION
N.C.	NORMALLY CLOSED CONTACT/POSITION
R	RELAY COIL
P	PILOT LIGHT
TDR	TIME DELAY RELAY
TDR	TIME DELAY RELAY / DELAY ON BREAK
TB	TERMINAL BLOCK
MS	MOTOR STARTER
DO-X	DIGITAL OUTPUT POINT
IN-X	INPUT POINT
OA	OUTSIDE AIR
ST/SP	START/STOP
HOA	HAND OFF AUTO SWITCH
	X = SWITCH POSITION CLOSED
AFF	ABOVE FINISHED FLOOR
CFR	CONDENSER FAN RELAY
DAC	DELTA APPLICATION CONTROLLER
DNS	DELTA NETWORK THERMOSTAT
DSC	DELTA SYSTEM CONTROLLER
F/SD-X	FIRE/SMOKE DAMPER
CAT(5)	24 AWG 4 PAIR CATEGORY 5 UTP PLENUM CABLE
MS/TP RS485	LO-CAPACITANCE, 24 AWG, 1 PAIR SHIELDED, 12.5PF, 100 OHM, ORANGE JACKET, PLENUM RATED
REP	DELTA NETWORK REPEATER
VAV	VARIABLE AIR VOLUME BOX
TRM	DELTA END OF LINE TERMINATOR
HUB	CATEGORY 5 NETWORK HUB
AHU	AIR HANDLING UNIT
CH	CHILLER
EF	EXHAUST FAN
SF	SUPPLY FAN
HP	HEAT PUMP
LPHW	LOW PRESSURE HOT WATER
HPHW	HIGH PRESSURE HOT WATER
BP	BOOSTER PUMP
SCHWP	SECONDARY CHILLED WATER PUMP
SPT	STATIC PRESSURE TRANSMITTER
SD	SMOKE CONTROLLER
FCU	FAN COIL UNIT

ABBREVIATION	DESCRIPTION
ALT	AUTOMATIC ALTERNATOR
CT	COOLING TOWER
T	TEMPERATURE
F	FLOW
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
P-X	PUMP
V-X	CONTROL VALVE
VT	AIR VELOCITY TRANSMITTER
CS	CURRENT SENSOR
MD	MOTORIZED DAMPER
FZ	FREEZE THERMOSTAT
T/H	COMBINATION TEMP/HUMIDITY SENSOR
HT	HUMIDITY TRANSMITTER
RTS	REMOTE TEST STATION

WIRE COLOR	DESCRIPTION
BLACK	120VAC HOT 24VAC HOT (-) DC NEGATIVE
WHITE	120VAC NEUTRAL 24VAC NEUTRAL
RED	SWITCHED HOT (+) DC POSITIVE
YELLOW	FOREIGN VOLTAGE

SYMBOL	DESCRIPTION
	TEMPERATURE SENSOR LOCATION
	FLOW METER LOCATION
	FLOW SWITCH LOCATION
	STATIC PRESSURE TRANSMITTER
	DIFFERENTIAL PRESSURE SWITCH
	PUMP
	CONTROL VALVE
	TRANSFORMER
	NORMALLY OPEN CONTACT/POSITION
	NORMALLY CLOSED CONTACT/POSITION
	RELAY COIL
	PILOT LIGHT
	TIME DELAY RELAY
	TIME DELAY RELAY / DELAY ON BREAK
	TERMINAL BLOCK
	MOTOR STARTER COIL
	HAND OFF AUTO SWITCH
	X = SWITCH POSITION CLOSED TEMPERATURE SENSOR
	CURRENT SENSOR
	NETWORK TERMINATOR

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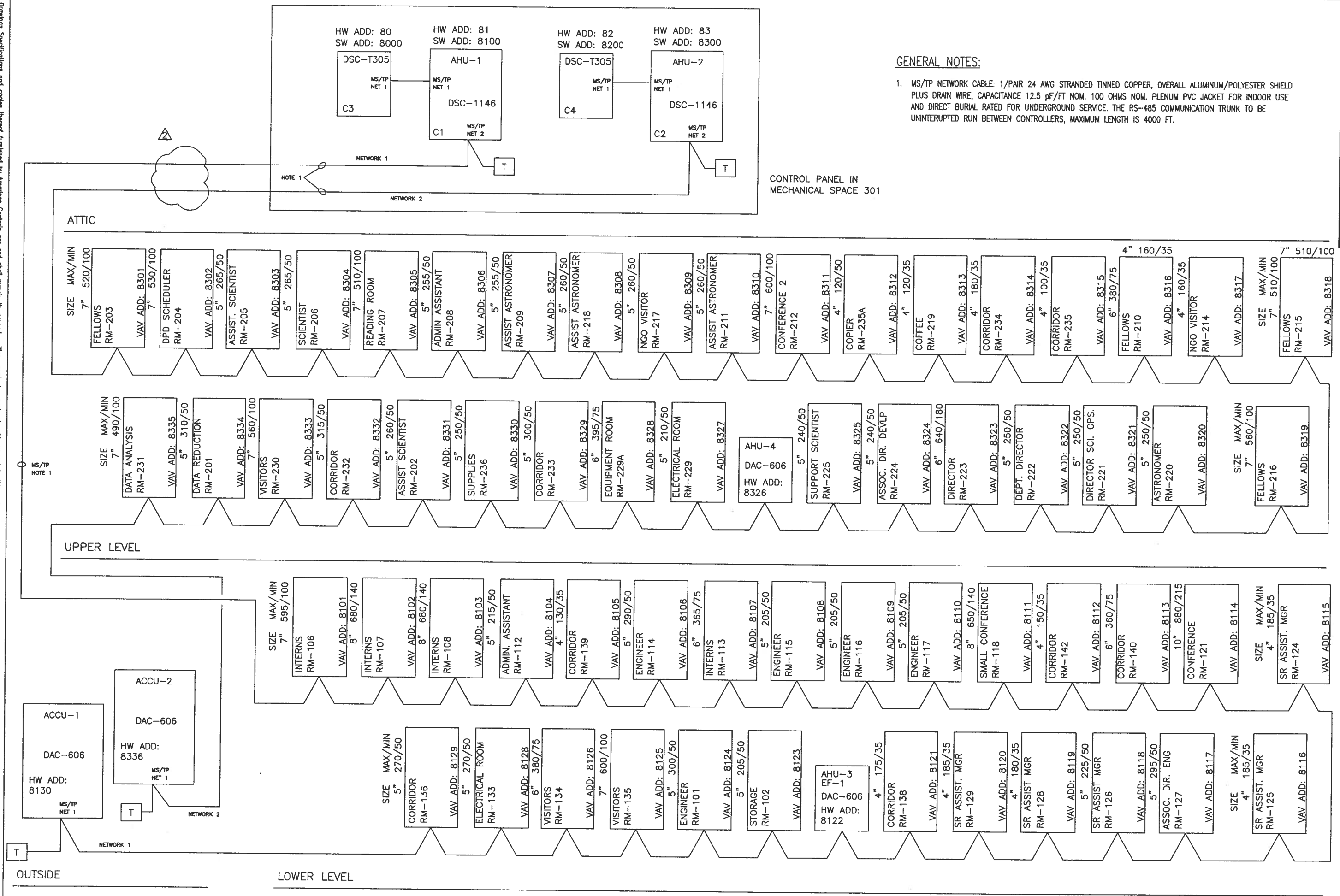
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GEMINI OBSERVATORY
HILO BASE FACILITY EXPANSION
HILO HAWAII

JOB NO: 270410
REVISION DATE: XXXXX
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410T2
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: EMS CONTROLS SYMBOLS AND ABBREVIATIONS
SHEET NO. T2

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REVISIONS	BY	DATE
ADD VFDs TO NETWORK		
REMOVE VFDs FROM NETWORK AND READDRESS VAV		

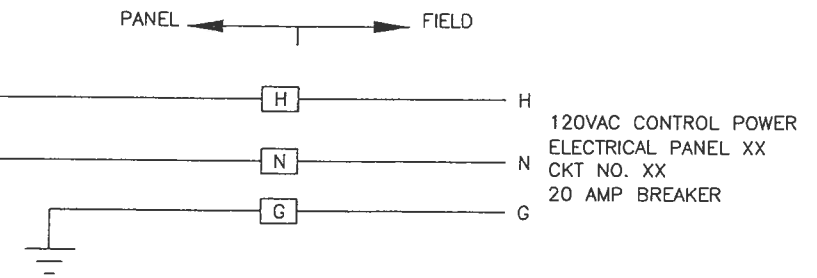
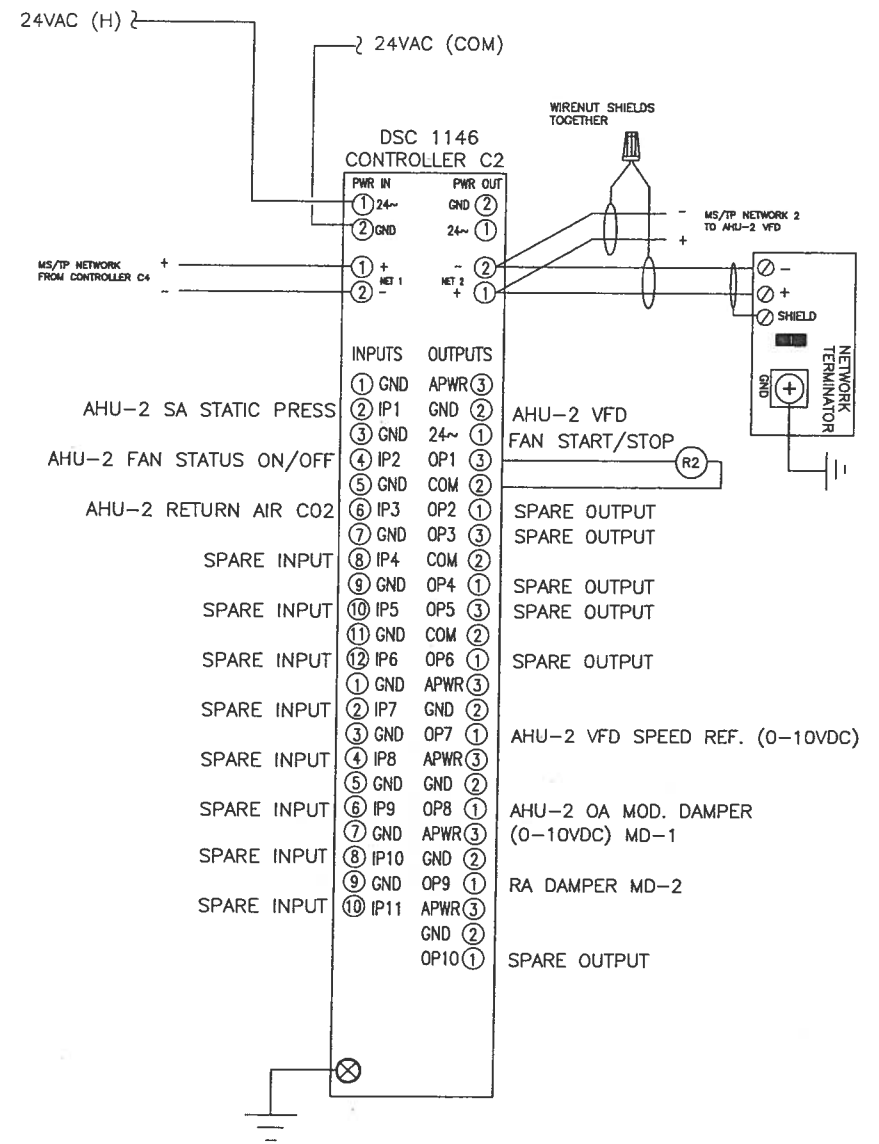
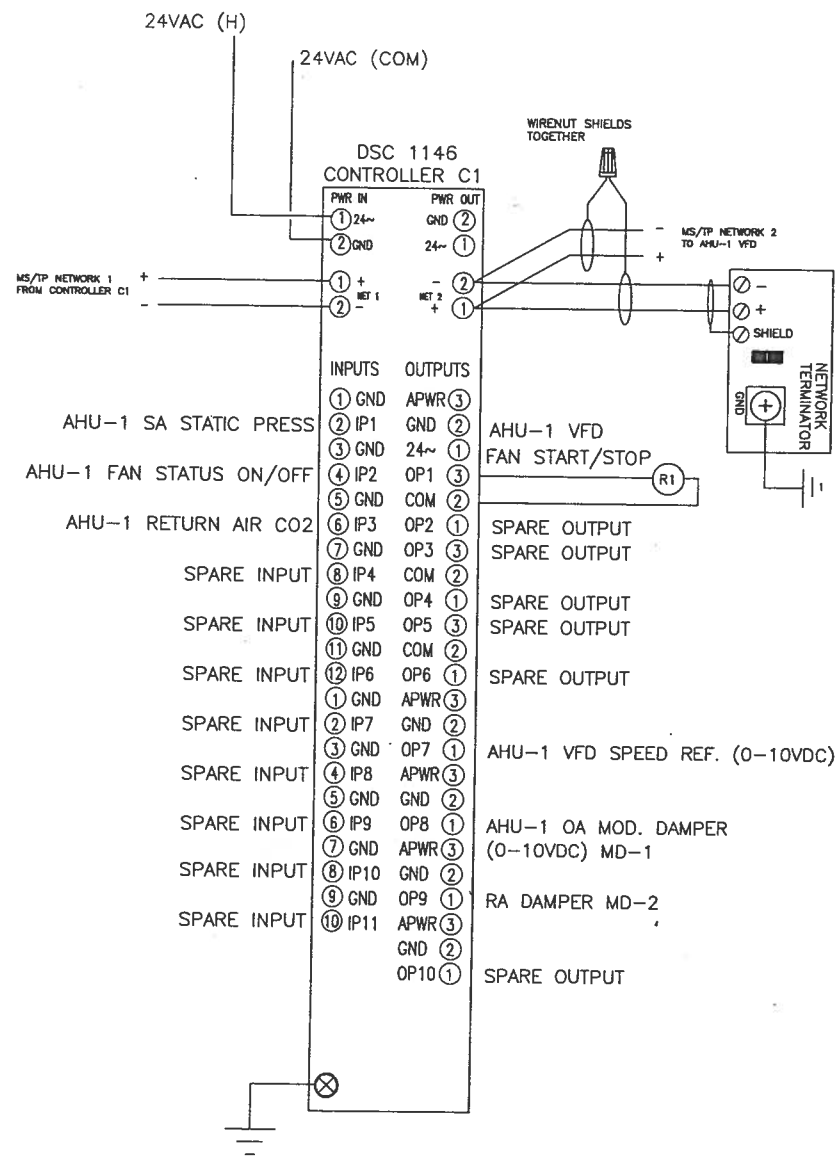
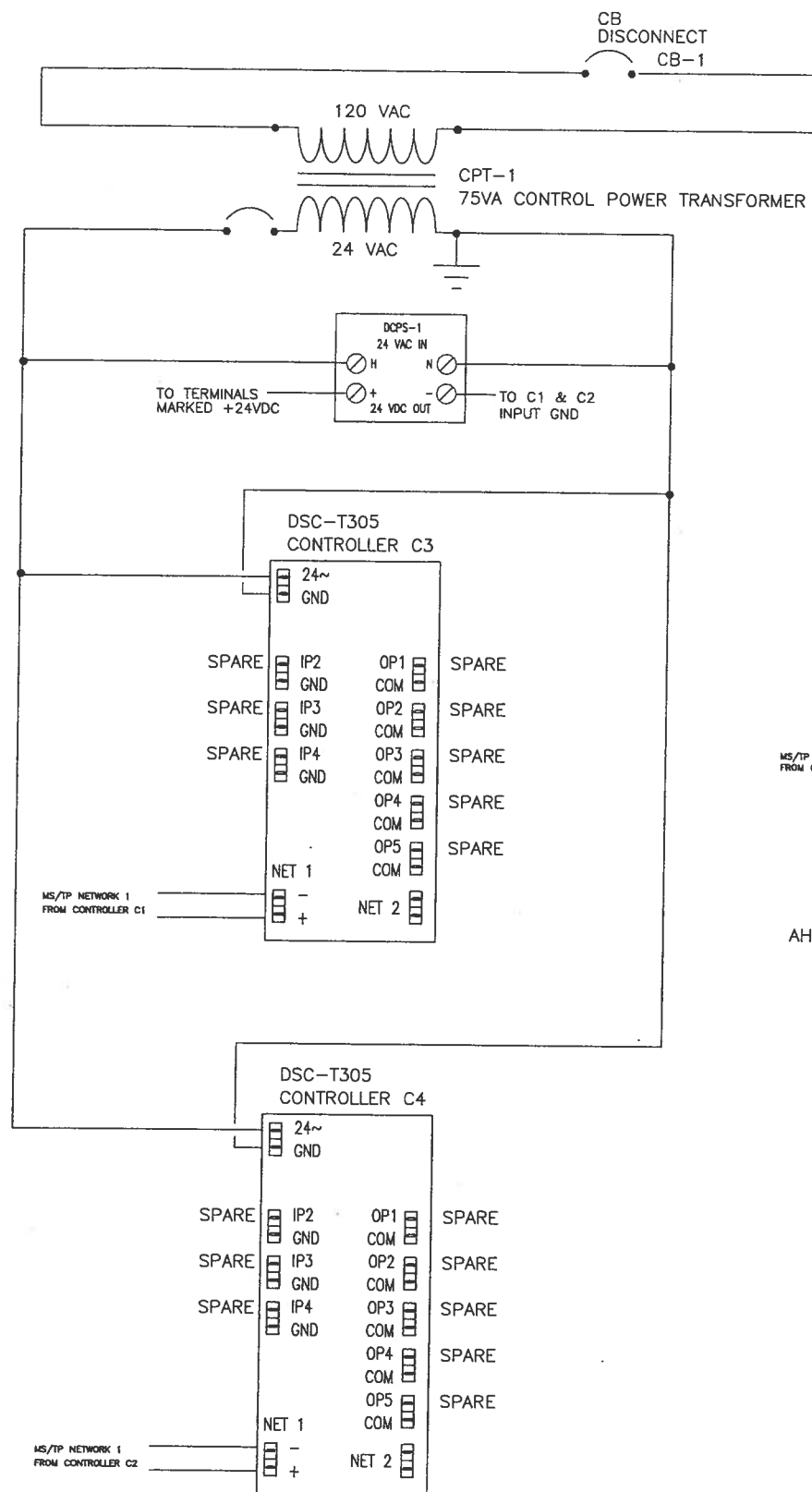
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JOB NO: 270410
REVISION DATE: AUG 18, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C1.0R3
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: NETWORK COMMUNICATION DIAGRAM
SHEET NO. C1.0

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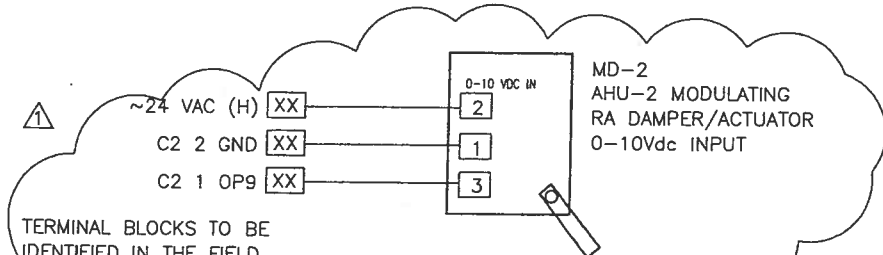
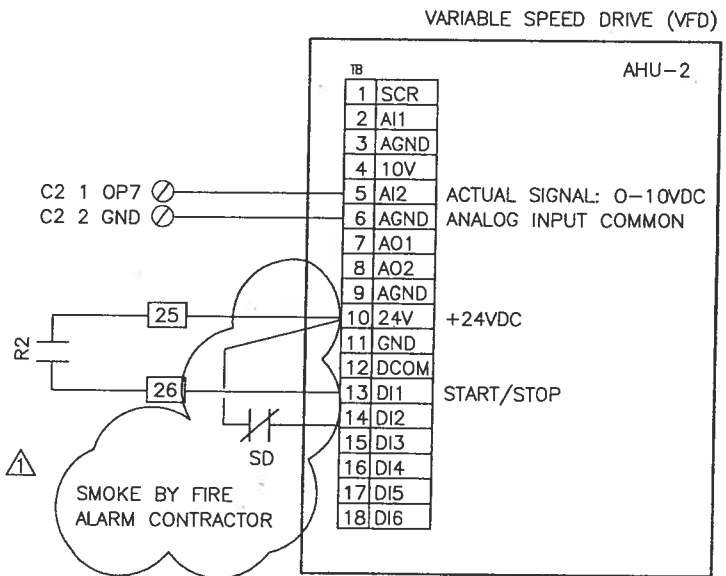
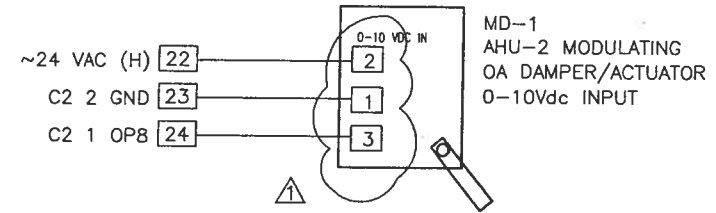
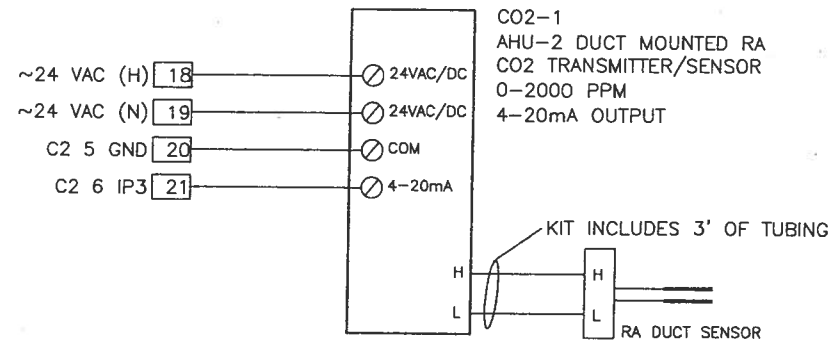
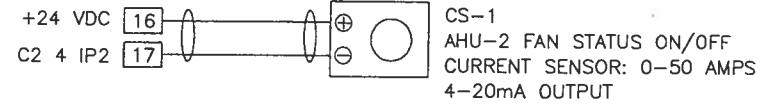
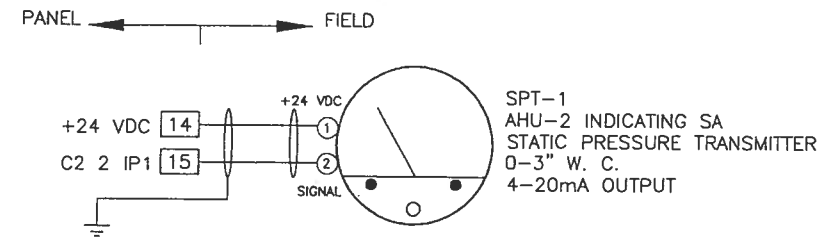
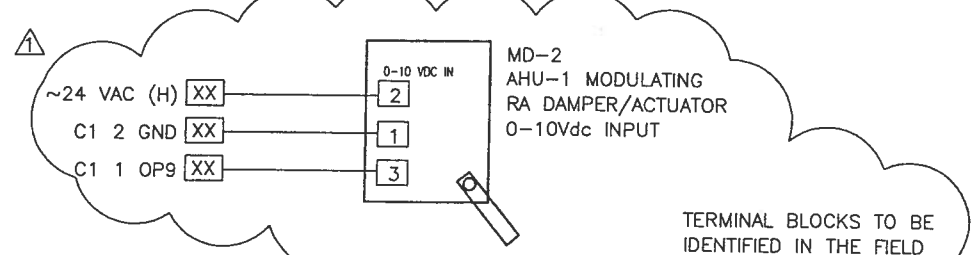
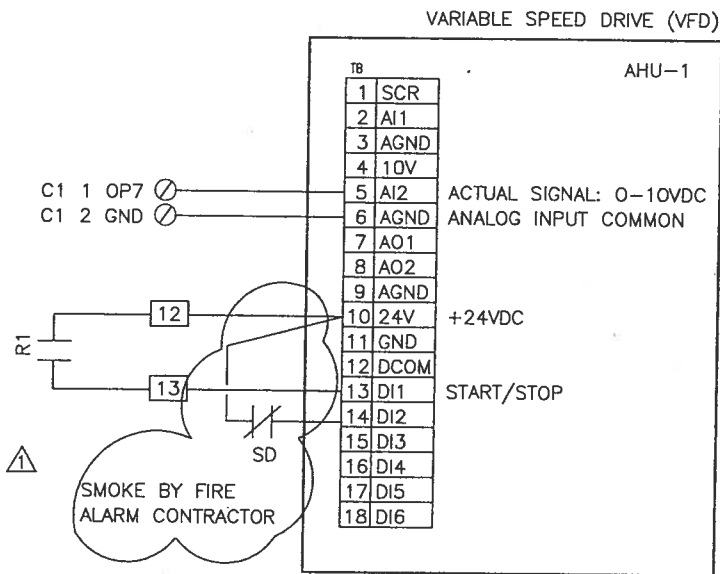
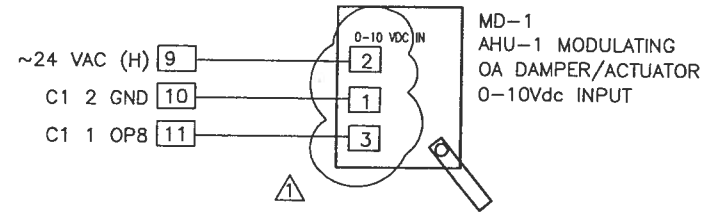
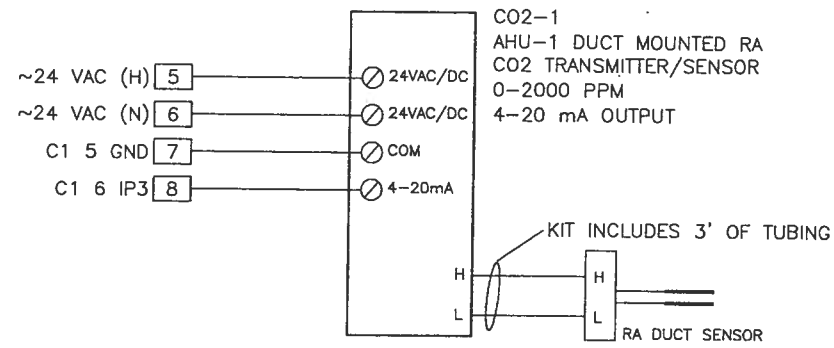
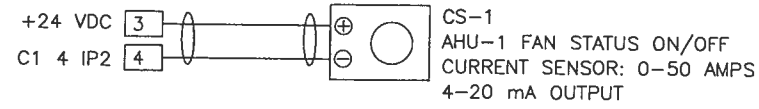
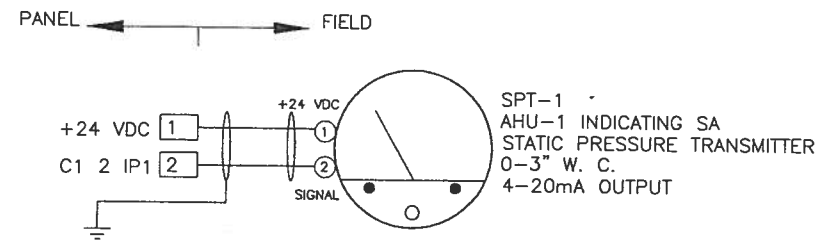
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JOB NO: 270410
REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C2.0R2
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU-1/AHU-2 DDC CONTROL PNL WIRING DIAGRAM
SHEET NO. C20

AHU-1 / AHU-2

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AH11-1 / AH11-2

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FIELD WIRING MODIFICATION		

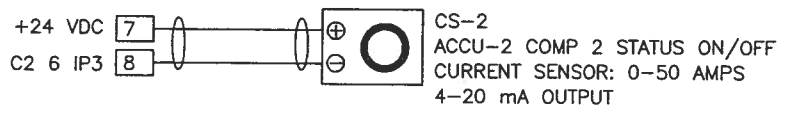
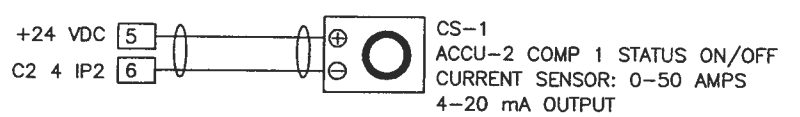
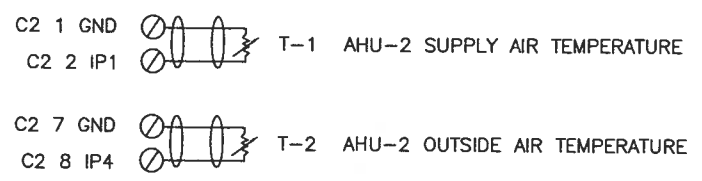
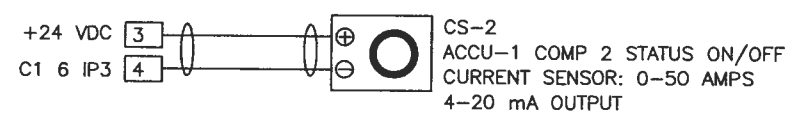
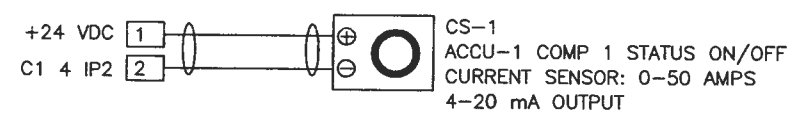
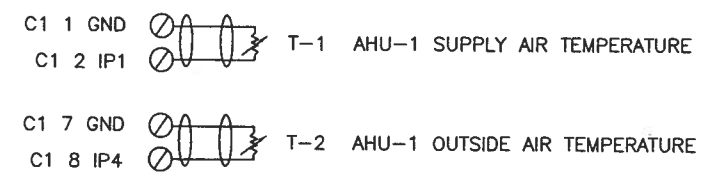
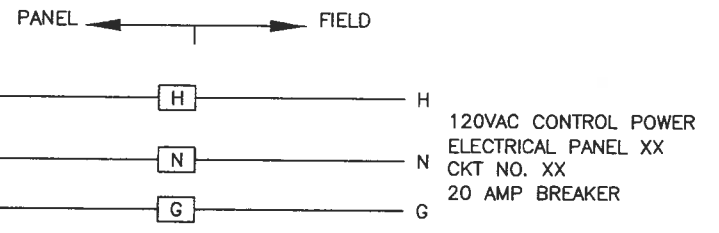
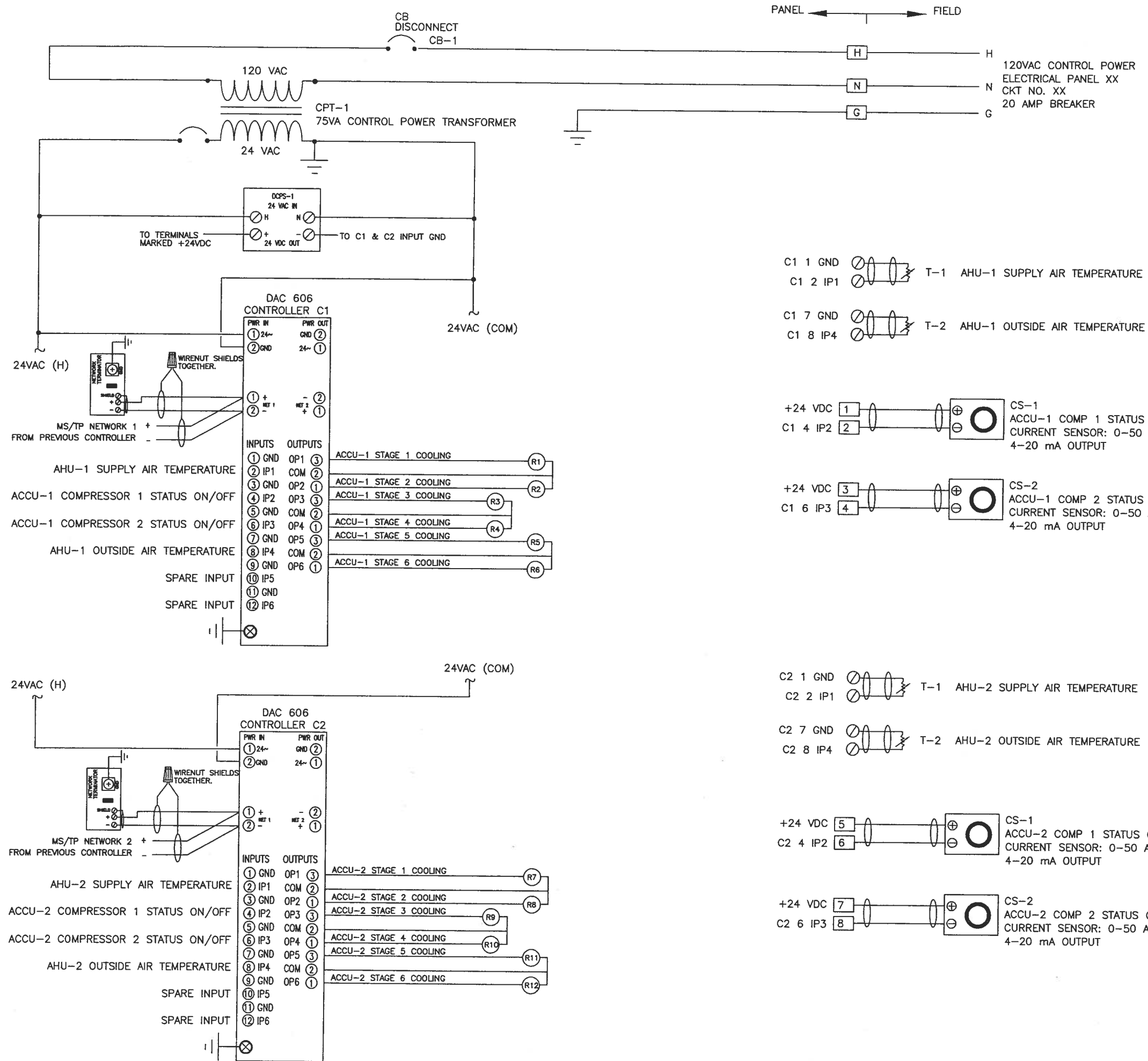
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REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C2.1R2
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU-1/AHU-2 DDC CONTROL PNL WIRING DIAGRAM
SHEET NO. C2 1

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HILO, HAWAII

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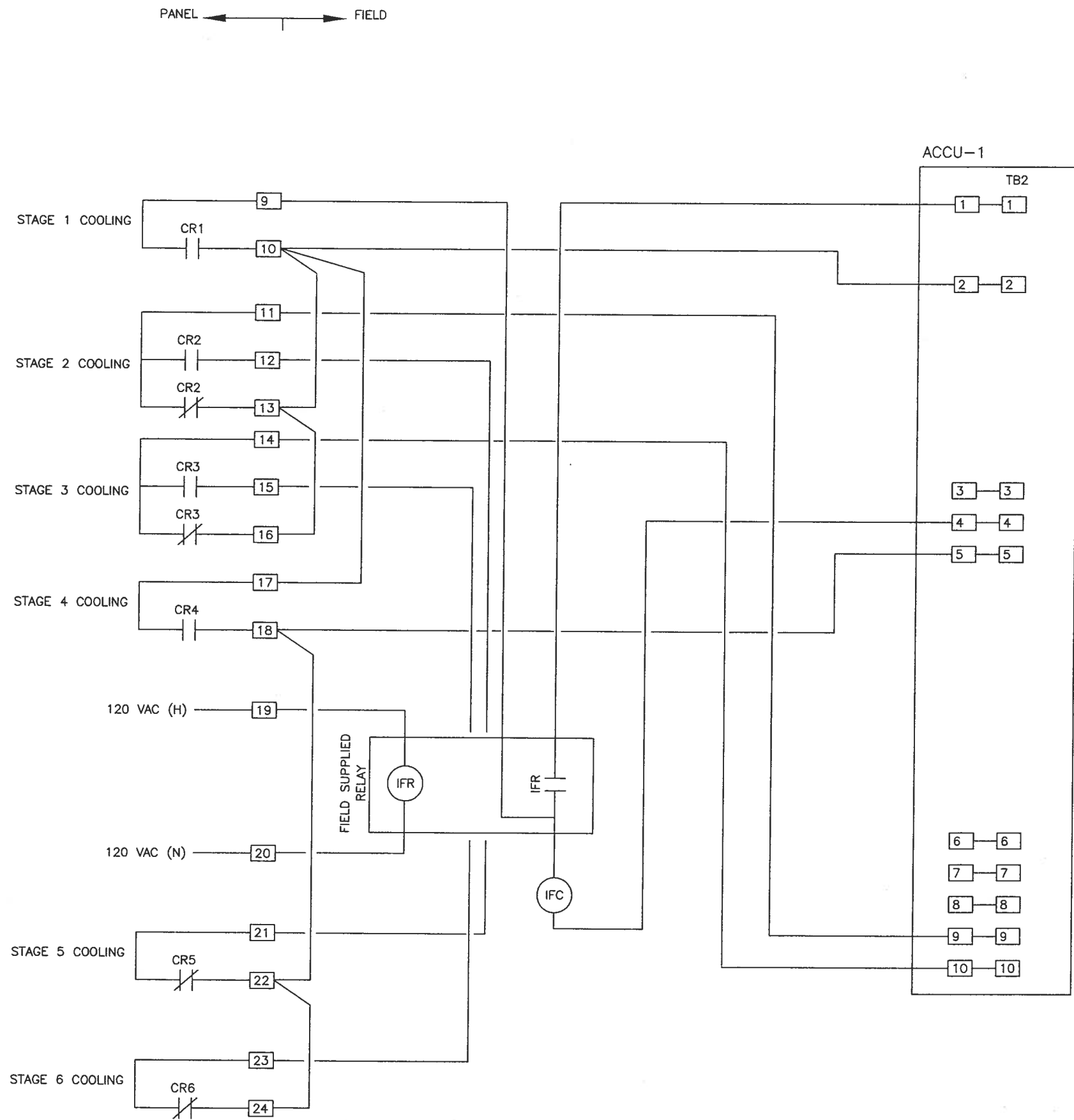
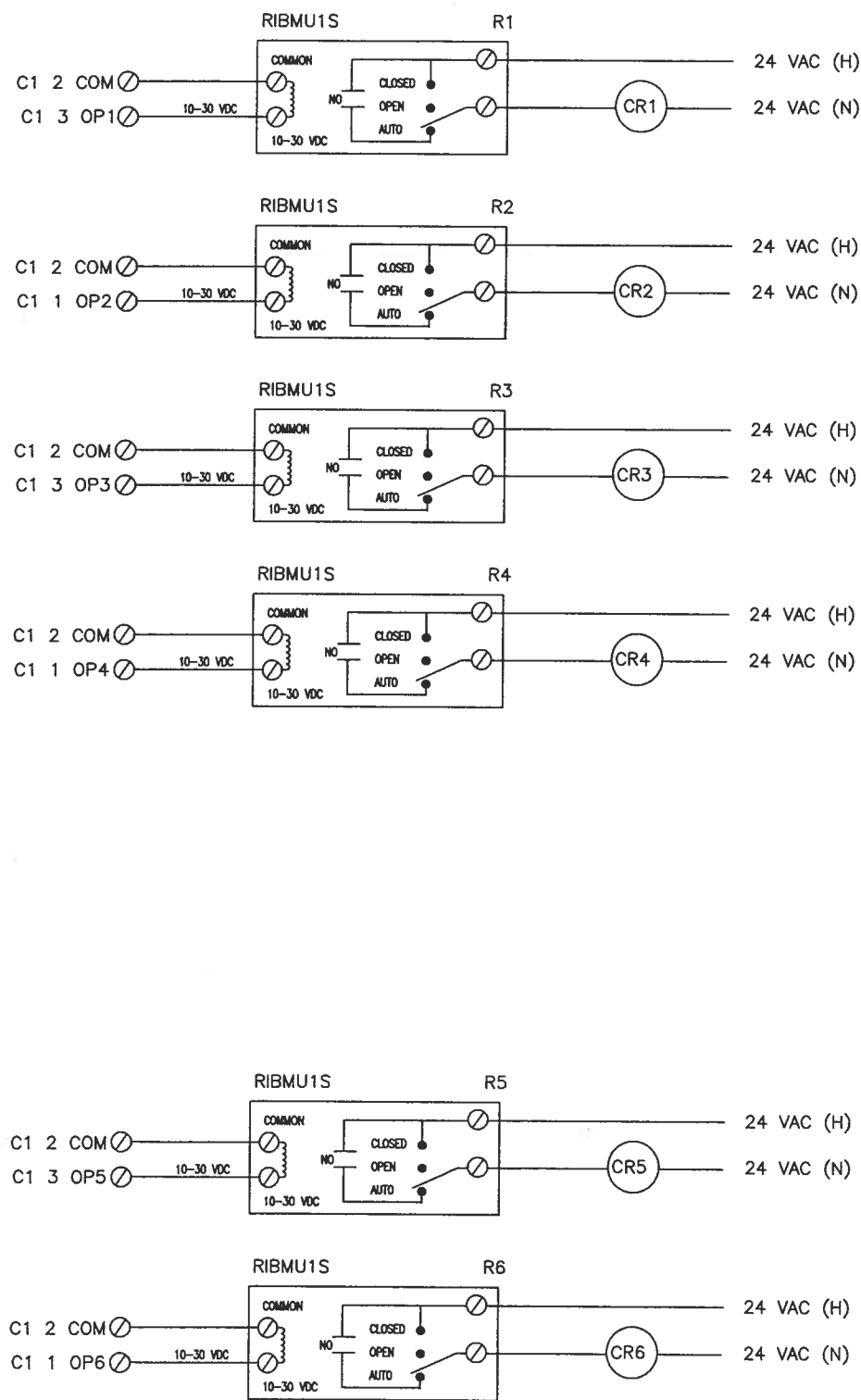
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JOB NO: 270410
REVISION DATE: XXXXXX
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C3.0
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: ACCU-1/ACC2-2 DDC CONTROL PNL WIRING DIAGRAM

ACCU-1/ACC2-2

SHEET NO.
C3.0

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ACCU-1/ACCU-2

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HILO HAWAII

JOB NO:
270410

REVISION DATE:
XXXXXX

ORIGINAL DATE:
APRIL 10, 2007

DISK FILE:
270410C3.1

ENGINEER:
M. MARATTA

DRAWN BY:
K. KEALOHA

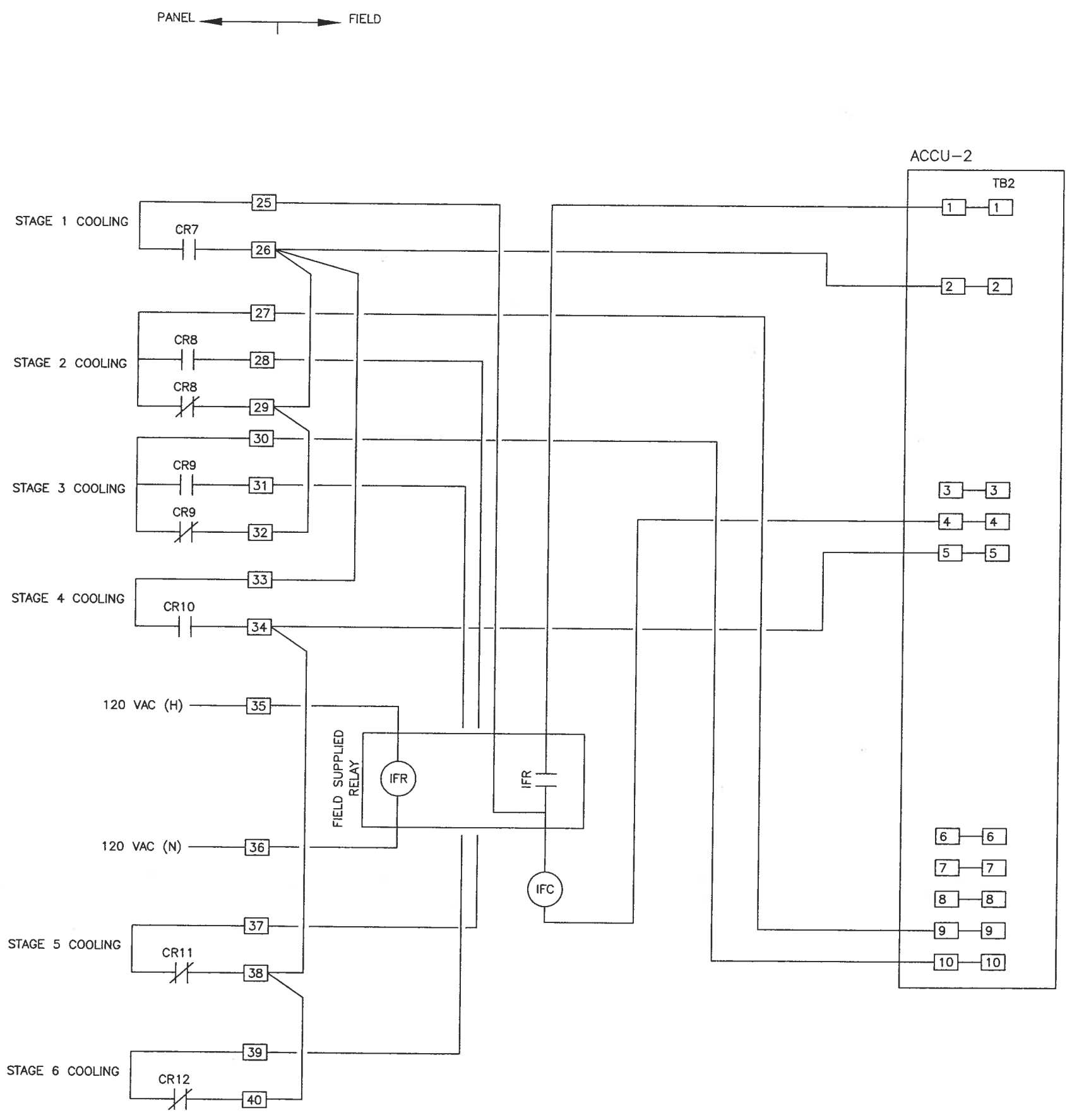
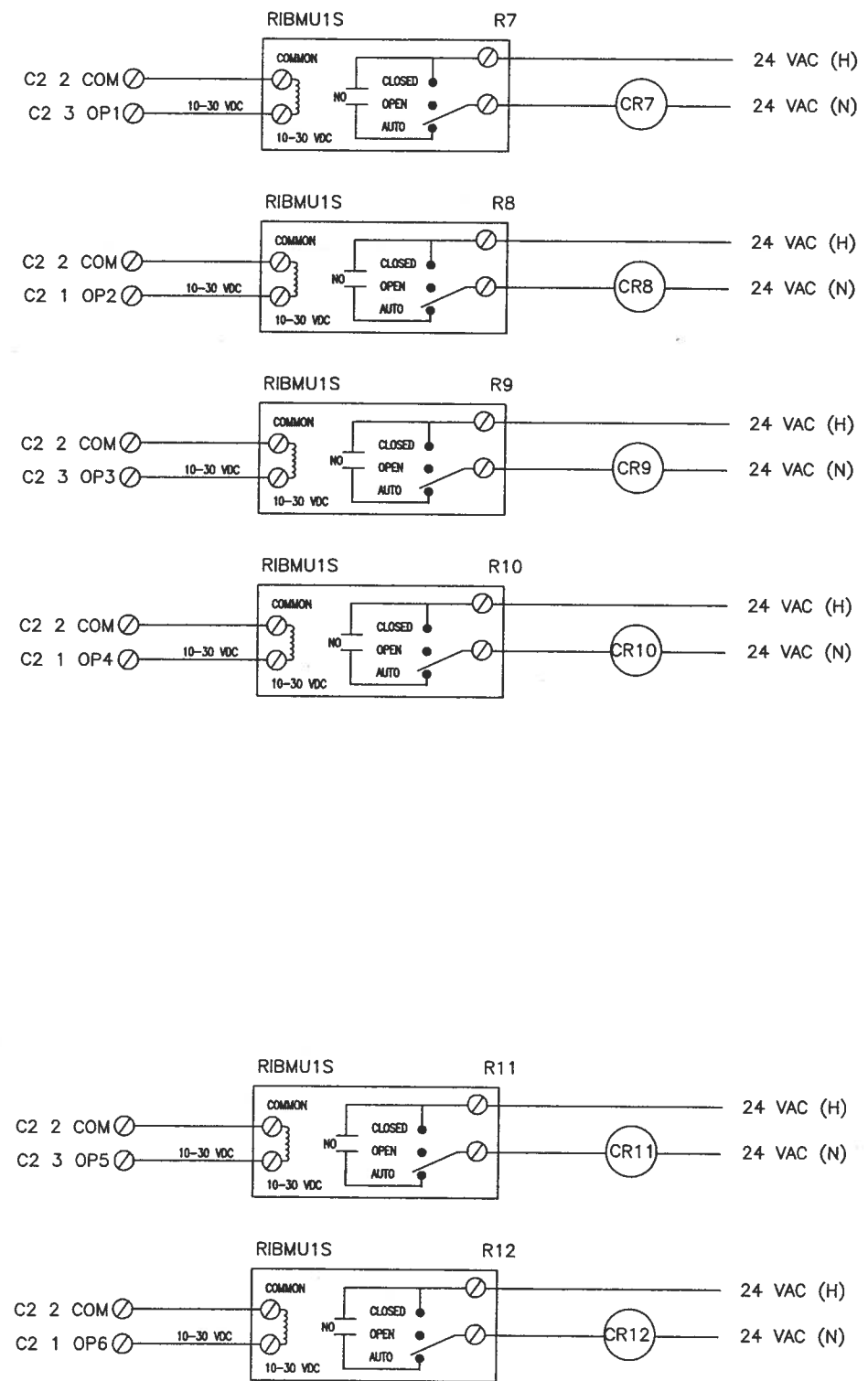
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ACCU-1/ACCU-2
DDC CONTROL PNL
WIRING DIAGRAM

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C3.1

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ACCU-1/ACCU-2

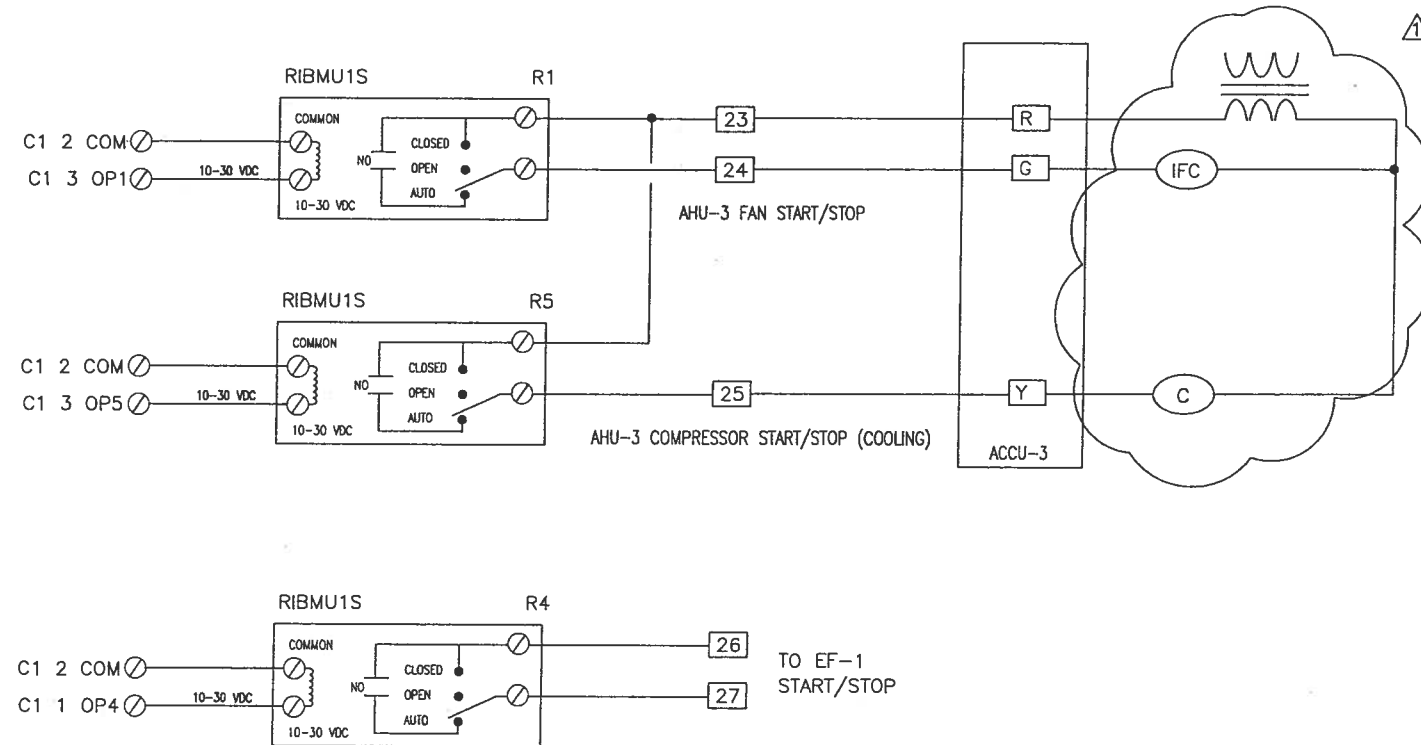
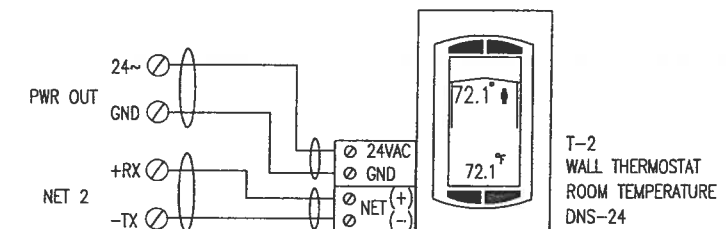
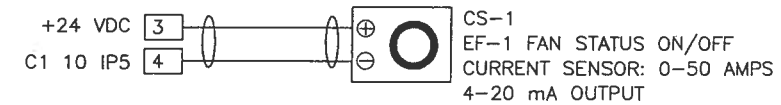
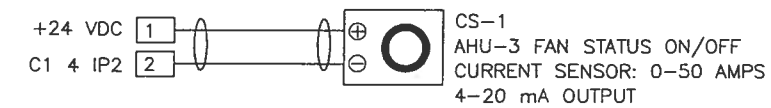
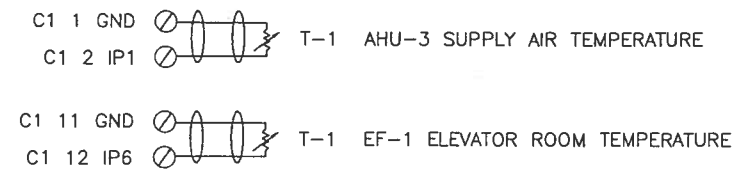
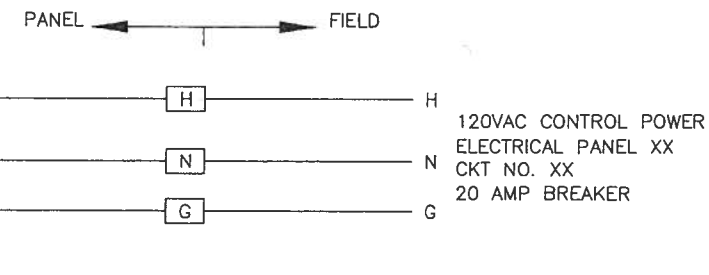
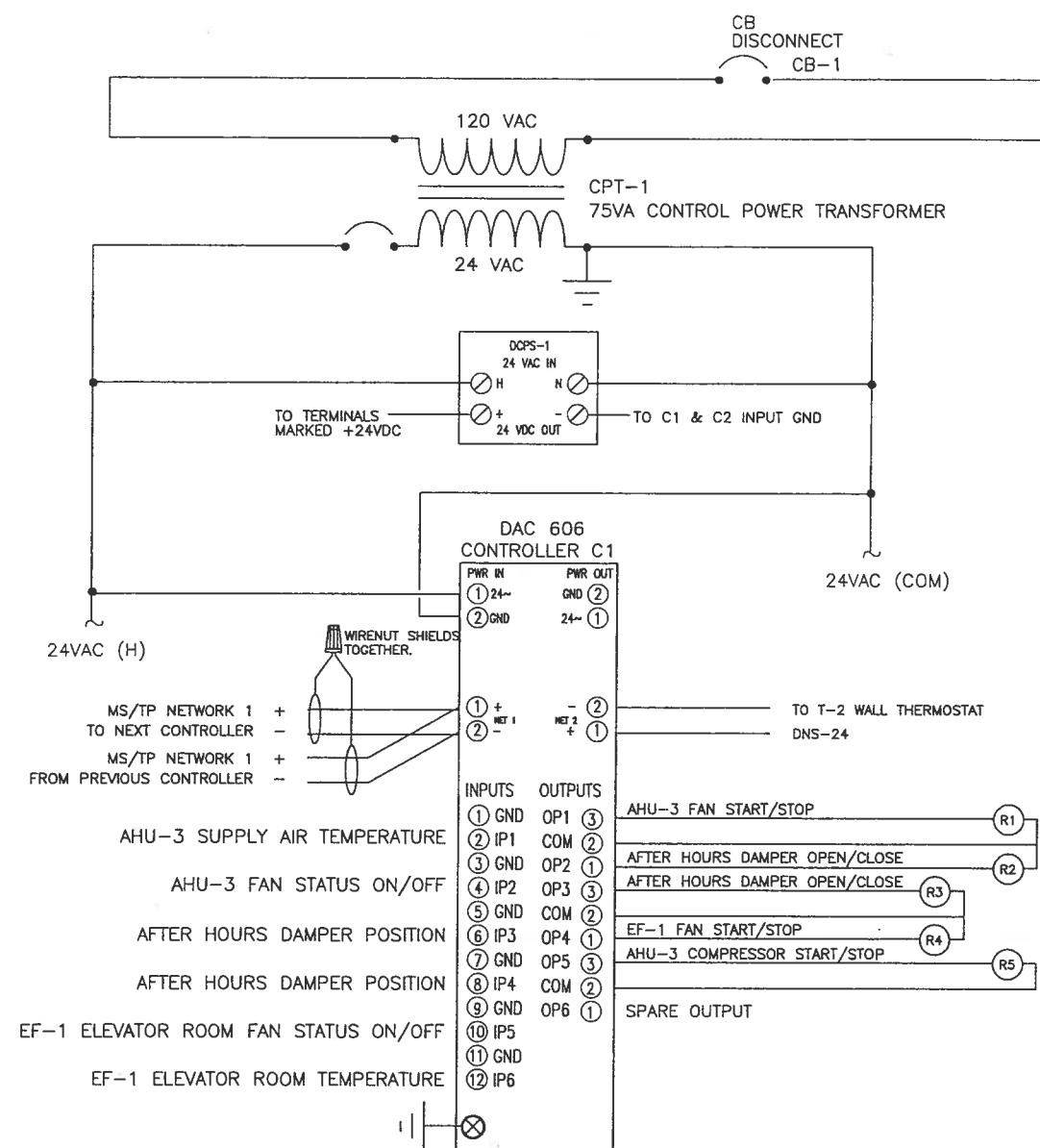
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JOB NO: 270410
REVISION DATE: XXXXX
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C3.2
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: ACCU-1/ACCU-2 DDC CONTROL PNL WIRING DIAGRAM
SHEET NO. C3.2

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AHU-3/FF-1

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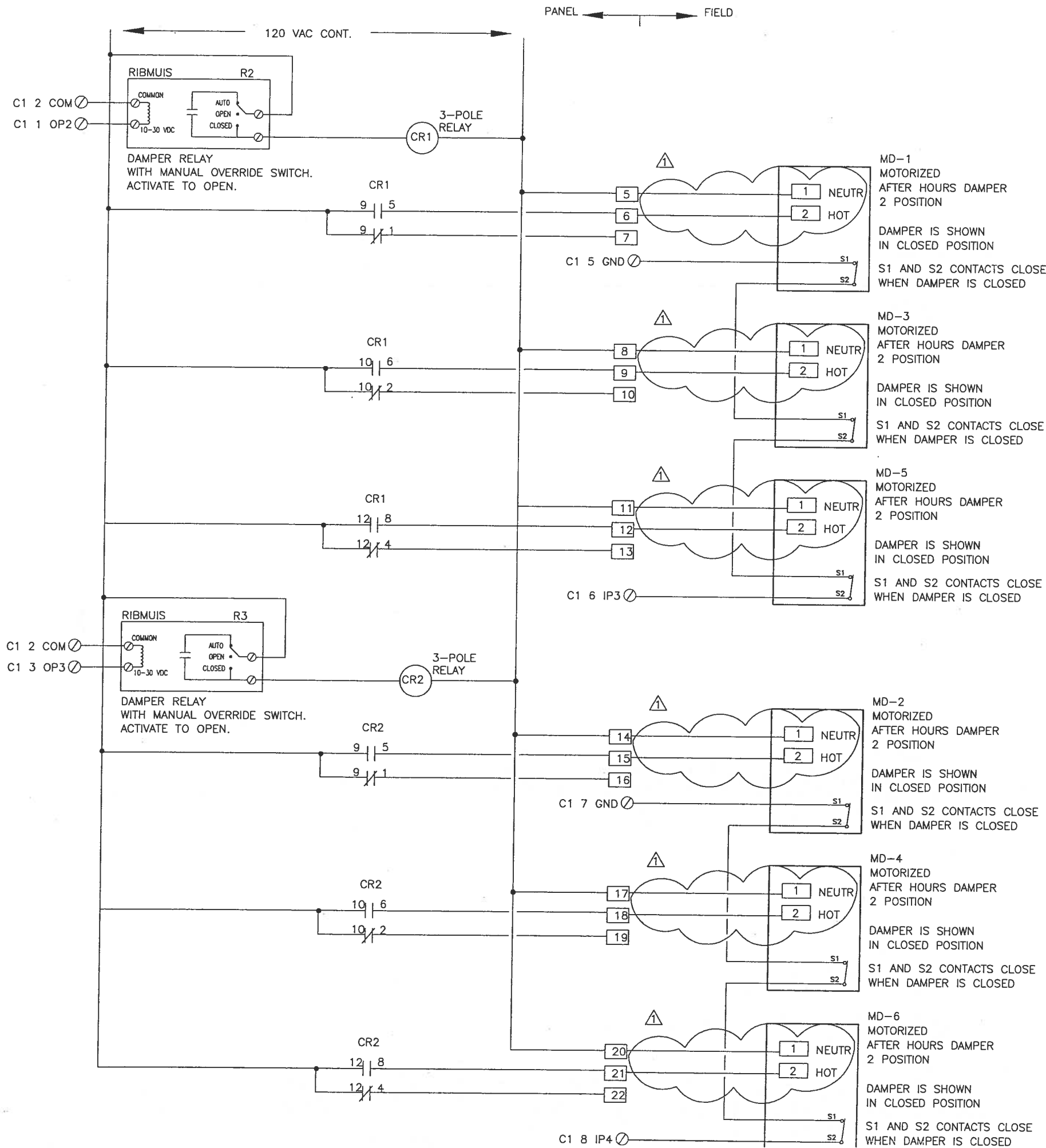
GEMINI OBSERVATORY
HILO BASE FACILITY EXPANSION
HILO, HAWAII

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JOB NO: 270410
REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C4.0R3
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU-3/EF-1 DDC CONTROL PNL WIRING DIAGRAM
SHEET NO. C4.0

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MODIFIED WIRING		

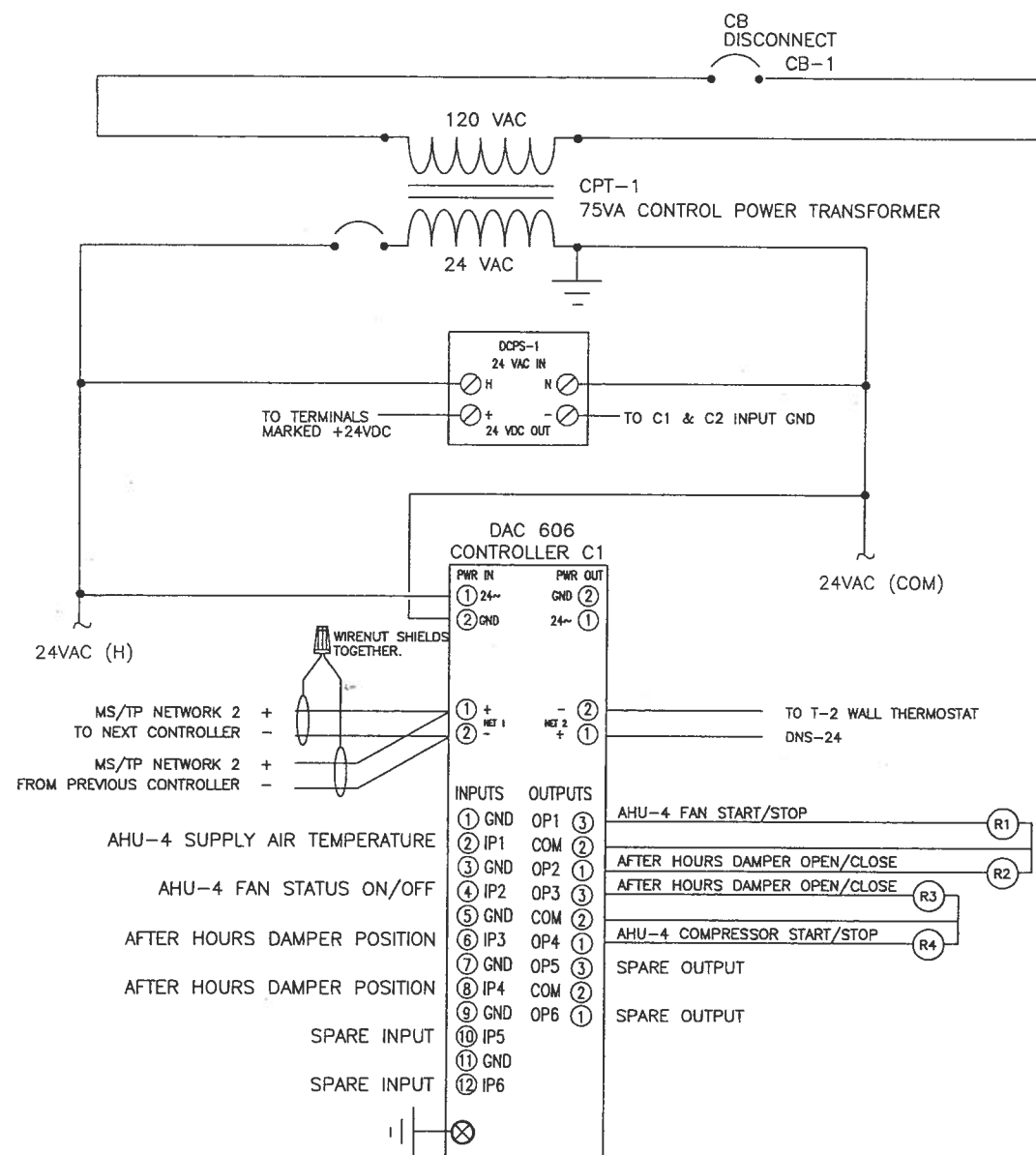
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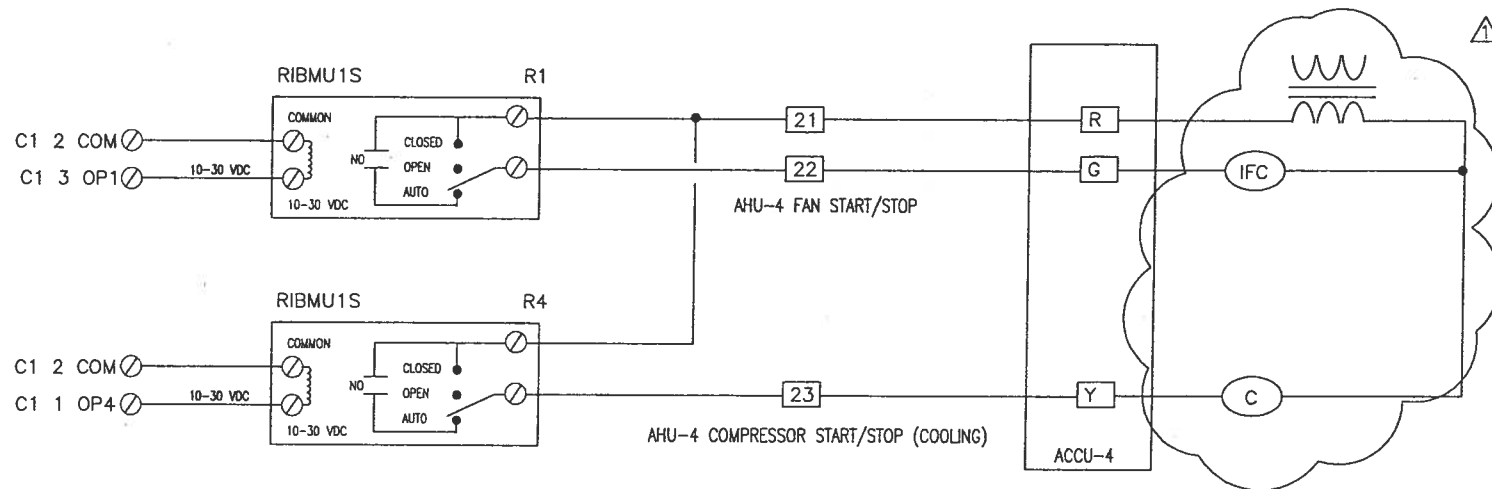
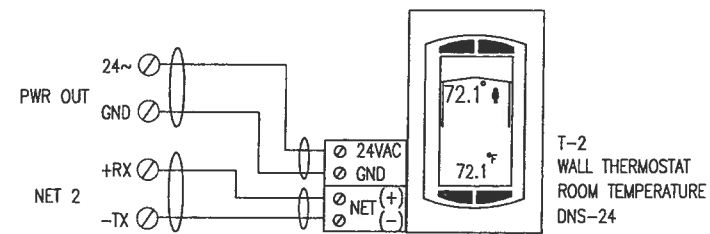
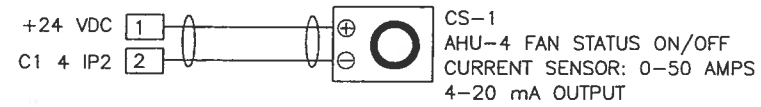
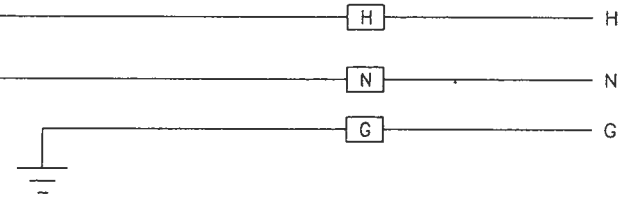
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REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C4.1R1
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU-3/EF-1 DDC CONTROL PNL WIRING DIAGRAM
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AH11-3/EF-1

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PANEL ← → FIELD



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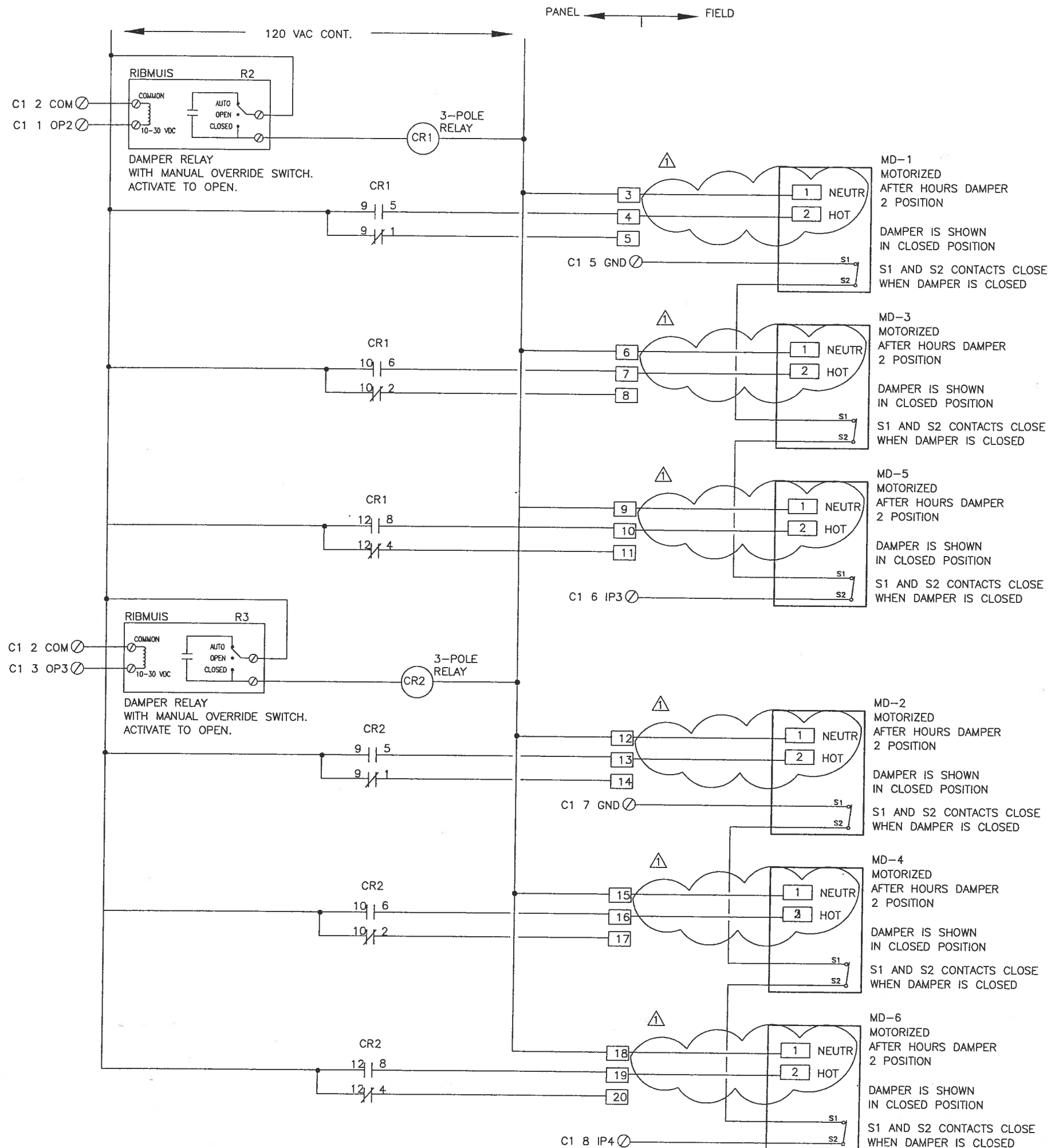
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REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C5.0R3
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU-4 DDC CONTROL PNL WIRING DIAGRAM
SHEET NO. C5.0

AHU-4

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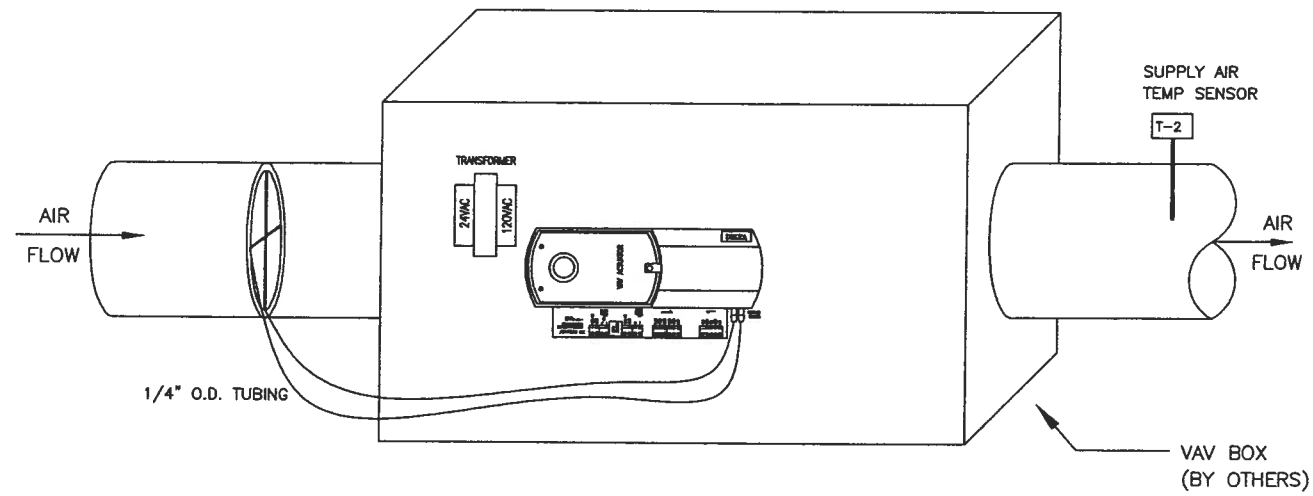
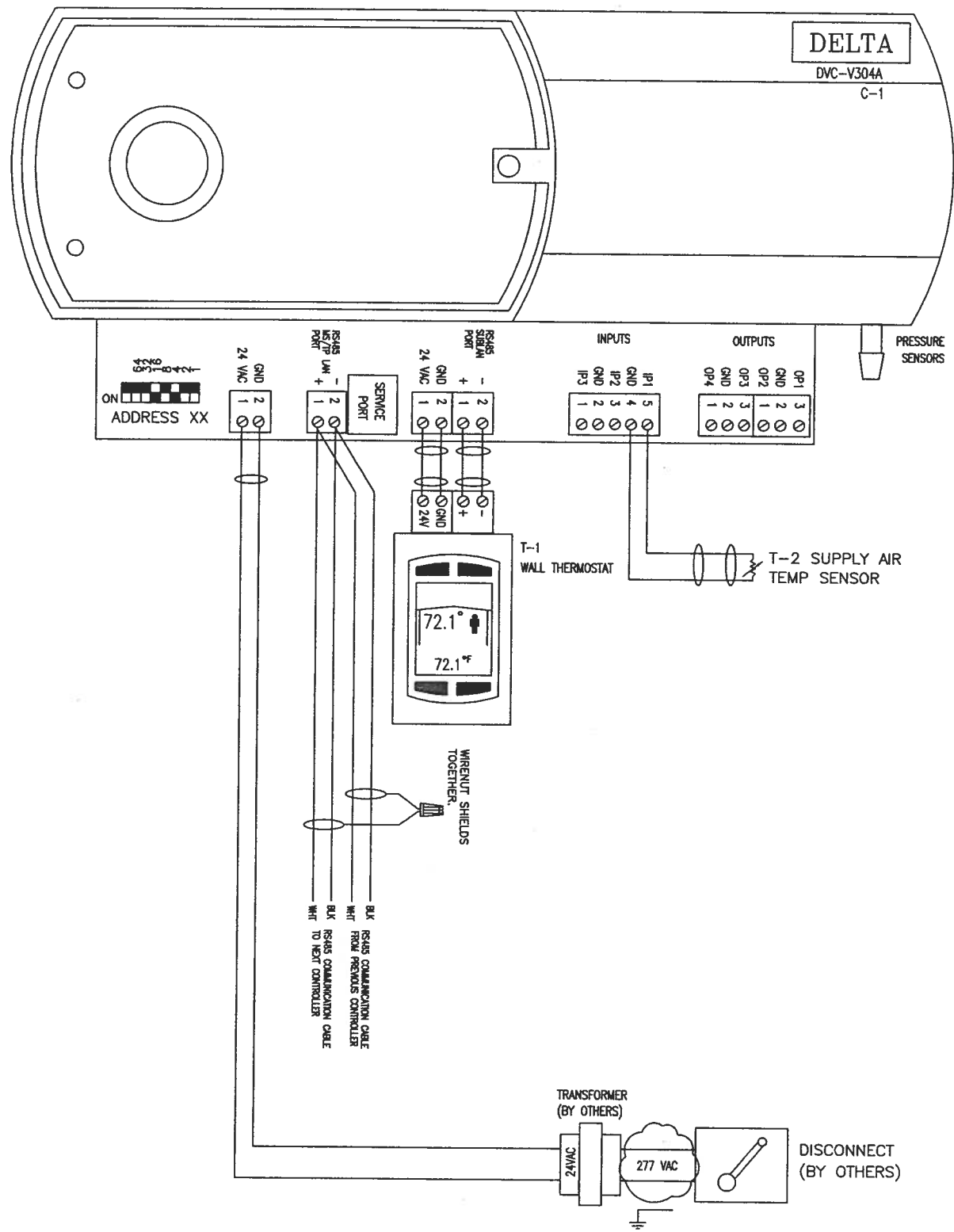
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JOB NO: 270410
REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C5.1R1
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU-4 DDC CONTROL PNL WIRING DIAGRAM
SHEET NO. C5 1

AH11-4

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TYPICAL VAV BOX

REVISIONS	BY	DATE

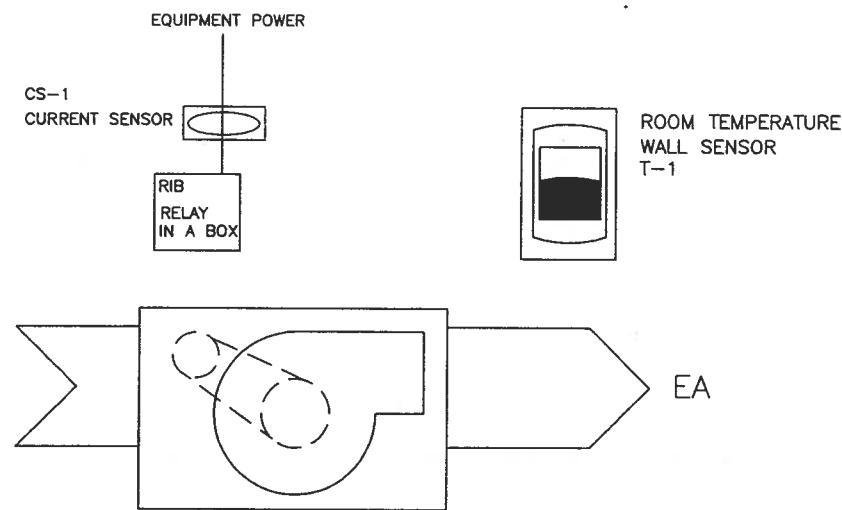
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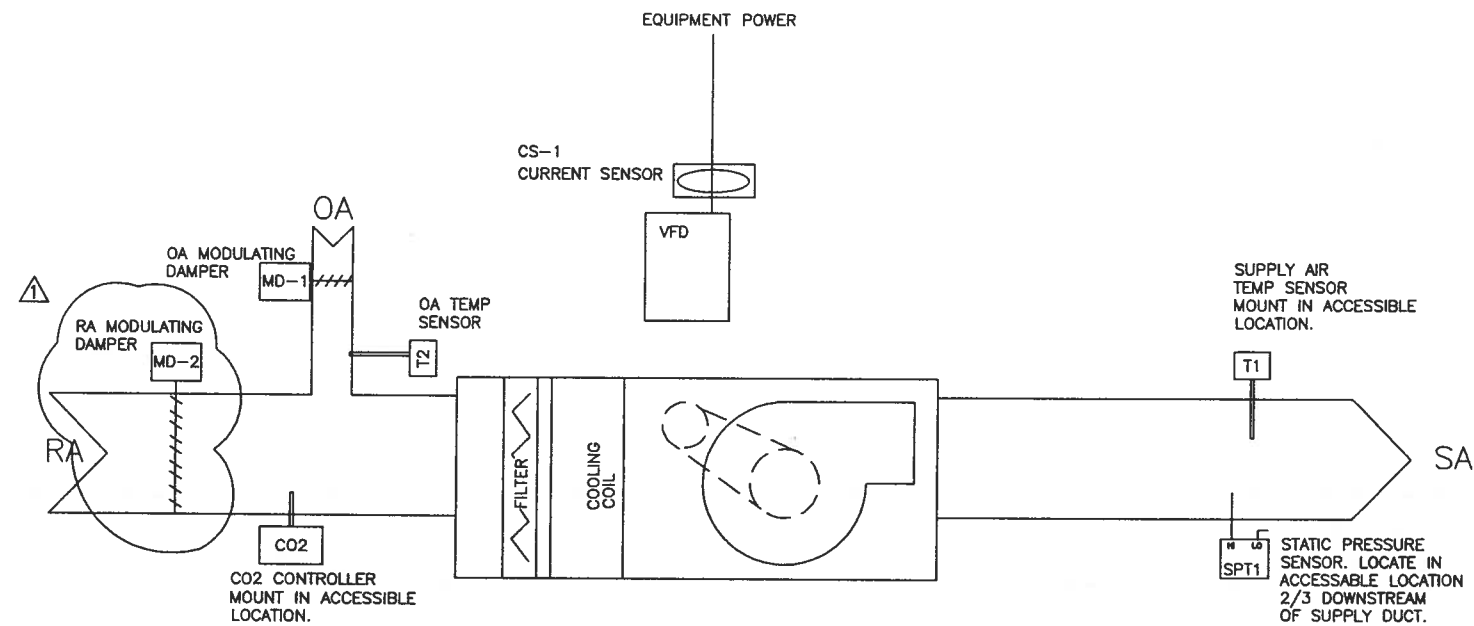
GEMINI OBSERVATORY
 HILO BASE FACILITY EXPANSION
 HILO HAWAII

JOB NO: 270410
REVISION DATE: AUG 18, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C6.0R1
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: TYPICAL VAV BOX WIRING DIAGRAM
SHEET NO. C6.0

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ELEVATOR ROOM
EXHAUST FAN EF-1 SCHEMATIC DIAGRAM



AHU-1, AHU-2
VARIABLE VOLUME AHU SCHEMATIC DIAGRAM

REVISIONS	BY	DATE
SHOW RA DAMPER		

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HILO BASE FACILITY EXPANSION
HILO, HAWAII

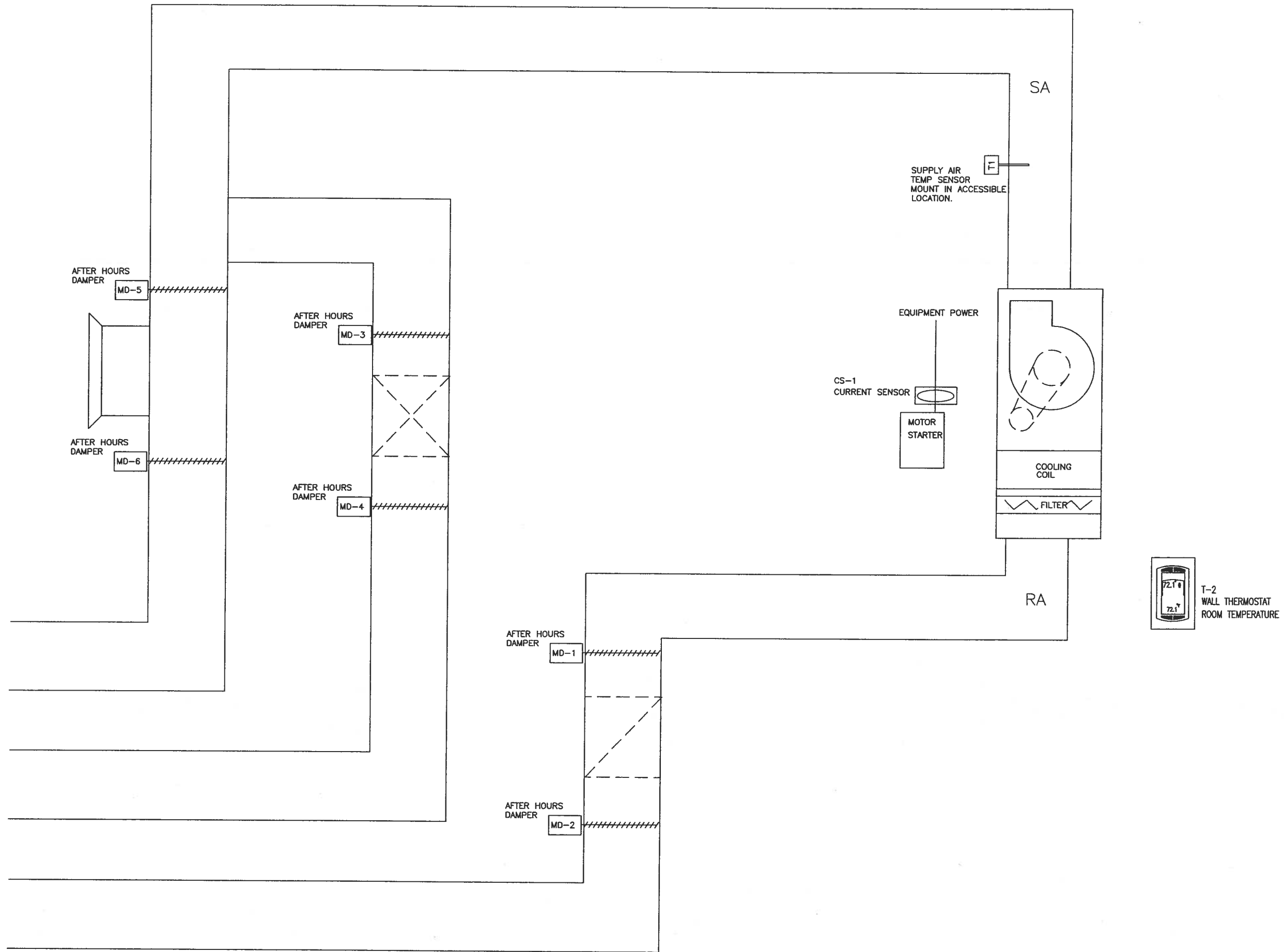
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JOB NO: 270410
REVISION DATE: JULY 15, 2008
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C7.OR1
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: SCHEMATIC DIAGRAMS

SHEET NO.
C7.0

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AHU-3
CONSTANT VOLUME AHU SCHEMATIC DIAGRAM

REVISIONS	BY	DATE

American Controls

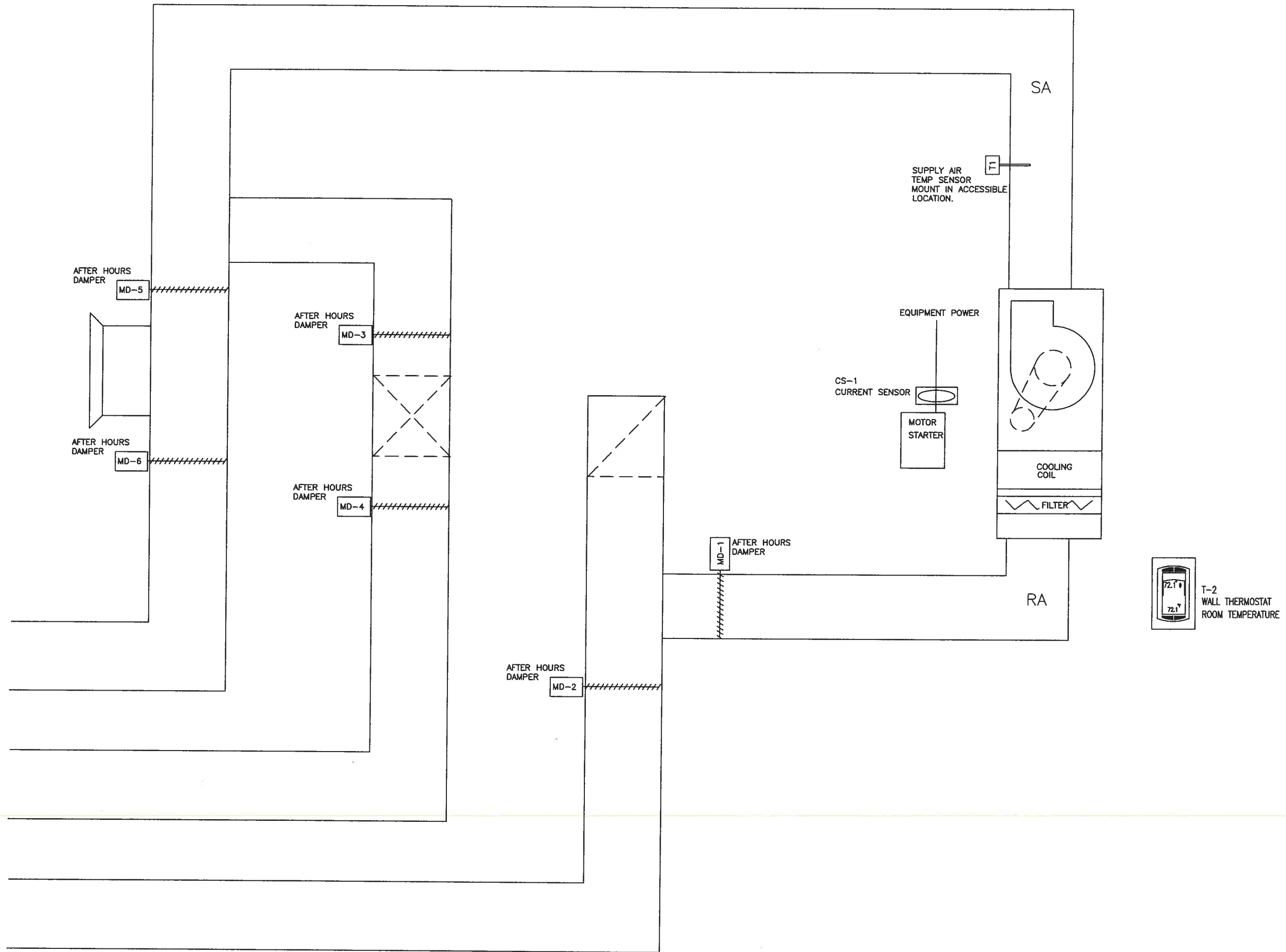
2001 A KAHAI ST. HONOLULU, HAWAII 96819
Phone: (808) 842-4484 Fax: (808) 845-4047

JOB NO: 270410
REVISION DATE: XXXXX
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C7.1
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: SCHEMATIC DIAGRAMS AHU-3

SHEET NO.
C7.1

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AHU-4
CONSTANT VOLUME AHU SCHEMATIC DIAGRAM

REVISIONS	BY	DATE

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HILO BASE FACILITY EXPANSION
HILO, HAWAII

American Controls

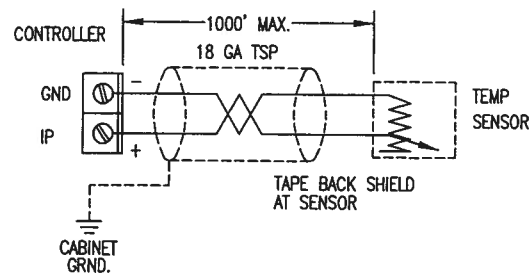
2001 A KAHAI ST. HONOLULU, HAWAII 96819
Phone: (808) 842-4484 Fax: (808) 845-4047

JOB NO: 270410
REVISION DATE: XXXXX
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C7.2
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: SCHEMATIC DIAGRAMS AHU-4

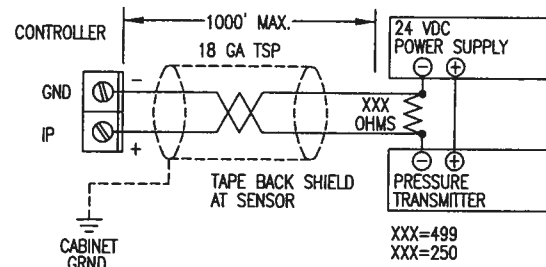
SHEET NO.
C7.2

STANDARD WIRING DETAILS

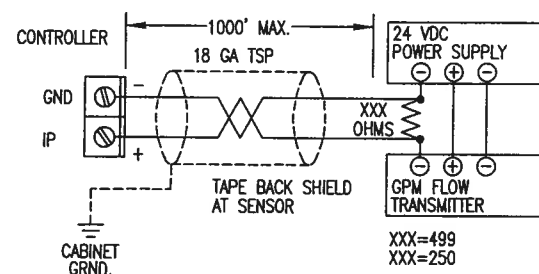
(A) ANALOG INPUT THERMISTOR:



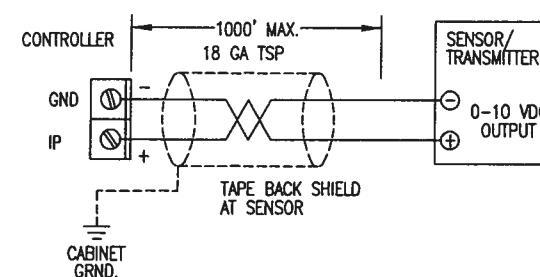
**(B) ANALOG INPUT CURRENT 4-20 mA:
(WITH EXTERNAL DC POWER SUPPLY)**



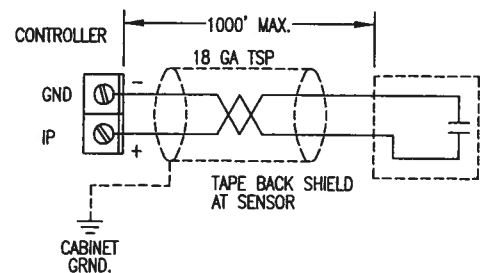
**(C) ANALOG INPUT CURRENT 4-20 mA:
(WITH EXTERNAL DC POWER SUPPLY)**



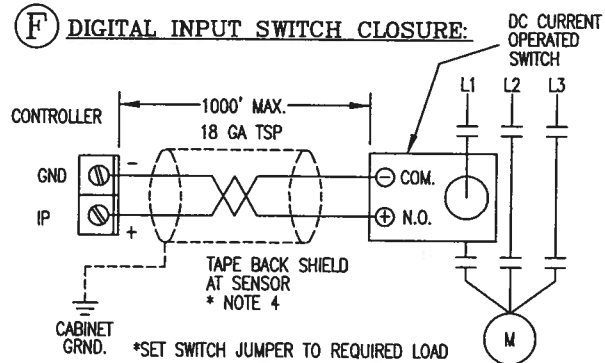
(D) ANALOG INPUT VOLTAGE 0-10 VDC:



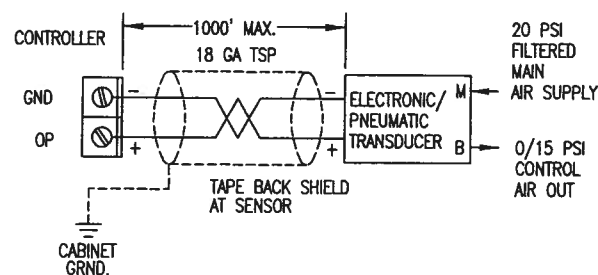
(E) DIGITAL INPUT DRY CONTACT:



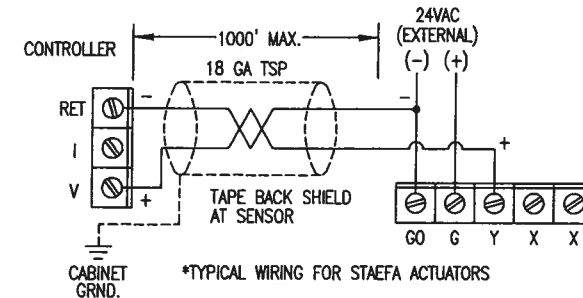
(F) DIGITAL INPUT SWITCH CLOSURE:



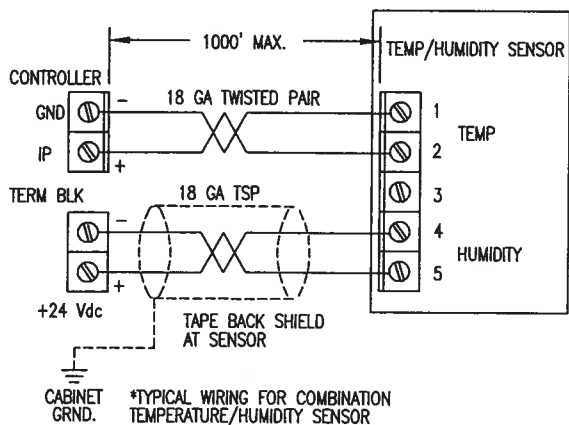
(G) ANALOG OUTPUT ELECTRONIC/PNEUMATIC:



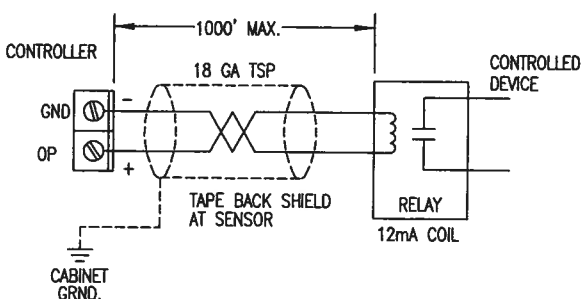
(H) ANALOG OUTPUT ELECTRONIC/TORQUE:



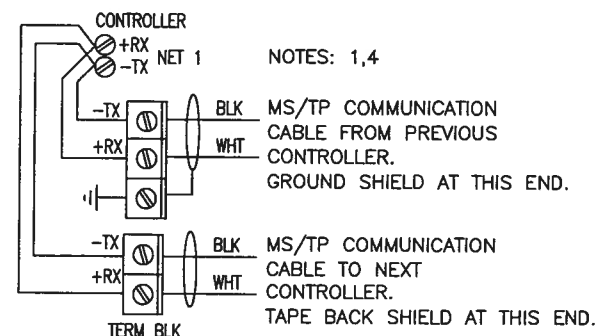
(I) COMB TEMP/HUMIDITY SENSOR INPUT:



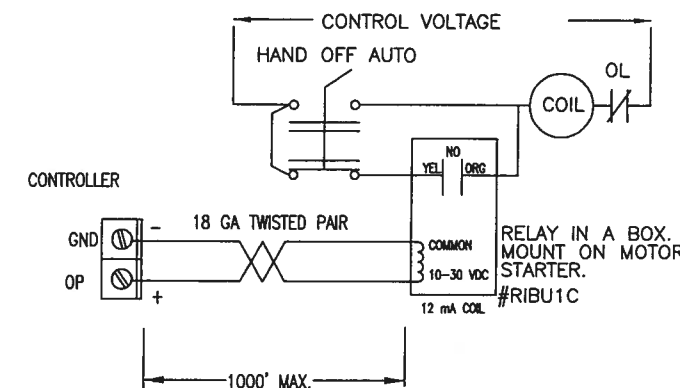
(J) DIGITAL OUTPUT:



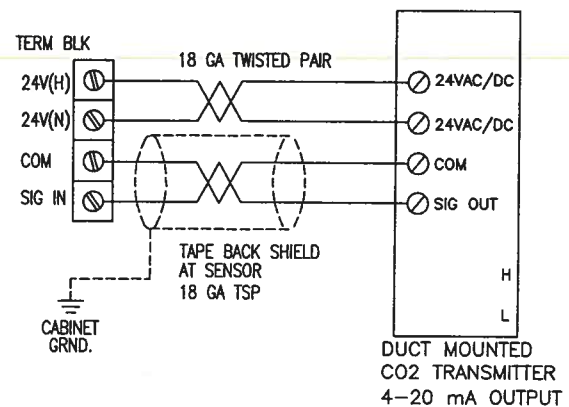
(K) COMMUNICATION LOOP RS-485 MS/TP:



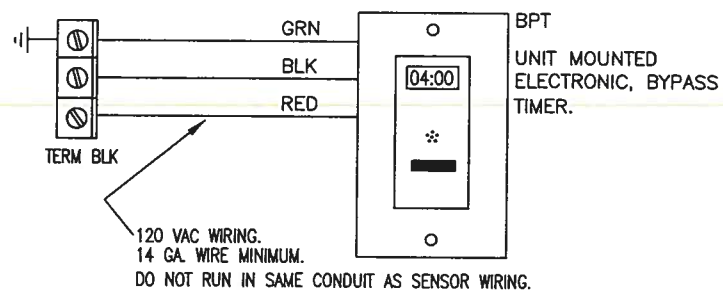
(L) DIGITAL OUTPUT TO MOTOR STARTER:



(M) CARBON DIOXIDE DUCT TRANSMITTER:



(N) ELECTRONIC BYPASS TIMER



GENERAL NOTES:

1. NETWORK CABLE: 1/PAIR 24 AWG STRANDED TINNED COPPER, OVERALL ALUMINUM/POLYESTER SHIELD PLUS DRAIN WIRE, CAPACITANCE 12.5 pF/FT NOM. 100 OHMS NOM. PLENUM PVC JACKET FOR INDOOR USE AND DIRECT BURIAL RATED FOR UNDERGROUND SERVICE.
2. ALL MAXIMUM SENSOR WIRE LENGTHS ARE BASED ON 18 AWG TWISTED SHIELDED WIRE.
3. DO NOT TERMINATE SHIELD AT BOTH ENDS OF THE WIRE RUN. TAPE BACK SHIELD AT SENSOR END, AND TERMINATE SHIELD AT CONVENIENT GROUNDED LOCATION IN THE CONTROL PANEL.
4. THE RS-485 COMMUNICATION TRUNK TO BE UNINTERRUPTED RUN BETWEEN CONTROLLERS, MAXIMUM LENGTH IS 4000 FT.

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HILO, HAWAII

JOB NO: 270410
REVISION DATE: XXXXX
ORIGINAL DATE: APRIL 10, 2007
DISK FILE: 270410C8.0
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: STANDARD WIRING DETAILS
SHEET NO. C8.0

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AUTO ICON ON IF ASHRAE STANDARD TEMPERATURE RESET, STATIC PRESSURE RESET, AND OPTIMUM START FUNCTIONS ARE ENABLED. (MOST EFFICIENT MODE)

VALUE FIELD DISPLAYS ANALOG AND BINARY VALUES

TIME AND UNITS FIELD

TIME SCHEDULE AUTO ICON ON IF UNIT STARTS/STOPS ON TIME SCHEDULE OFF IF SCHEDULE OVERRIDE IS ON.

SNOWFLAKE ON IF COMPRESSOR #1 IS ON

COOLING STATUS BARS ON IF COMPRESSOR #2 IS ON

FAN ICON ON IF FAN IS ON

OCCUPANCY ICON ON IF OCCUPANCY SCHEDULE IS ON

DESCRIPTION FIELD LIMITED TO 12 CHARACTERS'S

STANDARD ABBREVIATIONS:

- EN/DIS = ENABLE/DISABLE
- RSET = RESET
- STRT = START
- PUR = PURGE
- RA = RETURN AIR
- RA = RETURN AIR
- OVR = OVERRIDE
- STIC = STATIC PRESSURE
- SCH = SCHEDULE
- SPR = STATIC PRESSURE RESET
- OPTI = OPTIMUM
- DMP = DAMPER
- TMP = TEMPERATURE
- INT = INTERVAL
- COMP = COMPRESSOR
- RT = RUN TIME
- RMT = ROOM TEMPERATURE

NOTE: ADDRESS 8000 FOR AHU 1 AND 8200 FOR AHU 2

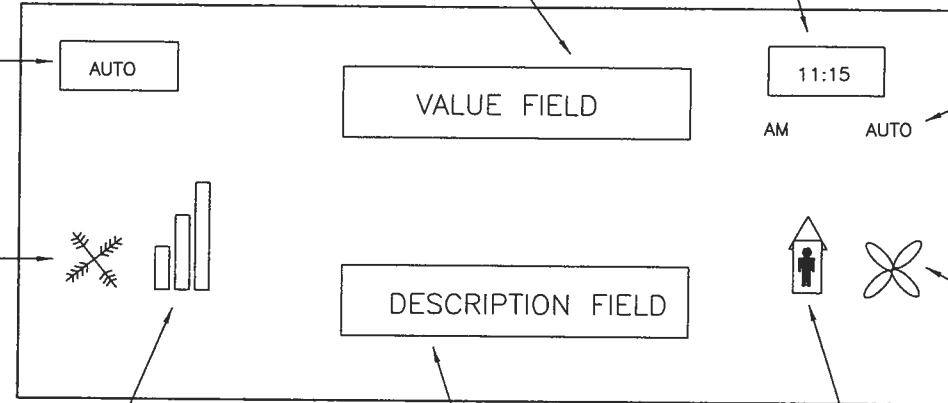
BINARY DATA POINTS LIST:

- BV1 AHU 1 SAT RESET CONTROL ADJUST
- BV2 AHU 1 STATIC RESET CONTROL ADJUST
- BV3 AHU 1 SCHEDULE OVERRIDE ADJUST
- BV4 OPTIMUM START CONTROL ADJUST
- BV5 AHU 1 RUN COMMAND
- BV6 AHU 1 NIGHT PURGE COMMAND
- BV7 AHU 1 OPTIMUM START COMMAND
- BV8 PASSWORD ACTIVE

NOTE: ADDRESS 8000 FOR AHU 1 AND 8200 FOR AHU 2

ANALOG DATA POINTS LIST:

- | | |
|--|--|
| AV1 AHU 1 SUPPLY AIR TEMPERATURE STATIC PRESSURE | AV17 AHU 1 SAT RESET SET POINT |
| AV2 AHU 1 SUPPLY AIR TEMPERATURE | AV18 AHU 1 SAT MIN RESET SET POINT |
| AV3 AHU 1 VAV MAX DAMPER | AV19 AHU 1 SAT MAX RESET SET POINT |
| AV4 AHU 1 VAV MIN DAMPER | AV20 AHU 1 SAT RMT MIN RESET SET POINT |
| AV5 AHU 1 VAV AVG DAMPER | AV21 AHU 1 SAT RMT MAX RESET SET POINT |
| AV6 AHU 1 VAV MAX ROOM TEMP | AV22 AHU 1 SAT RESET INTERVAL |
| AV7 AHU 1 VAV MIN ROOM TEMP | AV23 AHU 1 STATIC SET POINT ADJUST |
| AV8 AHU 1 VAV AVG ROOM TEMP | AV24 AHU 1 STATIC RESET SET POINT |
| AV9 AHU 1 RETURN AIR CO2 | AV25 AHU 1 STATIC MIN RESET SET POINT |
| AV10 AHU 1 MOTOR CURRENT | AV26 AHU 1 STATIC MAX RESET SET POINT |
| AV11 AHU 1 RUN TIME | AV27 AHU 1 STATIC DMPR MIN RESET SET POINT |
| AV12 AHU 1 COMPRESSOR 1 CURRENT | AV28 AHU 1 STATIC DMPR MAX RESET SET POINT |
| AV13 AHU 1 COMPRESSOR RUN TIME | AV29 AHU 1 STATIC RESET INTERVAL |
| AV14 AHU 1 COMPRESSOR 2 CURRENT | AV30 AHU 1 OUTDOOR AIR TEMP |
| AV15 AHU 1 COMPRESSOR 2 RUN TIME | AV31 AHU 1 STAGE CYCLE TIME SET POINT |
| AV16 AHU 1 SAT SET POINT | AV32 AHU 1 RETURN AIR CO2 SET POINT ADJUST |



REVISIONS	BY	DATE

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HILO BASE FACILITY EXPANSION
HILO, HAWAII

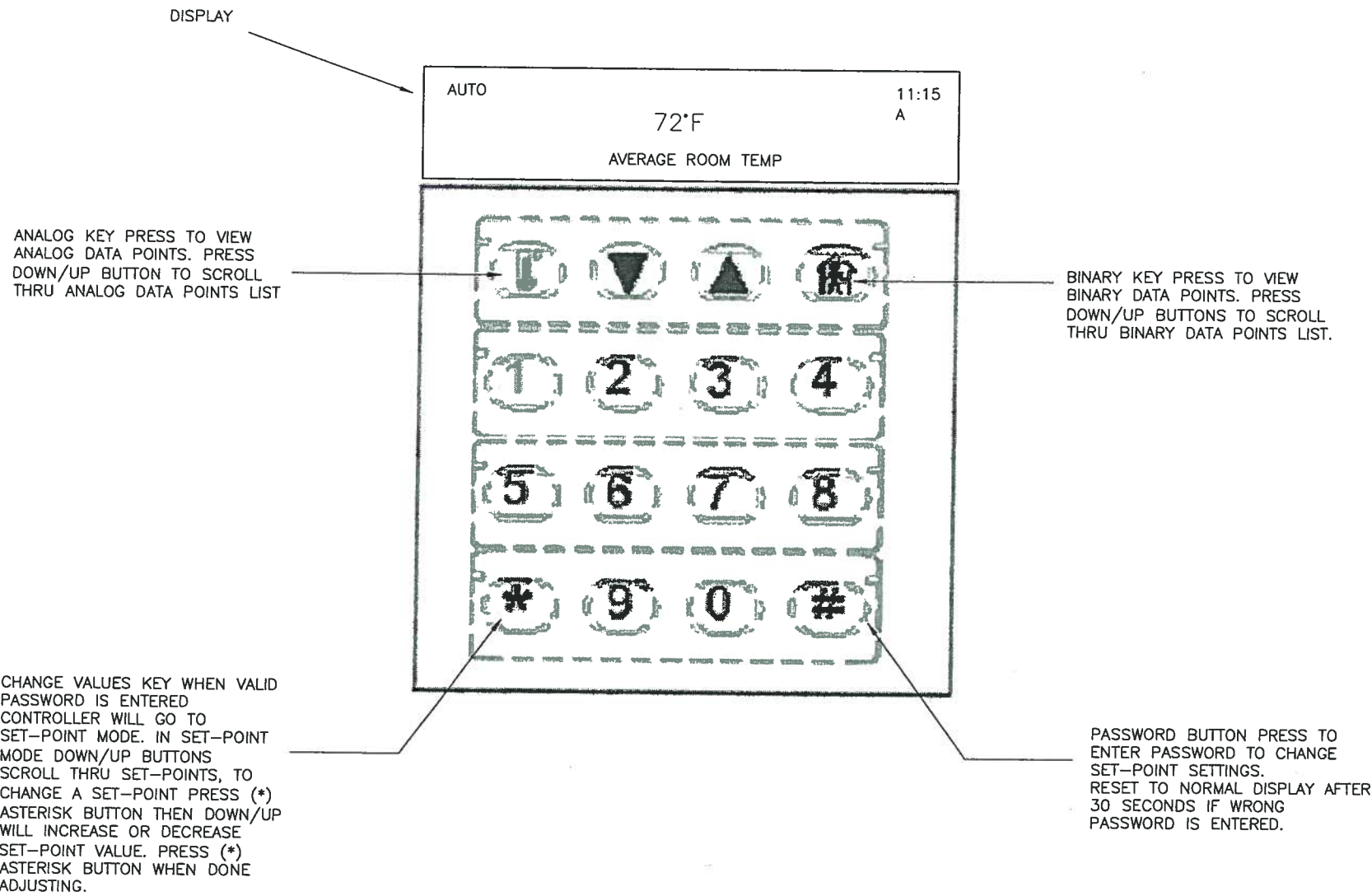
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Phone: (808) 842-4484 Fax: (808) 845-4047

JOB NO: 270410
REVISION DATE: AUGUST 18, 2008
ORIGINAL DATE: JULY 15, 2008
DISK FILE: 270410C9R1.0
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU CONTROLLER DISPLAY ICONS
SHEET NO. C9.0

AHU CONTROLLER DISPLAY ICONS

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AHU CONTROLLER DISPLAY BUTTONS

REVISIONS	BY	DATE

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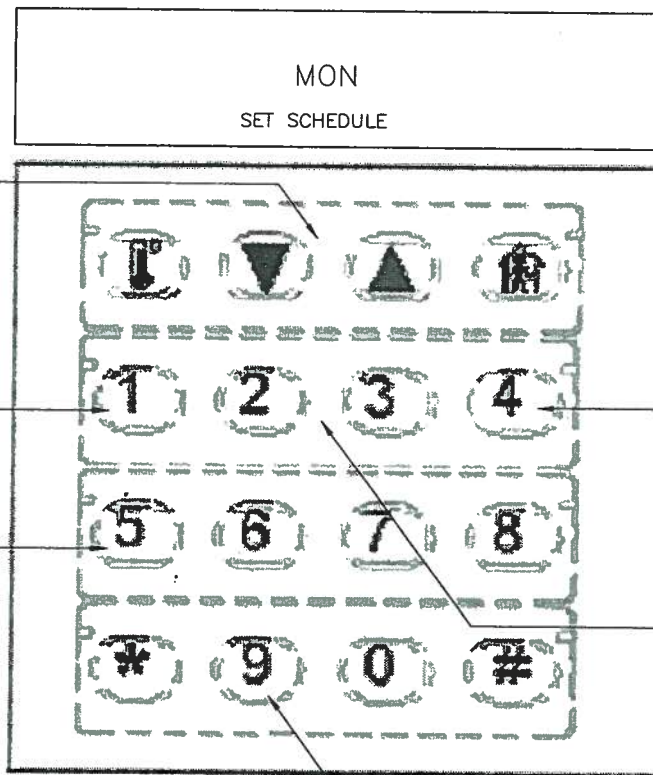
JOB NO: 270410
REVISION DATE: XXXX
ORIGINAL DATE: JULY 15, 2008
DISK FILE: 270410C10.0
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: AHU CONTROLLER DISPLAY BUTTONS
SHEET NO. C100

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DAY OF WEEK/MINUTE ADJUSTMENT
DOWN/UP ARROWS
INCREMENT/DECREMENT
DAY OF WEEK/MINUTES

① PREVIOUS BUTTON MOVES
SCHEDULE TO PREVIOUS ENTRY

⑤ TOGGLES SCHEDULE
EDIT MODE ON/OFF



PRESS TO START SCHEDULE
ADJUSTMENT PROGRAM

④ NEXT BUTTON MOVES
SCHEDULE TO NEXT ENTRY/DAY

HOURS ADJUSTMENT ② DOWN ③ UP
INCREMENTS/DECREMENTS
HOURS FIELD

TO SET OR VIEW OCCUPANCY SCHEDULE
(PASSWORD NOT REQUIRED)

STEP: 1. WAIT AND DON'T PRESS ANY
KEYS FOR 30 SECONDS (DISPLAY SHOULD
BE IDLE WITH BACKLIGHT OFF)

STEP: 2. PRESS ④ THEN ⑤
④ - STARTS SCHEDULE ADJUSTMENT
PROGRAM

⑤ - ENTERS SCHEDULE EDIT MODE
DISPLAY SHOULD SHOW (MON. SCHEDULE)
IF NOT PRESS ⑤ AGAIN.

STEP: 3. PRESS DOWN/UP BUTTONS TO
SELECT DESIRED DAY OF WEEK. PRESS ④
TO SEE THE NEXT "ON" TIME FOR
SELECTED DAY OF WEEK. PRESS DOWN
OR UP BUTTON TO ADJUST MINUTES.
PRESS ② OR ③ TO ADJUST HOURS. PRESS
④ TO SEE NEXT "OFF" TIME PRESS ① TO
SEE PREVIOUS ENTRY.

STEP: 4. AFTER ALL TIMES ARE SET
PRESS ⑤ WAIT 30 SECONDS BEFORE
PRESSING ANY MORE BUTTONS. TIME
SCHEDULE CHANGES WILL TAKE EFFECT
AFTER 1 MINUTES

NOTE: YOU CAN EXIT SCHEDULE
MODE AT ANY TIME BY PRESSING
BUTTON 5. BUT, YOU MUST WAIT
30 SECONDS FOR DISPLAY TO
EXIT SCHEDULE PROGRAM MODE,
OTHER BUTTONS MAY APPEAR TO
WORK (ANALOG KEY AND BINARY
KEY) BUT DATA VALUES WILL BE
INCORRECT.

REVISIONS	BY	DATE

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HILO, HAWAII

American Controls

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JOB NO:
270410

REVISION DATE:
XXXX

ORIGINAL DATE:
JULY 15, 2008

DISK FILE:
270410C11.0

ENGINEER:
M. MARATTA

DRAWN BY:
K. KEALOHA

SCALE:
NONE

DRAWING TITLE:
AHU CONTROLLER
OCCUPANCY
SCHEDULE ADJUST

SHEET NO.

C 11 0

AHU CONTROLLER OCCUPANCY SCHEDULE ADJUST



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DNT-305 AHU-1 SET TIME AND DATE

WAIT 30 SECONDS FOR ALL PROGRAM TO STOP!

PRESS (5) THEN (8)
PRESS (4) FOR TIME DISPLAY
IF TIME IS NOT DISPLAYED PRESS (4) AGAIN

PRESS (3) TO CYCLE THRU - (HOUR/MIN/MONTH/DAY/YEAR)
PRESS (2) TO REVERSE CYLCE

PRESS  OR  TO
DECREMENT OR INCREMENT DISPLAYED VALUES
PRESS (4) WHEN DONE

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GEMINI OBSERVATORY

American Controls

2001 A KAHAI ST. HONOLULU, HAWAII 96819

JOB NO: 270410
REVISION DATE: XXXX
ORIGINAL DATE: JULY 15, 2008
DISK FILE: 270410C12.0
ENGINEER: M. MARATTA
DRAWN BY: K. KEALOHA
SCALE: NONE
DRAWING TITLE: CONTROLLER SET TIME/DATE INSTRUCTION
SHEET NO. 0120

DNT-305 SET TIME /DATE