INSTALLATION AND OPERATIONAL MAINTENANCE MANUAL

IN ROW SYSTEMS

AYAN IV SERIES

IN ROW COOLING

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ADDENDUM

CORRECT PHASING OF SCROLL COMPRESSORS:
The scroll compressor is a unidirectional compressor and will only compress refrigerant in one rotation direction. Therefore, the proper rotation of the scroll compressor must be checked. The scroll compressor will run in the reverse direction but it will not pump refrigerant and will draw substantially reduced current as compared to listed values, and will result in elevated sound levels. Scroll compressor will trip on internal protection after running for some time in the reverse direction.
Verification of the proper rotation of the scroll compressor is done by observing that suction pressure drops and discharge pressure rises when the compressor is energized.

WARNING:
Extended Improper Operation May Also Void Compressor Warranty.

SAFETY INSTRUCTIONS

This user's manual contains important safety instructions that should be followed to properly install and maintain Compu-Aire system 2000 Chilled Water EC series. Read this manual thoroughly before attempting to install or operate this unit. Store this manual at safe place for future reference.

Adhere to all warnings, cautions and safety instructions on the unit and in this manual. Follow all local codes and safety requirements to install and service this unit.

WARNING

Installation and service of this equipment should be done by qualified personnel who have been specially trained and qualified in the installation of specific HVAC equipment. Improper installation could result in unaccountable loss or damage. COMPU-AIRE System 2000 series equipment requires a permanent power connection from an isolated circuit breaker. Customer must provide earth ground to the unit per NEC, CEC and local codes as applicable.

- Risk of high speed moving parts can cause injury or death.
- Risk of heavy unit falling over
- Risk of hot surfaces, sharp edges, splinters and exposed fasteners can cause injury

WARNING

High voltage danger!

Arc flash and electric shock hazard.

Disconnect main power supply from the feeder before working on this unit. Proceed with caution and always wear protective equipment per NFPA 70E before working within electrical control panel. Failure to comply can cause serious injury or death.

WARNING

Evaporator unit requires drain connections and water supply.
Do not locate these connections above any equipment that could sustain water damage.

NOTICE

- Improper storage can cause unit damage. Keep the unit upright and store it indoor. Protect the unit from dampness, freezing temperatures and contact damage.
- Risk of overhead interference. The unit may be too tall to fit through a doorway. Measure the unit and doorway heights and follow the installation plans to verify clearances prior to moving the unit.
- Risk of clogged or leaking drain lines. Drain line must be inspected and maintained to ensure that drain water runs freely through the drain system. Improper installation, application and service practices can result in water leakage from the unit. Water leakage can cause severe

property damage and loss of critical data center equipment. Suitable leak detection system shall be installed for the unit and water supply lines to minimize the damage.

- Risk of leaking unit coil/or piping due to freezing and/or corrosion can cause equipment and building damage. Use proper antifreeze and inhibitors to prevent freezing and premature coil corrosion. If required, the water or water/glycol solution shall be analyzed every six months to determine the pattern of inhibitor depletion.

GENERAL

The Compu-Aire Compu-Kool series is a complete environmental control system, factory wired, tested, and specially designed to provide temperature, humidity, and dust control for computer room installations.

The unit as shipped from the factory includes a blower/motor package, evaporator with expansion valves, co-axial condensers, water control valve, and humidifier, reheat elements, electrical control package, control monitor, and other specified special options.

TRANSPORTATION MODE

Visual inspection of the outer casing provides a simple indication of possible internal damage to the equipment. Move the unit to the installation site in the upright position. **FILE A CLAIM WITH THE SHIPPING COMPANY IF THE SHIPMENT IS DAMAGED OR INCOMPLETE. FREIGHT DAMAGE CLAIMS ARE THE RESPONSIBILITY OF THE RECEIVER.**

Optional articles such as jack stand parts, condensate pump, and remote control panel are packed inside the unit.

IMPORTANT – READ BEFORE INSTALLING

Check the power supply. Voltage, frequency and phase must correspond to that specified on the unit nameplate. The power supply must be able to handle the additional load imposed by this equipment.

LOCATING THE UNIT

Consult local building codes and National Code for special installation requirements. When installing the unit, allow sufficient space for air flow clearance, wiring and servicing the unit. ***Left side, right side and front should have a minimum clearance of 36 inches for servicing***. Rear clearance should be at least 1 inch to allow for out-of-square walls.
The unit may be set directly on top of the raised floor or on adjustable jack stands.

The unit should not be placed near any corner of the room. For best air distribution, the unit should be place in mid-point against the unit should be place in mid-point against the longest wall, and as close to the load(s) as possible. For multiple units, place them as far apart from each other as possible for optimum air distribution. Before placing a unit directly on the raised floor, it is important that the proper openings have already been cut.

The unit you have received is very special. It is specifically designed for Computer Room applications. Please read the following INSTRUCTIONS prior to working on the equipment.

ELECTRICAL DATA:
208v, 3 phase, 60 h, 460v, 3 phase, 60 Hz, 208v, 1 phase, 60 Hz, 575v, 3 phase, 60 Hz, 3 phase, 60 Hz, or 415/380v, 3 phase, 50 Hz.
Please check the voltage.

NAMEPLATE DATA
Refer to the unit name plate. It indicates all the electrical data for the unit. LOCAL ELECTRICAL CODES OR ANY OTHER APPLICABLE CODES MUST BE COMPLIED WITH PRIOR TO WORKING IN THE UNIT.

HUMIDIFIER
Unit is equipped with one of the following humidifiers:

A. Electric Immersion
B. Infrared
C. Disposable Cylinder
D. Wetter Media
E. No Humidifier

Check you unit for the kind of reheat it has. For type C and D piping connections are required. Make sure shut off valves are provided external to the unit.

CONDENSATE DRAINS
Two condensate drains are provided (primary and secondary). Each drain is to be trapped and separately piped to the drain.

CONDENSATE PUMP
(optional): When provided it is shipped separately. To avoid any flooding problems provide a separate power source. WIRE THE PUMP TO SHUT THE SYSTEM OFF IN CASE OF OVERFLOW OR PUMP FAILURE. A SYSTEM CUT OFF TERMINAL IS PROVIDED IN THE UNIT.

COMPRESSOR
Standard units are provided with hermetic compressors. Each compressor is provided with a safety high pressure switch. It is manual resettable and is factory set to open at 400 psig. A low pressure switch is also provided which is automatic reset.

AIR COOLED UNITS (CKA)
These units are provided in two sections; indoor (Compu-Aire unit) and the outdoor (Air Cooled Condenser). Standard units are provided with Low Ambient control system operable down to 0°F. Variable Fan Speed Control along with fan cycling in case of multiple fans are provided.

AIR COOLED CONDENSERS (ACC)
These are mostly dropped shipped to the job site ahead of the unit. Air cooled condenser supplied are provided with:

A. Variable Speed Fan Motor
B. Control Box where motor wires terminates less any controls
C. Access fittings to hook up SCR controller

CONTROL PANEL
This is for the air cooled condenser which is shipped from COMPU-AIRE with the air conditioner. This control panel is to be filed installed and wired in the field. **MAKE SURE TO PROPERLY HOOK UP THE SENSOR CONNECTION TO THE SCR CONTROLLER WHICH ARE TO BE MADE IN THE FIELD**

FOR UNITS EQUIPPED WITH LOW AMBIE4NT CONTROL BELOW 0°F: A head pressure control valve for each refrigeration circuit is provided and is shipped with the Computer Room air Conditioner for a FIELD installation on the air cooled condenser. An appropriate control panel for with fan cycling control is also supplied for field installation on the air cooled condenser.

ALL REFRIGERATION PIPING SHALL BE INSTALLED PER ASHRAE STANDARDS.

WATER COOLED UNITS (CW)
These units are factory piped and wired Water cooled condensers(s) are complete with a head pressure control valve(s). Field piping must be provided with a shut off valve for the supply and return. **MAXIMUM WATER SIDE WORKING PRESSURE SHOULD NOT EXCEED 125 psig.** Higher pressure units are provided. Refer to the nameplate.

GLYCOL COOLED UNITS(CKG)
These units are similar to water cooled units, except they are provided with remote DRY FLUID COOLER AND A PUMP.

DRY FLUID COOLERS
These are mostly dropped shipped on the job site prior to the air conditioner. These units are shipped from the factory with the following:

A. Control Box
B. Surge Tank (if ordered it is pre-piped)
C. Pump Mounting Kit consisting of a special mounting leg and a weather shield (optional)

CONTROL PANEL
With fan cycling thermostats, etc., are shipped from Compu-Aire with the air conditioner. This control panel is to be field mounted, wired and provide a fused disconnect switch for the power.

PLEASE NOTE the nameplate on the condenser does not include power consumed by the pump. Add these amps to the nameplate data prior to wire sizing, etc.

PUMPS FOR CKG MODELS
These are shipped from Compu-Aire along with the air conditioners. Pump supplied are internally protected, but in many localities local codes require that a separate fused disconnect be provided. These pumps are to be field mounted. Every care should be taken to ascertain that no undue noise of vibration be carried to the structure. Provide vibration eliminator and shut off valves.

DUAL PUMP PACKAGE WITH AUTOMATIC CHANGE OVER AND MANUAL CHANGE OVER (optional) FOR CKG MODELS: Control panel are factory supplied for field installation. Flow switch and check valve are to be supplied and installed by the contractor per drawing shown inside.

CHILLED WATER UNITS(CKC)
These units are factory piped with a three way water regulating valve. These systems are designed for working pressure of 200 psig. Higher pressure- Refer to nameplate.

IMPORTANT SUGGESTION*

In order to have trouble free operation free operation please maintain the humidifiers, regularly check the belts for proper tension and change filters when dirty.

For assistance, please call COMPU-AIRE, INC. at (562)945-8971

ABOUT COMPU-KOOL - AYAN IV SERIES

The COMPU-KOOL – AYAN SERIES is designed to provide localized temperature and humidity control in high heat load areas found in commercial and industrial setting. This free standing unit operates independently of the central air conditioning system and provided auxiliary cooling to a pre-selected environment. Completely factory assembled, piped, and wired, the COMPU-KOOL offers flexibility features to meet virtually any floor plan.

A unique field reversible blower mounting allows air flow discharge to be reversed from an Up-flow configuration to a downflow arrangement for raised flooring systems. Installed in the room center, against a wall, or in a corner, the COMPU-KOOL will deliver maximum performance at the lowest cost.

Maintaining consistent temperature and humidity conditions requires quick response to changing heat loads in the computer room. COMPU-KOOL meets this challenge through constant fan operation, thus preventing stratification of room air. COMPU-KOOL constantly monitors the return air steam for any change in space conditions; the appropriate air conditioning mode is quickly initiated. All cooling, heating, humidification and dehumidification controls are fully automatic. To keep noise levels at a minimum, thermal and sound barrier insulation fully line cabinet. COMPU-KOOL is available as air, water or glycol cooled system. COMPU-KOOL answers the need for localized environmental control.

TECHNICAL DATA

AYAN IV-IN ROW COOLING SYSTEM

UNIT MODEL: CKC-534-IRC

COOLING CAPACITY: At 72°F DB, 60°F WB; 50% RH - Entering Air Temp.

Gross Total Capacity BTU/HR:	179,095
Gross Sensible Capacity-BTU/HR:	170,140
Net Total Capacity BTU/HR:	163,695
Net Sensible Capacity-BTU/HR:	154,740

CHILLED WATER COIL DATA - Aluminum Fins, 3/8" OD Copper tubing

Face Area-Sq. Ft.	8
Rows/FPI	4/12
Face Velocity (MAX FPM)	625

CHILLED WATER DATA–At 44°F Entering Water Temp.; 58°F Leaving Water Temp.

GPM	27
% of Ethylene Glycol	20%
Pressure Drop: Ft of Water (coil)	3.36

BACKWARD INCLINED DIRECT DRIVE PLENUM FANS:

Quantity	3
CFM	5,000
External Static Pressure (Inch of Water)	0.3”

E.C MOTOR

kW/Fan	1.41
Qty.	3

ELECTRICAL DATA - @ 460V/3Ph/60Hz

Full Load Amps (FLA)	4.89
Min. Circuit Ampacity (MCA)	6.11
Max. Recomm. Fuse Size (MFS)	15A

PIPING DATA- All Connections are Copper O.D.

Condensate Drains	3/4”
Chilled Water Supply	1-1/8”
Chilled Water Return	1-1/8”

PHYSICAL DATA	
Length	23.63”
Width	42.13”
Height	78.75”
Unit Weight (Lbs.)	550

INSTALLATION

Prior to placing the unit make sure proper clearances are available:

Front	36”
Right Side	36”
Left Side	36”
Rear	1”

UTILITY CONNECTIONS

Electrical and piping supply could be brought in two ways.

1. Rear right hand side
2. Bottom right hand side

Bring connections where ever suitable.

Provide isolation shut off valves for all pipes external to the unit.

SETTING OF THE UNIT

Locate the unit so the desired clearances are provided, paying special attention to floor height for downflow units. Make sure that piping under floor does not interfere with the discharge air of the unit.

AIR FLOW

The return air is drawn through the back of the unit and discharged into the room through the front of the unit.

CONNECTIONS

In connecting the unit, five items must be addressed. They are

1. Structural Support
2. Electrical Supply
3. Humidifier Connection
4. Condensate Drain Connection
5. Condenser Connections for
    a. Water Cooled/Glycol Cooled
    b. Air Cooled hot gas and liquid line piping

STRUCTURAL SUPPORT

The unit can be installed directly on the floor or on the raised floor without the need for any special support. The floor should be level. Gasket material should be placed between the bottom perimeter of the unit and the floor on the downflow unit to act as vibration isolator. The gasket should be foam, 1/2" x 3/8 ". No gasket is needed on the upflow unit.

ELECTRICAL SUPPORT

A fused disconnect of a HVAC approved circuit breaker must be field provided and installed per the National Electric Code. There is access to the unit for electrical connection through the unit bottom or the lower portion of the unit back. Be sure unit is properly grounded.

A fused disconnect must be provided for the air cooled condenser for air cooled condenser for air cooled units and dry fluid cooler for the glycol cooled units.

CONDENSATE DRAIN CONNECTION

This must be equipped with 3/4" O.D. drain line. The contractor must provide and install a P-trap in this line at the lowest point in the unit or below the unit. A minimum slope of 1/4" per foot must be provided on the horizontal run.

WATER CONNECTIONS

For water cooled units where water supply shall be either city water or cooling tower. Provide a shut off valve in supply and return line for isolation.

FOR GLYCOL UNITS

A close circuit dry fluid cooler is to be used. Provide shut off valves for isolation at supply and return at the unit and at the dry fluid cooler.

Note: Glycol and water cooled units are designed for maximum of 150 psig water pressure. Higher pressure units are available; refer to unit nameplate.

AIR COOLED UNITS

These units are designed to be used with a remote air cooled condensers. Standard units are designed for ambient controls down to 0°F. Air cooled condensers are provided with variable speed fan motor.

Condensers are dropped shipped from another source. Control panels for the condenser are shipped with the air conditioners. This control panel is to be wired and connected in the field. Provide a rain tight fused disconnect switch in the field. Provide a rain tight fused disconnect switch. Single fan units are generally single phase.

Two 28 gauge wires are required between the air conditioner and the condenser to interlock indoor unit with the outdoor unit. Run wires in conduit. The connection is 24 VAC.

Suggested pipe sizes are: Refer to the ASHRAE guide for proper sizing and layout. **A CHECK VALVE MUST BE INSTALLED IN THE DISCHARGE LINE.**

FOR UNITS REQUIRED AMBIENT BELOW 70°F.
An optional head pressure control is provided . It is shipped with the air conditioner for field mounting; refer to the brochure enclosed in the box.

Receivers are installed inside the air conditioners.

Suggested pipe sizes are:
Hot gas – 7/8" – 50 ft. TEL
Liquid Drain – 1 1/8" – 50 ft. TEL (refer to ASHRAE guide for details)
(Liquids drain should be sized based on 100 FPM velocity)

- Once it is ascertained as to what kind of low ambient the unit is provided with, install proper size pipes and evacuate using triple evacuation method.
- Charge units based on superheat, set superheat not lower than 10°F and not greater than 15°F.
- Units provided with head pressure control valve and ambient below -10°F will require additional charge.
- Check valve-provide a check valve for the discharge like at the air cooled condenser.

ELECTRICAL CONNECTIONS: The power supply to the air cooled condenser must be brought through a fused disconnect of a proper handle the electrical requirement of the condenser. Control panel is factory supple and is packaged separately. This panel is to be field mounted.

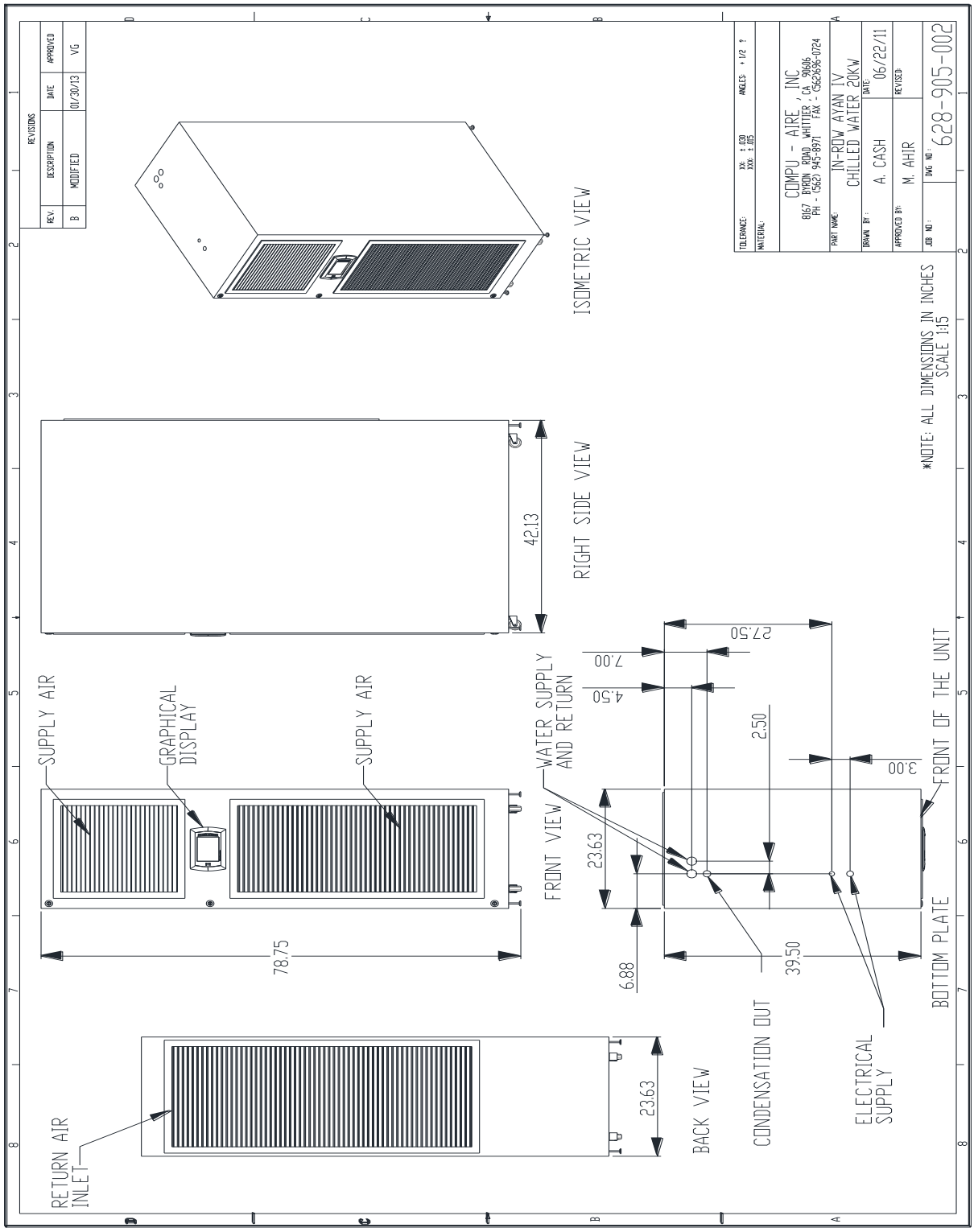

FIGURE 1 - SYSTEM LAYOUT

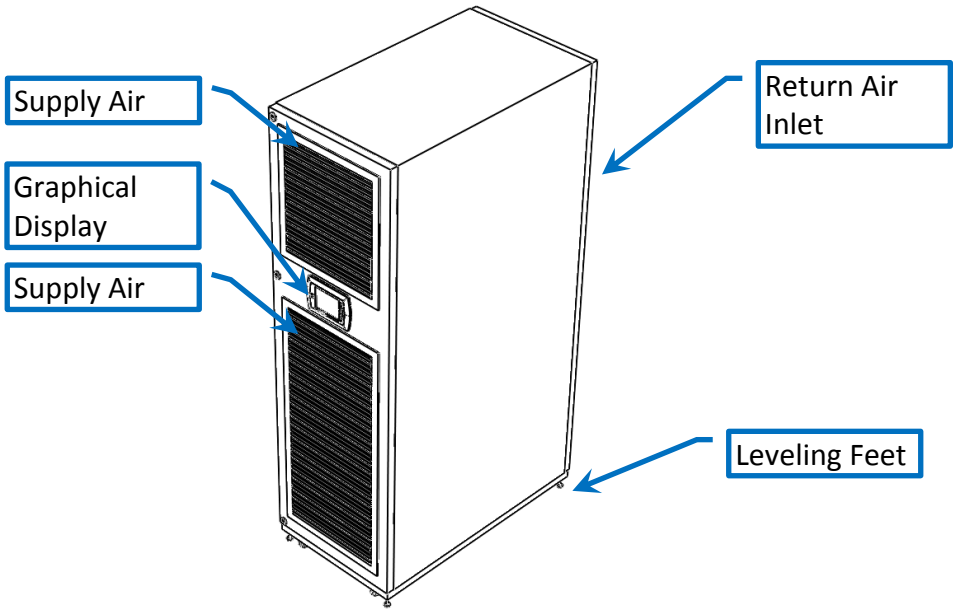

FIGURE 2 - AYAN IV INROW COOLING

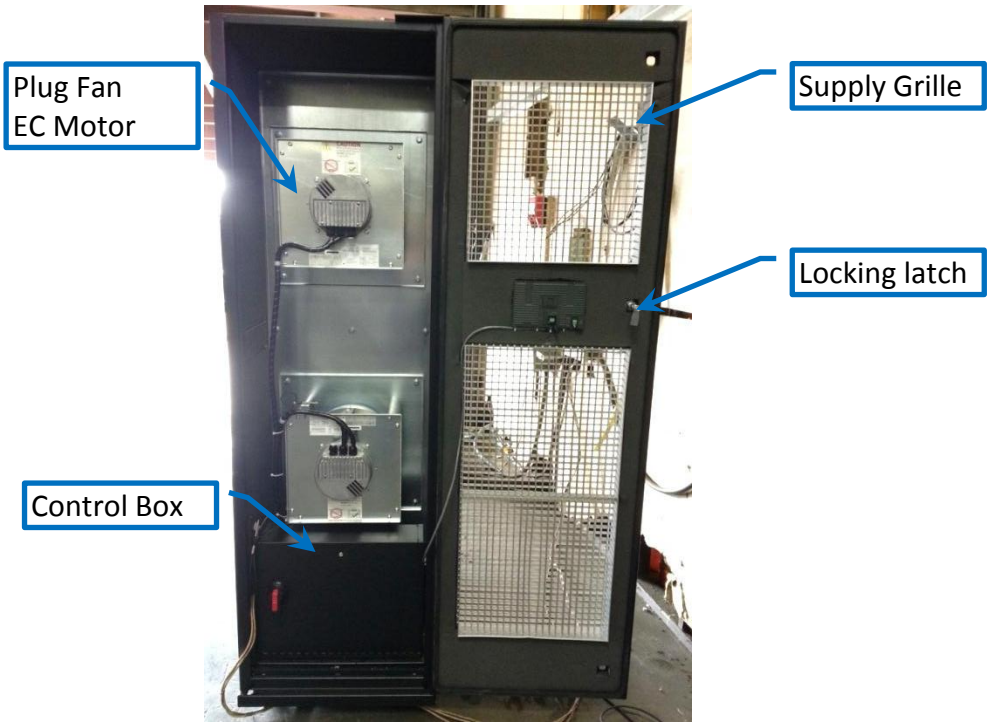

FIGURE 3 - FRONT VIEW

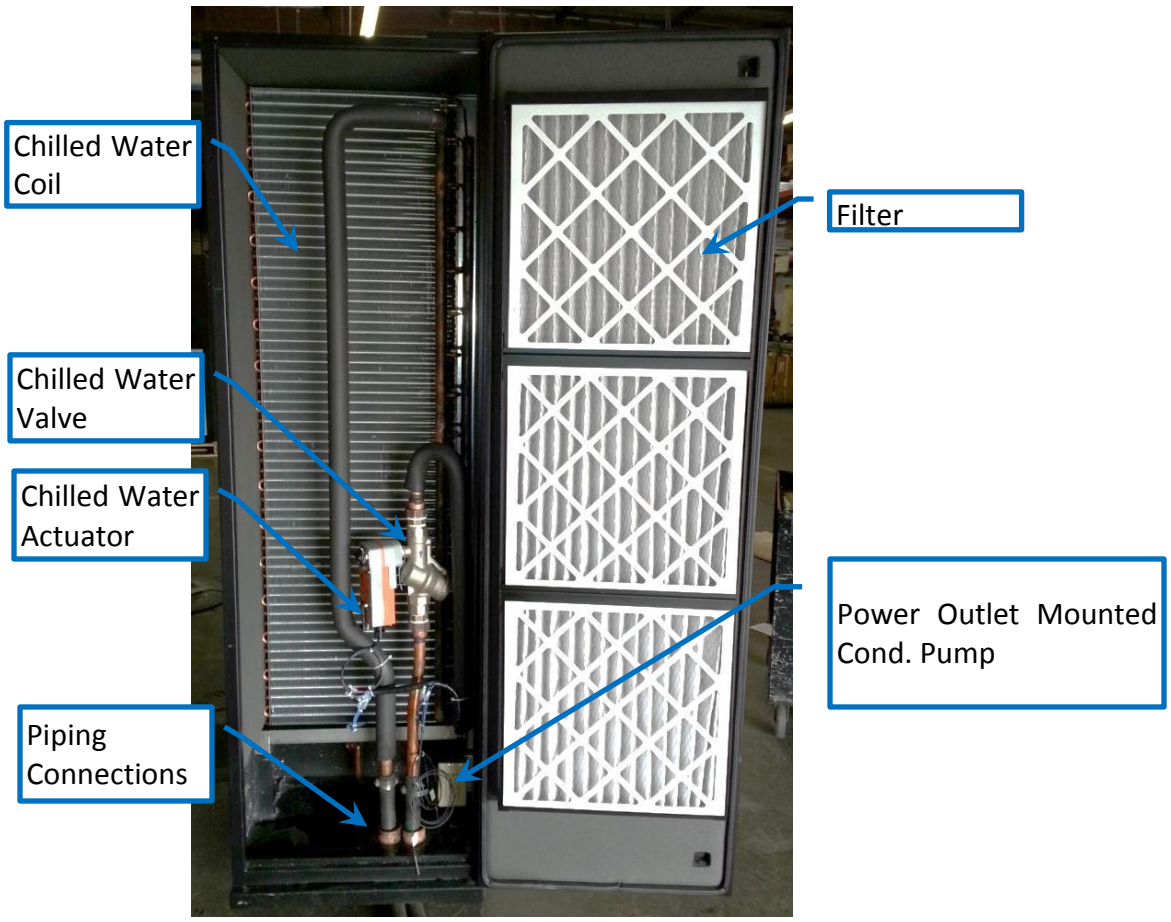

FIGURE 4 - BACK VIEW

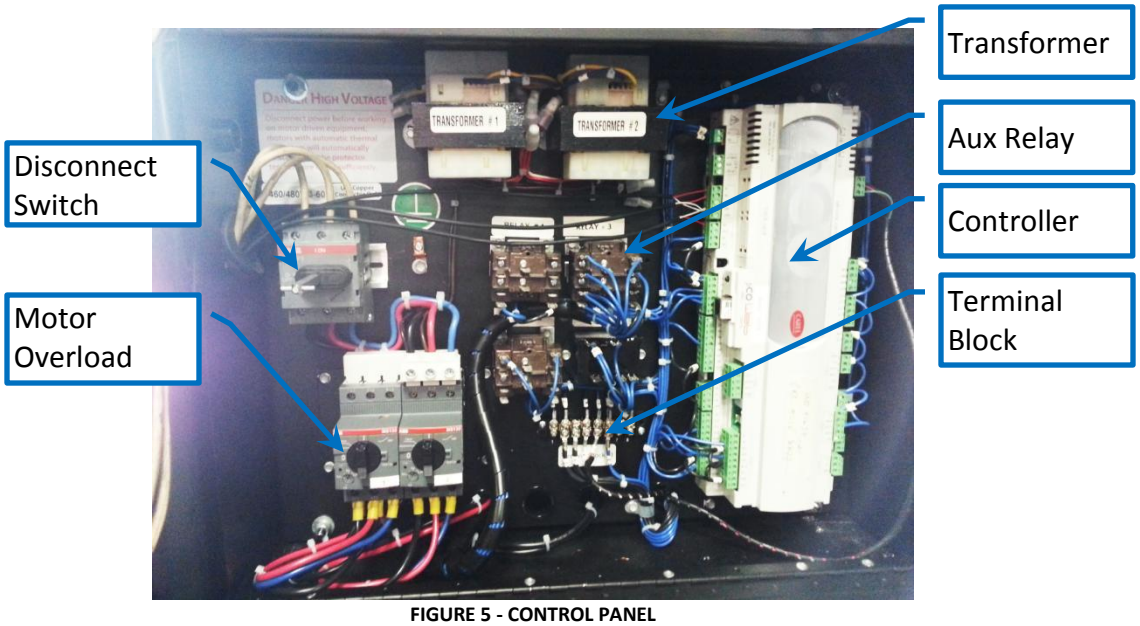

FIGURE 5 - CONTROL PANEL

START-UP AND TEST PROCEDURE

A. With all power to unit off- Check that ALL WIRING IS CORRECT.

   Check that properly sized fuses are installed in the disconnect switch. Correct fuse size and minimum circuit ampacity are listed on the unit nameplate. Now, check the wiring connections in the Main Control Panel to see if they are tight. It is best that this be checked prior to operating the machine. After checking, close the Main Control Panel cover and proceed as follows:

   Microprocessor Control Panel – With the system switch in the "OFF" position, apply power to the unit. The "Power ON" light should illuminate.

B. Check for Correct Phasing

   The equipment should now be checked for correct phasing required to make the blower motor turn in the correct directions. For this test it is necessary to open the right side doors of the unit to observe the blower and blower motor. Now, momentarily switch the system switch to the "ON" position and then back to "OFF". The blower motor with have started and it is therefore possible to determine rotation. On Compu-Aire units, the blower should be rotating in a CLOCKWISE direction in downflow units and COUNTERCLOCKWISE direction in upflow units, looking in the right side of the unit. Heaters and humidifiers are not affected by phasing.

C. Blower Speed Adjustment

   Adjustment of the air flow maybe desired. The air flow can be readily adjusted with the variable pitch pulley provided on the blower motors. After the unit has been started and the air flow properly adjusted, check the blower motor current to ensure is increased; the blower motor current should be checked. If a field adjustment is made, the motor should run for at least one hour at maximum design room temperature to see if motor trips on internal overload. For proper motors amps refer to the name plate.

COMPU-AIRE INC.
Specialized Environmental Air Conditioning Systems

8167 Byron Rd., Whittier, CA 90606
PH (562) 945-8971 FAX (562) 696-0724

STANDARD ONE YEAR WARRANTY

Job Name: _____ Job No. _____ Date: _____

We warranty this Compu-Aire, Inc. computer room unit to be free from defects in material and workmanship; our obligation being limited to repairing or replacing at our factory any part (except as noted below) within one year from the date of shipment to the original purchaser. Parts to be returned to us PREPAID. Proof of start-up date must be submitted to the factory.

This warranty is effective only if the unit has been installed in accordance with our instructions and connected to proper and adequate electric, water and drain services, correctly dehydrated and placed into operation by a competent service representative.

Fan motor compressor warranty is covered by original manufacturer's warranty and any repair or replacement should be made by the local authorized service facility as listed the telephone book.

Maintenance and service such as replacing filters, humidifier cylinder, infra-red lamps, float valve assemblies, belts, cleaning, lubrication, calibration and adjusting are NOT INCLUDED in this warranty.

Replacement or repair parts shall be shipped from the factory pre-paid and invoiced for the full amount. Upon receipt of warranteed parts within 30 days with prepayment of the component and which our inspection discloses the parts are defective, and show no signs of misuse, alterations, or abuse, full credit will be issued.

Compu-Aire, Inc. does not assume any responsibility for the labor expense for changing defective parts or replacement of any refrigerant or other cooling medium such as glycol etc.

All parts and goods are thoroughly inspected and packed to meet the requirements of railroad freight classifications bureaus, and under standard shippers risk, when they leave our factory. SHOULD GOODS ARRIVE DAMAGED, call the agents attention to damage, and have same noted on freight bill. For concealed damage, demand immediate inspection from agent of the shipping company and insist on a notation being made on freight bill.

Purchaser-User	**Model Number**	**Serial Number**
		Serial Number
		Serial Number
		Serial Number

Company Seal must be affixed for validation

Authorized by

X _____

Quality Manager

COMPU-AIRE INC.
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PROVIDE READINGS AS APPLICABLE:

PROVIDE ALL READINGS IN 100% COOLING MODE

_____ /_____ SUPPLY / RETURN AIR TEMPERATURE (°F))

_____ /_____WATER IN / WATER OUT TEMPERATURE (°F) – CONDENSER

OPERATING PRESSURE OF REFRIGERANT R: _____

SYSTEM 1: DISCHARGE:_____ SUCTION: _____

SUPERHEAT:_____ SUBCOOLING:_____

REFRIGERANT: _____ LB._____ OZ.

SYSTEM 2: DISCHARGE:_____ SUCTION: _____

SUPERHEAT:_____ SUBCOOLIG: _____

REFRIGERANT:_____ LB._____ OZ.

TECHNICIAN COMMENTS

NOTE ALL READINGS AND ANY ADJUSTMENT MADE AT THE JOB SITE:

_____

_____

_____

ANY VISUAL DAMAGE:

_____

_____

_____

FOR ADDITIONAL COMMENTS PLEASE USE BACK PAGE.

THANK YOU

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FIELD CHECK, TEST & START-UP

THIS FORM MUST BE COMPLETED FOR EACH UNIT AND SENT BACK TO COMPU-AIRE WITH THE COMPLETED WARRANTY REGISTRATION CARD. FACTORY SERVICE PERSONNEL NEED THIS INFORMATION TO PERFORM WARRANTY INSPECTION WHEN APPLICABLE.

COMPANY PERFORMING START-UP:_____

ADDRESS: _____

PHONE NUMBER: _____ FAX NO: _____

EMAIL: _____

TECHNICIAN'S NAME: _____

PROJECT NAME: _____

START-UP DATE: _____

PROJECT ADDRESS: _____

TECHNICIAN PHONE NO: _____

CUSTOMER CONTACT: _____

COMPU-AIRE JOB NUMBER: _____

UNIT MODEL: _____

UNIT SERIAL NO: _____

VOLTAGE: _____

CONTROLLER MODEL:_____

SOFTWARE REVISION:_____REVISION DATE: _____

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UNIT EQUIPPED WITH:

TYPE OF HUMIDIFIER: _____

HUMIDIFIER SN#: _____ KW: _____

TYPE OF HEAT: _____

TYPE OF COMPRESSOR: _____

AIR CONFIGURATION: _____

TYPE OF AUX. EQUIPMENT (DX UNIT ONLY):

CONDENSING UNIT/ACC/DFC: _____

HOT GAS BYPASS ☐ YES ☐ NO

FIELD CHECK

_____UNIT ALIGNMENT AND SECURELY MOUNTED

_____DOOR ALIGNMENT

_____NUTS FOR TIGHTNESS

_____WIRES FOR CONNECTION TIGHTNESS

_____SEPARATE POWER FEEDER WITH CIRCUIT BREAKER FOR UNIT

_____MAIN FUSED DISCONNECT SWITCH INSTALLED NEAR THE UNIT

_____UNIT GROUND CONNECTED

_____HIGH AND LOW VOLTAGE WIRING CONDITION FOR ANY DAMAGE

_____CONDITION OF CAPACITOR

_____BELT TENSION

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_____MOTOR BASE BOLTS

_____BLOWER SET SCREW (S)

_____BLOWER ROTATION AND NOTE RPM: _____

_____COMPRESSOR MOUNTS

_____PIPING AND VALVE SUPPORTS AND AVOID ANY RUBBING PIPES

_____INSULATION (CHECK ALL PIPING, C.W. VALVES & EXPANSION VALVES)

_____FIELD WIRING BETWEEN DIFFERENT SECTIONS – VERIFY POINT TO POINT

_____CONDENSATE DRAINS TRAPS

(PRIMARY & SECONDARY DRAIN MUST BE TRAPPED SEPERATELY.)

_____FIELD PIPING AND NOTE APPLICABLE LINE SIZES:_____

_____ISOLATION VALVES INSTALLED

_____SUPPLY AND RETURN AIR CONNECTIONS SECURE

_____CROSS CONNECTION OF REFRIGERATION LINES(***FOR DUAL SYSTEM ONLY)***

_____AQUA-STATS ON WATER LINE ARE SECURED & INSULATED

_____INVERTED TRAPS ARE PROVIDED AT CONDENSER

_____HUMIDIFIER CYLINDER IS SECURED

_____CHILLED WATER / WATER REGULATING VALVES – SECURED

_____AMBIENT STATS ARE SECURED UNDERNEATH OF COIL

AND SHEILDED FROM DIRECT SUNLIGHT

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SET CONTROLS AS FOLLOWS:

_____TEMPERATURE SET POINT (AS REQUIRED BY CUSTOMER)

(IF NOT SPECIFIED, SET AT 75ºF WITH 50% RH)

_____HUMIDISTAT SETPOINT

_____OUTDOOR UNIT STAT

_____AIR/WATER ECONOMIZER SETPOINT

(NOTE ANY CHANGES MADE TO THE CONTROLLER SETTINGS)

UNIT POWER SUPPLY: TEST VOLTAGE

LINE VOLTAGE: L1-L2: _____L2-L3: _____ L1-L3:_____

CONTROL VOLTAGE AT CONTROLLER : _____

TEST CONDITION IN 100% COOLING MODE

SUPPLY AIR TEMPERATURE: _____ °F RETURN AIR TEMPERATURE: _____ RETURN HUMIDITY: ____%

EVAP BLOWER #1

MOTOR HP/KW: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

PULLEY ALIGNMENT: _____

BELT SIZE: _____

CONTROL INPUT SIGNAL MIN/MAX: _____ VDC

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EVAP BLOWER #2

MOTOR HP/KW: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

PULLEY ALIGNMENT: _____

BELT SIZE: _____

CONTROL INPUT SIGNAL MIN/MAX: _____ VDC

EVAP BLOWER #3

MOTOR HP/KW: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

PULLEY ALIGNMENT: _____

BELT SIZE: _____

CONTROL INPUT SIGNAL MIN/MAX: _____ VDC

REHEAT

TYPE: ELECTRIC: _____ HOT WATER: _____

AMP DRAW: L1: _____ L2: _____ L3: _____

HOT WATER VALVE OPERATION: _____

TEST CONDITION IN 100% HEATING MODE:

SUPPLY AIR TEMPERATURE: _____ °F RETURN AIR TEMPERATURE: _____

RETURN HUMIDITY: ___%

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Specialized Environmental Air Conditioning Systems

8167 Byron Road, Whittier, CA 90606
(562) 945-8971 * Fax (562) 696-0724

HUMIDIFIER

TYPE: STEAM: _____ INFRA-RED: _____

AMP DRAW: L1: _____ L2: _____ L3: _____

VERIFY FILL VALVE OPERATION: _____

DRAIN VALVE OPERATION: _____

AIRCOOLED CONDENSER

NO. OF REFRIGERATION CIRCUITS: _____ NO. OF CONDENSER FANS: _____

LOW AMBIENT CONTROL TYPE: _____

AMBIENT STAT SETTINGS:

AMBIENT STAT # 1 SET AT: _____ºF AMBIENT STAT # 2 SET AT: _____ºF

AMBIENT STAT # 3 SET AT: _____ºF AMBIENT STAT # 4 SET AT: _____ºF

PRESSURE SWITCH SETTINGS:

LIMIT SWITCH # 1 SET AT: _____ PSIG. LIMIT SWITCH # 2 SET AT: _____ PSIG.

LIMIT SWITCH # 3 SET AT: _____ PSIG. LIMIT SWITCH # 4 SET AT: _____ PSIG.

MOTOR #1

UNIT AIR FLOW CONFIGURATION;

MOTOR HP: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

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MOTOR #2

MOTOR HP: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

MOTOR #3

MOTOR HP: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

MOTOR #4

MOTOR HP: _____ F.L.A: _____ VOLTAGE: _____

AMP DRAW: L1 _____ L2 _____ L3 _____

WATER/GLYCOL COOLED

NO OF AQUASTATS: _____

1 75ºF # 2 65ºF # 3 55ºF # 4 45ºF

WATER REGULATING VALVE ADJUSTMENT: _____

GLYCOL SOLUTION: _____% OF _____ GLYCOL

WATER PUMP HP: _____

CHILLED WATER

WATER IN TEMP: _____ °F WATER OUT TEMP: _____ °F

CHILLED WATER VALVE OPERATION: _____ MIN/MAX: _____VDC