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**IMPORTANT:** READ THIS MANUAL CAREFULLY. IT CONTAINS INFORMATION ABOUT SAFETY AND THE SAFETY OF OTHERS. ALSO BECOME FAMILAR WITH THE PROPER INSTALLATION AND CONTROLS OF THE AIR DRYER BEFORE OPERATING. ONLY QUALIFIED, TRAINED AND LISCENSED PERSONAL SHOULD SERVICE OR OPERATE THIS EQUIPMENT. RECORD THE INFORMATION BELOW AND SAVE THIS MANUAL. IF SERVICE IS NEEDED THE INFORMATION BELOW WILL BE NEEDED.

**CAUTION:** THIS MACHINE CONTAINS HIGH PRESSURE GAS AND ELECTRICITY.

**NOTE:** Please record the information below and keep this manual. If you need service on this dryer you will need this information.

Use [QR Code](#) to register your new Attec AIR Refrigerated Air Dryer

Model # \_\_\_\_\_  
 Serial # \_\_\_\_\_  
 Voltage \_\_\_\_\_

Purchased from: \_\_\_\_\_



## **INTRODUCTION**

Thank you for selecting an DX Series energy savings refrigerated air dryer from Altec AIR.

The refrigerated air dryer is specifically designed and manufactured for drying and purifying compressed air generated by an air compressor.

Please read this instruction manual carefully before using the air dryer and pay attention to the precautions in transportation, installation and operation that are listed in this manual.

Please use the dryer according to our application guide and be sure to perform the proper preventative maintenance as recommended in this manual. Failure to perform the preventative maintenance will void the air dryer warranty.

Refrigeration used in this air dryer is environmentally friendly R134a or R404a and is available at local refrigeration wholesalers.

Direct any questions not covered in this manual to your distributor or call Altec AIR @ 1-800-521-5351. Before calling with questions always have the air dryer model #, serial # and pressure gauge readings.

Service and maintenance can be obtained from your distributor. If you do not know your distributor please contact the factory. Authorization must be obtained from Altec AIR before any parts or dryers are returned to the factory. Altec AIR will not be responsible for anything returned without authorization.

## **RECEIVING AND INSPECTION**

**The dryer cannot be tilted on its side or upside down during shipping.**

**Use forklift from the bottom of the dryer when installing or moving.**

- Dryers are shipped F.O.B. factory. Immediately upon arrival check the dryer for possible damage. If damage is found, report it to the carrier and file a damage claim. Check dryer data label to be sure you have the right dryer. Check the data labels voltage and amperage to be sure it is correct and the one you ordered. Check the refrigeration gauges for pressure.

**If the gauges read 0 PSIG, STOP.**

- Do not start the dryer. Contact Altec AIR or your local distributor for service. This could mean there is a leak in the refrigeration system.

### **Data Label**

- The data label is affixed to the outside of the cabinet.
- This label identifies the air dryer's model and serial numbers and important technical data.
- Before installing the dryer check all of the information on the data label for the correct model and voltage.

**If the model number and voltage are incorrect do not install or power ON the dryer.**

**Contact Altec AIR or your local distributor immediately.**

| DATA LABEL                                  |               |
|---|---------------|
| Model                                       | UA200A-2      |
| Serial #                                    |               |
| Date of MFG.                                | 1/8/2016      |
| Voltage                                     | 230v-1ph-60hz |
| Voltage Range                               | 253-187       |
| RLA   | 7             |
| LRA   | 41            |
| Min Circuit Ampacity                        | 9.9           |
| Max Fuse Size                               | 15            |
| Maximum Inlet Air Temp - F                  | 110           |
| Min/Max. Ambient Temp - F                   | 110/45        |
| Ref. System Design - PSI                    | 350/150       |
| Suction/Discharge - PSI                     | 30/120        |
| Maximum Pressure (PSIG)                     | 232           |
| Ref. Compressor HP                          | 1             |
| Refrigerant Type                            | R134A         |
| Refrigerant Charge                          | CF            |
| MADE IN USA                                 |               |
| DISCONNECT POWER SUPPLY<br>BEFORE SERVICING |               |

## **INSTALLATION**

### **DRYER LOCATION / VENTILATION**

Install dryer only in a well-ventilated, clean, dry area and keep at least 3 feet between the dryer, other equipment and the walls. Dust and dirt particles will clog the air-cooled condenser and will reduce the performance of the dryer and will eventually cause damage to it.

Do not install the dryer outside. The air dryer must not be exposed to direct sunlight, rain or snow.

### **AMBIENT TEMPERATURES**

Suitable ambient temperature for the refrigerant dryer is a MIN of 45°F to a Max of 110°F. The performance of the dryer will be significantly decreased when the air dryer is subject to temperatures higher than 110°F.

For installations with ambient temperatures higher than 110°F it is recommended to use a water-cooled condenser on the dryer. Contact Altec AIR or your local distributor for details

### **INLET & OUTLET CONNECTIONS**

Do not mix the air inlet and outlet air flow. Pipe diameter should be sized according to air flow requirements. It is recommended that a vibration absorber be installed on the dryer inlet and outlet to eliminate vibration from the compressor. Do not use the inlet and outlet of the air dryer to support the weight of the air piping.

### **FILTRATION, BYPASS VALVES, & CONDENSATE DRAINS**

Appropriate pre and post filtration should be installed to protect the air dryer as well as the compressed air system.

Isolation or 3-valve bypass should be installed on the air dryer outlet and inlet ports to allow for bypassing, depressurizing, proper maintenance, and servicing of the air dryer.

Condensate drains must be properly piped from the dryer to prevent moisture re-entrainment. The dryer is equipped with an automatic drain valve that controls the discharge of the condensate. The user must run a drain line to an environmentally approved condensate collection/disposal system.

### **ELECTRICAL INSTALLATION**

The dryer Data Label lists the electrical power requirements for the air dryer. The user must confirm that the line voltage matches the voltage listed on the data label. (Warning – Operating the air dryer with improper line voltage will void the warranty). Provide the proper size wire, disconnect switches and fuses in accordance with applicable codes. Field wiring must comply with local and national fire safety and electrical codes. Standard dryer's enclosures and controls are designed to meet NEMA 1 Type 1 electrical standards.

Connect power leads as indicated in the electrical schematic. Ground the frame properly.

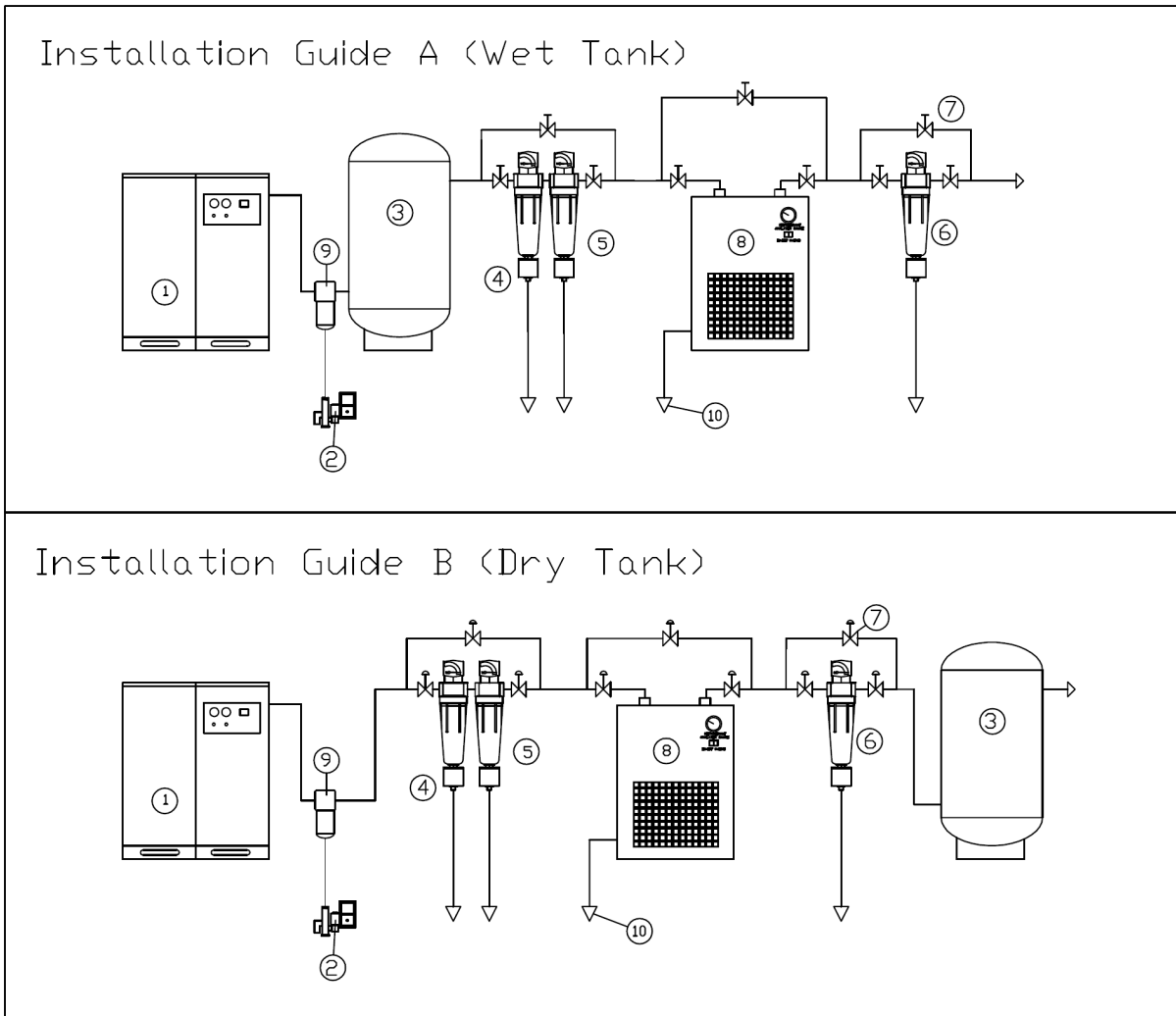
**IMPORTANT NOTE:** DX series dryers that are 460v-3ph-60hz and 230v-3ph-60hz voltages have Scroll Refrigerant Compressors. These compressors must be wired for proper rotation with the proper phases L1, L2, L3. To check if dryer is wired properly turn dryer on and observe the REFRIGERANT SUCTION PRESSURE GAUGE, immediately after the dryer is switched ON the pressure on this gauge should drop. If after 30-45 seconds the pressure does not drop switch the dryer OFF. This could mean the dryer is wired wrong. Switch any 2 leads and repeat.

**MAXIMUM WORKING PRESSURE** - 232 psig.

### **BREATHING AIR APPLICATIONS**

This dryer has not been tested for breathing air applications. The owner is advised to do its own testing and use for breathing air applications at own's risk.

# **INSTALLATION GUIDE**



- |                             |                               |
|-----------------------------|-------------------------------|
| (1) Air Compressor          | (6) AC Series XA After filter |
| (2) ADF Series Drain Valve  | (7) 3 Valve Bypass            |
| (3) Air Receiver Tank       | (8) DX Series Air Dryer       |
| (4) AC Series X5 Pre-filter | (9) AW Series Water Separator |
| (5) AC Series X1 Pre-filter | (10) Centrifugal separator    |

INSTALLATION A: Recommended for systems that consume less than or equal to the maximum capacity of the air compressor.

INSTALLATION B: Recommended for systems that consume more than the maximum capacity of the air compressor.

## DRYER CONTROLS

### CLD CONTROLLER

Is a closed-loop digital controller that precisely monitors the refrigeration system high side and low side pressures, cycles the condenser fan motors on and off, loads and unloads the digital scroll compressor based on the current heat load (Air flow) going through the dryer.

- Refrigerant Suction Pressure readout
- Refrigerant Discharge Pressure readout
- Condenser fan ON/ OFF indicators

NOTE: The CLD controller is pre-set at the factory. No adjustments are necessary or should be made.

| UPPER DISPLAY                   | LOWER DISPLAY                     | ICONS                              |
|---------------------------------|-----------------------------------|------------------------------------|
| Suction temperature or pressure | Discharge temperature or pressure | -Active loads<br>-Measurement unit |



Figure 6 – Controller Display

Table 5 – Icon Legend

| LED | FUNCTION | MEANING  |
|-----|----------|--|
| °C  | ON       | Celsius degrees  |
| °F  | ON       | Fahrenheit degrees   |
| bar | ON       | bar displaying   |
| PSI | ON       | PSI displaying   |
| kPa | ON       | KPA displaying   |
| [1] | ON       | Copeland Scroll Digital compressor on  |
| [1] | Flashing | Digital compressor is waiting to start (flash once per second) or digital input alarm for DIGITAL COMPRESSOR (flash twice per second) or DIGITAL COMPRESSOR in maintenance status. |
| [2] | ON       | Compressor 2 on  |
| [2] | Flashing | Compressor 2 is waiting to start (flash once per second)   |
| [3] | ON       | Fan 1 on   |
| [3] | Flashing | Fan 1 is waiting to start (flash once per second)  |
| [4] | ON       | Fan 2 on   |
| [4] | Flashing | Fan 2 is waiting to start (flash once per second)  |
| [⊞] | ON       | The digital solenoid valve coil is energized   |

## **SAFETY SHUTDOWNS**

### **HOW TO MAKE MINOR REFRIGERANT SUCTION PRESSURE ADJUSTMENTS**

Keep dryer running under a no load by turning off or bypassing the compressed air.

Remove dryer top and locate the Hot Gas Bypass Valve. Remove cap on Hot Gas Bypass Valve and using an Allen wrench turn valve counter clockwise to decrease the suction pressure and clockwise to increase the suction pressure.

Make ½ turn adjustments and wait 2 to 3 minutes for suction pressure to stabilize. Make more adjustments if needed.



### **HIGH PRESSURE SHUTDOWN WITH MANUAL RESET**

Shuts the dryer down in the event of a dirty condenser, fan motor failure or excessively high ambient temperatures (Installed on UA150/MHT100 and above)

### **LOW PRESSURE SHUTDOWN**

Shuts the dryer down in the event of low ambient conditions or if there is a leak in the refrigeration system.



### **INTERNAL OVERLOAD**

The internal overload is a bi-metal switch that will open and stop the compressor if the temperature of the compressor is too high. The switch will re-set itself when the compressor cools to a lower temperature.

## **START UP**

The following procedure must be followed to start your air dryer. Failure to follow this start up procedure will void your warranty. If problems occur during start up, contact Altec AIR or your local distributor.

1. Turn the ON/OFF switch to the OFF position.
2. Verify the main electrical supply voltage matches the voltage specified on the data label.
3. Check the proper connection and support of the compressed air lines to the dryer: check dryer bypass and isolation valve system.
4. Confirm that the inlet and ambient air temperature, pressure and flow to the dryer meet the specified requirements.
5. Confirm that the condensate drain lines from the separator are properly piped to an environmentally approved disposal system
6. Check the refrigeration pressure on the Suction Pressure Gauge. If pressure is at 0 psig, DO NOT attempt to start the dryer. Call Altec AIR or your local distributor for assistance.

## **INITIAL RUN PROCEDURE**

After start up and checks are complete and after the main electrical power to the dryer has been connected, follow the procedure below to put the dryer in operation:

1. Turn ON the dryer ON/OFF switch.
2. Let the dryer run for 15 minutes.  
IMPORTANT NOTE: All 230/460/575 VAC, 3 Phase motors MUST be wired for proper rotation. After the air dryer is turned ON, the suction pressure should DECREASE (pull down) instantly. If the suction pressure does not pull down TURN OFF THE AIR DRYER IMMEDIATELY and contact your local distributor or Altec AIR for assistance
3. Check the Refrigerant Suction Pressure Gauge: (65 psig to 90 psig) Pressures will fluctuate due to loading and unloading of the digital scroll compressor.
4. Check the Refrigerant Discharge Pressure Gauge: (170 psig to 270 psig) Pressures will fluctuate due to loading and unloading of the digital scroll compressor.
5. Check the Dewpoint Temperature Indicator. After 15 min, the indicator should read 35F to 39F.
6. Slowly, allow compressed air to flow through the dryer.
7. Confirm that condensate is discharging from the condensate drain. This may take 30-60 minutes.
8. Make sure bypass valves are closed and 100% of the air from the compressor is flowing through the dryer.

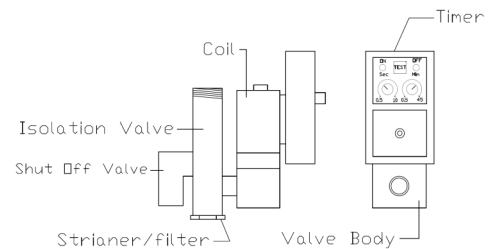
## **HOW TO SET THE CONDENSATE DRAIN OPEN & CLOSED TIME**

The OPEN (ON) time is adjustable from 0.5 sec to 10 sec. Drains are set at factory to open for 6 sec. When drain opens the on light will light. Push the TEST button to manually open the drain valve.

The CLOSED (OFF) time is adjustable 0.5 min to 45 min. Drains are set at factory to stay closed for 10 min. When drain is closed the off light will light. You may increase or decrease this based on moisture levels in the air.

### **TO CLEAN VALVE**

1. Close isolation valve
2. Push the push to test button to release the pressure
3. Remove strainer/filter and screen.
4. Clean screen and replace.



## **MAINTENANCE PROCEDURES**

### **Weekly Maintenance (or as Required)**

- Check the operation of the automatic drain valves at least once during each eight hour shift.
- Check Dew point Indicator to make sure it is the proper range. (UA10 to UA55 & MHT25)
- Check Suction Pressure Gauge to make sure it is the proper range. (UA75/MHT40 and larger)
- Check Discharge Pressure Gauge to make sure it is the proper range. (UA400/MHT200 and larger)
- Make sure condenser coil is clean and unobstructed. Clean Air Cooled Condenser Coil if necessary.  
**WARNING** - DRYER FAILURE DUE TO A DIRTY CONDENSER IS NOT COVERED UNDER WARRANTY

### **Monthly Maintenance**

- Clean Air Cooled Condenser Coils - Blow off all dust and dirt that is on the condenser with a compressed air maintenance gun. While cleaning the condenser fins do not damage fins.
- Clean Automatic Drain Valve - Close Isolation Valve; Push the Test Button to release the pressure; Remove strainer/filter and screen; Clean screen and replace.
- Check Compressed Air Filter Differential - Replace Elements if necessary

### **Yearly Maintenance**

- Replace Elements of Pre and Post Filtration - Replace per Filter Instructions annually or as required due to high differential.

## **HOW THE AIR DRYER WORKS - DX SERIES**

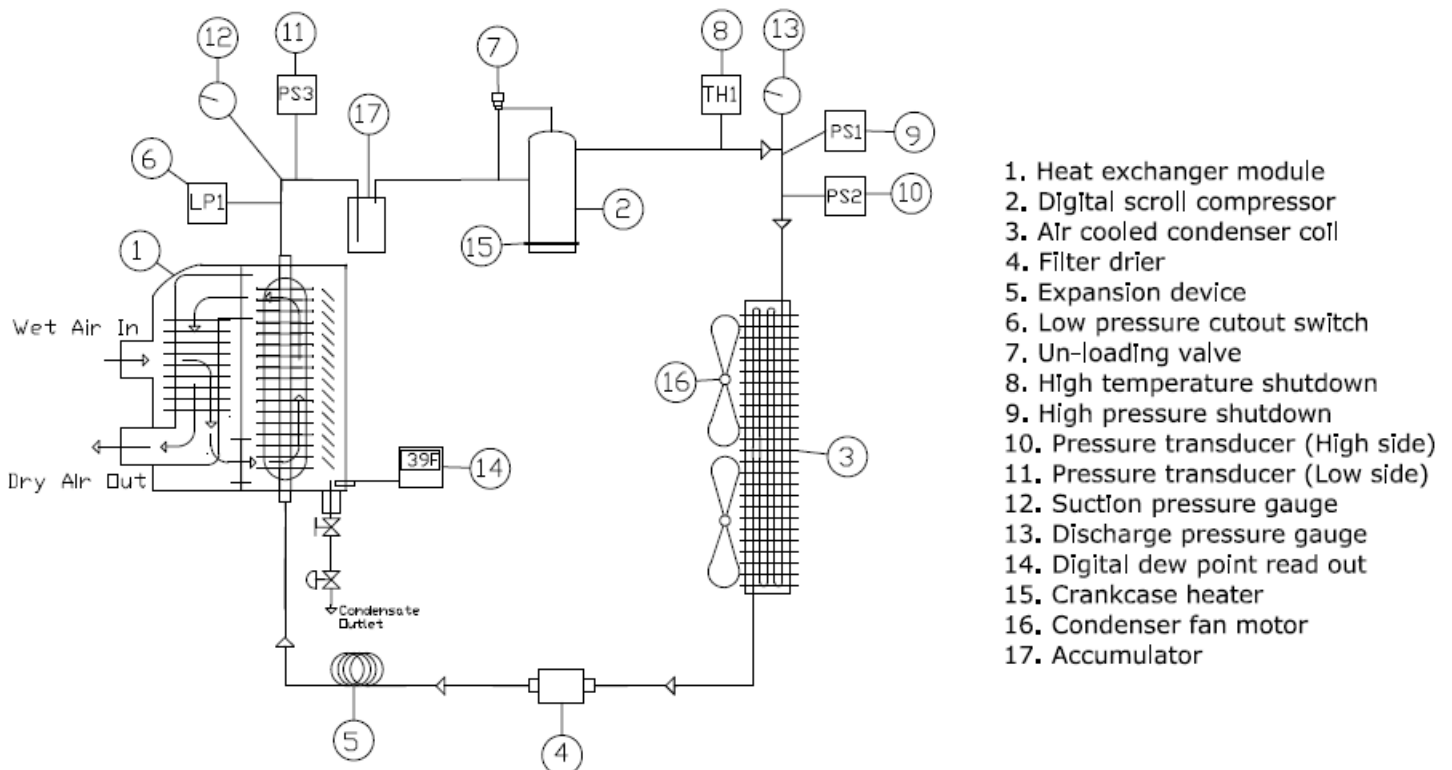
The DX Series air dryer featuring a digital scroll refrigeration compressor and capacity modulation control is the only type of air dryer that will respond during periods of lower compressed air usage by unloading the refrigeration compressor thereby reducing the power consumption of the dryer down to 10% of its typical full power (watts) running requirements.

The beauty of this technology is its inherent simplicity. The standard Scroll has a unique feature called axial compliance. This allows the fixed scroll to move slightly in the axial direction to ensure that the fixed and orbiting scrolls are always engaged together with the optimal force. This optimal force, which holds the two Scrolls together at all operating conditions, ensures high efficiency of Scroll.

The Digital Scroll operation builds on this principle. A piston is fixed to the top scroll to ensure that when the piston moves up, the top scroll also moves up. There is a modulation chamber at the top of the piston that is connected to the discharge pressure through a bleed hole of diameter 0.6 mm.

An external solenoid valve connects the modulation chamber with the suction side pressure. When the solenoid valve is in the closed position, the pressure on either side of the piston is discharged and a spring force ensures that the two scrolls are loaded together. When the solenoid valve is energized, the discharge gas in the modulation chamber is relieved to the low pressure. This causes the piston to move up and consequently the top scroll also moves up. This action separates the scrolls and results in no mass flow through the scrolls.

At this point the power consumption is reduced by 90%. De-energizing the external solenoid valve again loads the compressor fully and the compression is resumed.





## **DESCRIPTION OF COMPONENTS - DX SERIES**

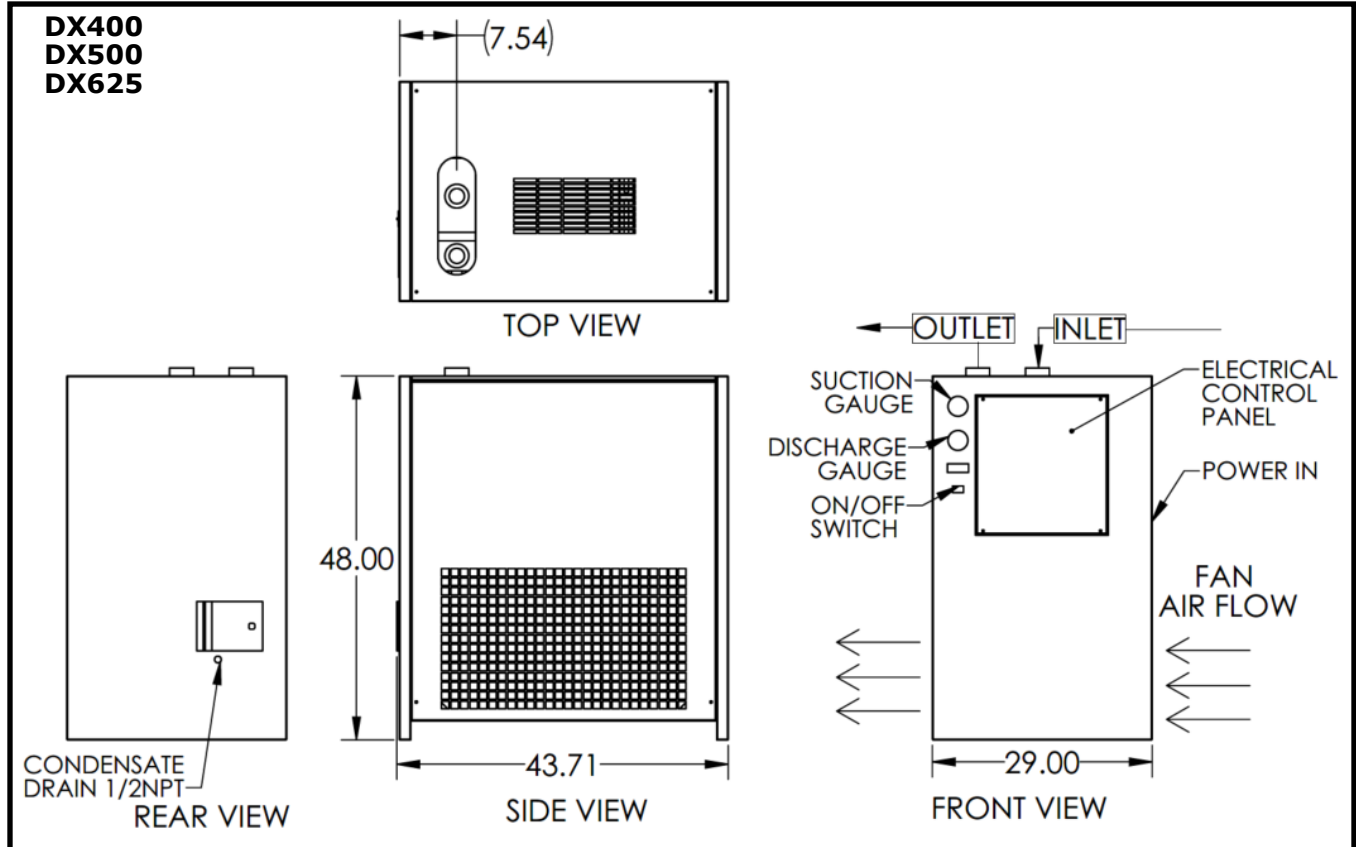
- 1. HEAT EXCHANGER MODULE:** The compact aluminum module contains the air to air heat exchanger the air to refrigerant heat exchanger and the moisture separator
- 2. DIGITAL SCROLL REFRIGERANT COMPRESSOR:** The main function of the compressor is to circulate the refrigerant. The compressor pumps refrigerant to the other components in the system so they can perform heat transfer functions. The compressor also separates the high pressure from the low pressure side of the refrigeration system.
- 3. AIR-COOLED CONDENSER:** One of the main functions of the condenser is to condense the high pressure and high temp refrigerant vapor to liquid. A heavy duty fan moves ambient air across the condenser coils removing heat from the refrigerant vapor. As the heat is removed the refrigerant vapor the temperature change causes the refrigerant to change state from a vapor to a liquid. The condenser is made from aluminum fins attached to copper tubes.
- 4. FLTER-DRIER:** Adsorbs and filters out any moisture or debris that maybe in the refrigeration system. Moisture can cause freeze ups and dirt particles can plug capillary tubes causing system malfunctions.
- 5. EXPANSION DEVICE:** The metering device meters liquid refrigerant from the liquid line to the evaporator. The capillary tube is a restriction that separates the high pressure side from the low pressure side in the refrigeration system.
- 6. LP1 - LOW PRESSURE SAFETY CUT OUT –** Prevents damage to the refrigerant compressor in the event of a refrigerant leak or low refrigerant pressure.
- 7. UN-LOADING VALVE –** respond to changes in suction pressure. As the air flow (Or heat load) on the dryer changes the suction pressure will change. An increase in air flow causes an increase in suction pressure a decrease in air flow causes a decrease in suction pressure. During periods of low air flow the HGBV meters hot gas from the hot gas line of the high side to the inlet of the air to ref
- 8. (TH1) HIGH TEMPERATURE SHUTDOWN:** Shuts off compressor if discharge gas temperature exceeds 290°F.
- 9. (PS1)HIGH PRESSURE SAFETY SHUTDOWN w/MANUAL RESET:** Prevents damage to the refrigerant compressor and other components in the event of high refrigerant pressure due to fan motor failure, dirty condenser or over capacity. CUT OUT: (R404A 405 PSIG)
- 10. (PS2)PRESSURE TRANSDUCER(HIGH SIDE):** Cycles the condenser fan motor on and off to maintain the proper condensing pressure dryer periods of fluctuating loads and ambient conditions. Fan#1 On 170psig, Fan #2 On 270 psig.
- 11. (PS3)PRESSURE TRANSDUCER(LOW SIDE):** Monitors evaporator pressure. Set to maintain an average 70 psig evaporator pressure. Under low loads the evaporator pressure will drop below 70 psig. The CLD controller will open the un-loading valve and stop the scroll compressor from pumping. When the suction pressure increases the valve will close and the compressor will resume pumping.
- 12. SUCTION PRESSURE GAUGE:** Continuously monitors the refrigerant suction or low side refrigeration system pressure. The suction pressure will fluctuate between 60 and 90 psig as the un-loading valve opens and closes. DX series dryers use R404a
- 13. REFRIGERATION DISCHARGE PRESSURE:** Continuously monitors the refrigerant discharge or high side pressure. The Discharge pressure will fluctuate between 170 and 270 psig.
- 14. DIGITAL DEWPOINT READOUT:** Continually monitors the lowest air temperature or dew point air temperature of the compressed air in the heat exchanger module.
- 15. DIGITAL SCROLL REFRIGERANT COMPRESSOR:** Semi – hermetic compressor continually pumps refrigerant through the refrigerant circuit.
- 16. CONDENSER FAN MOTORS:** Drives ambient air over condenser coils. Fan motors will cycle on and off based on the high side refrigeration pressure. One fan cycles on at 170 psig the other cycles on at 270 psig.

## **TROUBLE SHOOTING GUIDE**

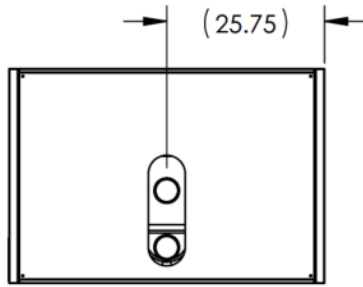
| <b>Problem</b>  | <b>Cause</b>   | <b>Solution</b>   |
|---|--|---|
| Excessive pressure loss in system                     | Bypass valve not completely open   | Open completely   |
|   | Pipe diameter too small  | Increase diameter   |
|   | Piping system has too many tie ins                                       | Redesign pipe system  |
|   | Leaks in piping system   | Fix leaks   |
|   | In line filter element clogged   | Replace filter element.   |
| Water downstream of dryer                             | Bypass valve not completely closed                                       | Close bypass valve  |
|   | Air not going through dryer  | Open inlet valve completely   |
|   | Under high flow conditions pressure drops significantly                  | Redesign compressed air source and check pipe diameter.                 |
|   | Auto drain plugged or not working.                                       | Clean drain or replace  |
|   | Dryer too small for inlet air flow                                       | Replace dryer or reduce inlet flow.                                     |
|   | No pre filter in system  | Install pre filter  |
| Evaporator pressure is too high or too low.           | Inlet air temp is too high   | Check air compressor after cooler                                       |
|   | Air cooled condenser is clogged  | Clean condenser   |
|   | Expansion valve is defective   | Replace expansion valve   |
|   | Refrigerant leak   | Find leak and fix. Add refrigerant                                      |
|   | Pressure gauge is bad  | Replace with new gauge  |
|   | Hot gas bypass needs adjusting   | Adjust valve to correct pressure.                                       |
| Power is on to the dryer but the dryer will not start | Fuse is bad  | Check for short, fix and replace fuse                                   |
|   | On/Off switch defective  | Replace switch  |
|   | No power going to dryer  | Check circuit breaker and power supply                                  |
|   | Power going to dryer is incorrect  | Make sure power source and data label match.                            |
|   | Contactors defective   | Replace with a new one  |
|   | Over load relay defective  | Replace with a new one  |
|   | Capacitor defective  | Replace with a new one  |
|   | Start relay defective  | Replace with a new one  |
|   | Pressure switch defective  | Replace with a new one  |
|   | Temp switch defective  | Replace with a new one  |
|   | Compressor defective   | Replace with a new one  |
|   | High Pressure switch is open Low pressure switch is open Thermostat open | Find reason and reset<br>Find reason and reset<br>Find reason and reset |
| Evaporator Temp is too low                            | Hot gas bypass valve needs adjusting                                     | Adjust or replace   |
|   | Evaporator pressure gauge bad  | Replace   |
|   | Capillary tube blocked   | Replace   |
|   | Temp or Pressure reset set to low  | Reset   |
|   | Refrigerant leak   | Find leak, fix it and add refrigerant                                   |
| Evaporator Temp is too high                           | Ambient temp too high  | Improve ventilation in area   |
|   | Hot Gas valve needs adjusting  | Adjust or replace   |
|   | Condenser blocked or plugged   | Clean condenser   |
|   | Flow is too high going in dryer  | Change air compressor   |
|   | Compressor valves are damaged  | Replace compressor  |

# TECHNICAL SPECIFICATIONS

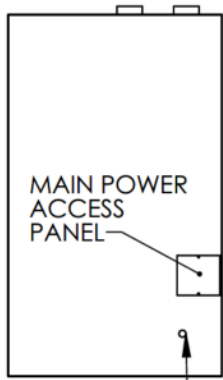
| SPECIFICATIONS                       | DX400A        | DX500A        | DX625A        | DX800A        | DX1000A       | DX1200A       | DX1600A       | DX2000A       |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>CAPACITY (SCFM)</b>               | 400           | 500           | 625           | 800           | 1000          | 1200          | 1600          | 2000          |
| <b>Inlet/Outlet Connection (NPT)</b> | 2" NPT        | 2" NPT        | 2-1/2" NPT    | 3" NPT        | 3" NPT        | 3" NPT        | 4" NPT        | 4" NPT        |
| <b>MIN/MAX INLET AIR PRESSURE</b>    | 0/232         | 0/232         | 0/232         | 0/232         | 0/232         | 0/232         | 0/232         | 0/232         |
| <b>MIN/MAX AMBIENT TEMP</b>          | 35/110°F      | 35/110°F      | 35/110°F      | 35/110°F      | 35/110°F      | 35/110°F      | 35/110°F      | 35/110°F      |
| <b>MAX. INLET TEMP</b>               | 110°F         | 110°F         | 110°F         | 110°F         | 110°F         | 110°F         | 110°F         | 110°F         |
| <b>VOLTAGE (STANDARD)</b>            | 460V-3PH-60HZ | 460V-3PH-60HZ | 460V-3PH-60HZ | 460V-3PH-60HZ | 460V-3PH-60HZ | 460V-3PH-60HZ | 460V-3PH-60HZ | 460V-3PH-60HZ |
| <b>VOLTAGE RANGE</b>                 | 414-506       | 414-506       | 414-506       | 414-506       | 414-506       | 414-506       | 414-506       | 414-506       |
| <b>REF. COMP. HP</b>                 | 2             | 3             | 3             | 4             | 5             | 6             | 8             | 10            |
| <b>RLA</b>                           | 6.5           | 7.1           | 7.1           | 7.9           | 11            | 11            | 29            | 30            |
| <b>LRA</b>                           | 38            | 39            | 39            | 46            | 75            | 75            | 95            | 150           |
| <b>MAX FUSE SIZE</b>                 | 15            | 15            | 15            | 15            | 15            | 30            | 30            | 30            |
| <b>REFRIGERANT TYPE</b>              | R404a         | R404A         | R404A         | R404A         | R404A         | R404A         | R404A         | R404A         |
| <b>REFRIGERANT QTY.</b>              | CF            | CF            | CF            | CF            | CF            | CF            | CF            | CF            |
| <b>SHIPPING WGT. (LBS)</b>           | 486           | 510           | 530           | 855           | 865           | 900           | 1400          | 1595          |



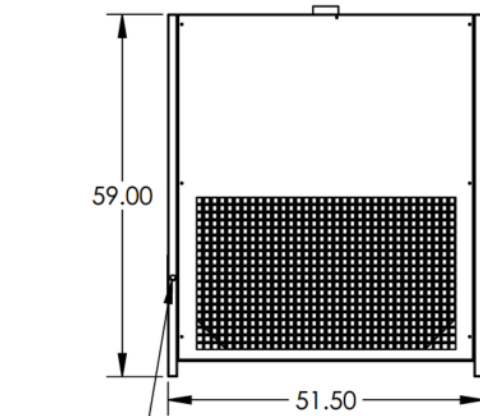
**DX800  
DX1000  
DX1200**



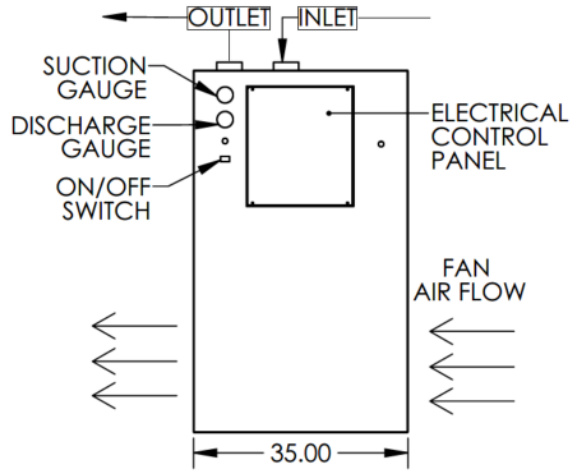
TOP VIEW



REAR VIEW

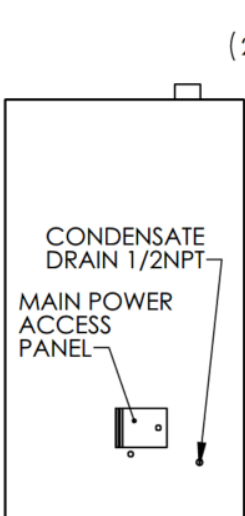
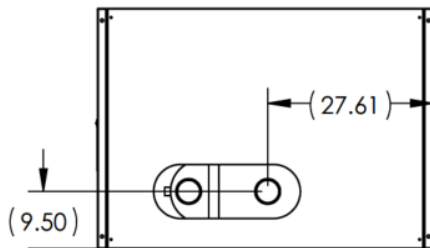


SIDE VIEW

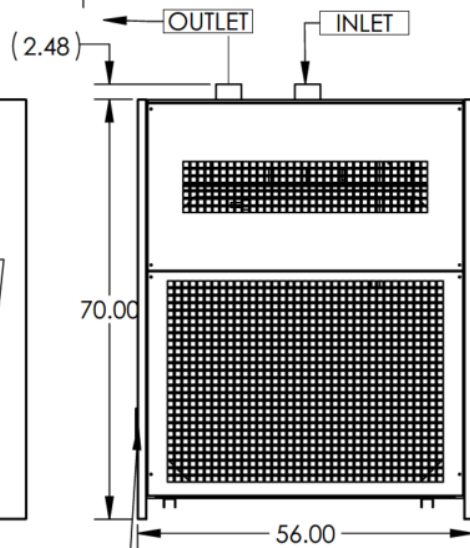


FRONT VIEW

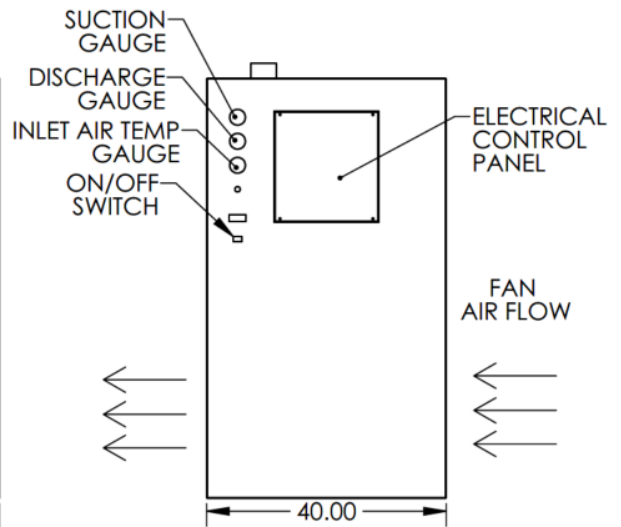
**DX1600  
DX2000**



REAR VIEW

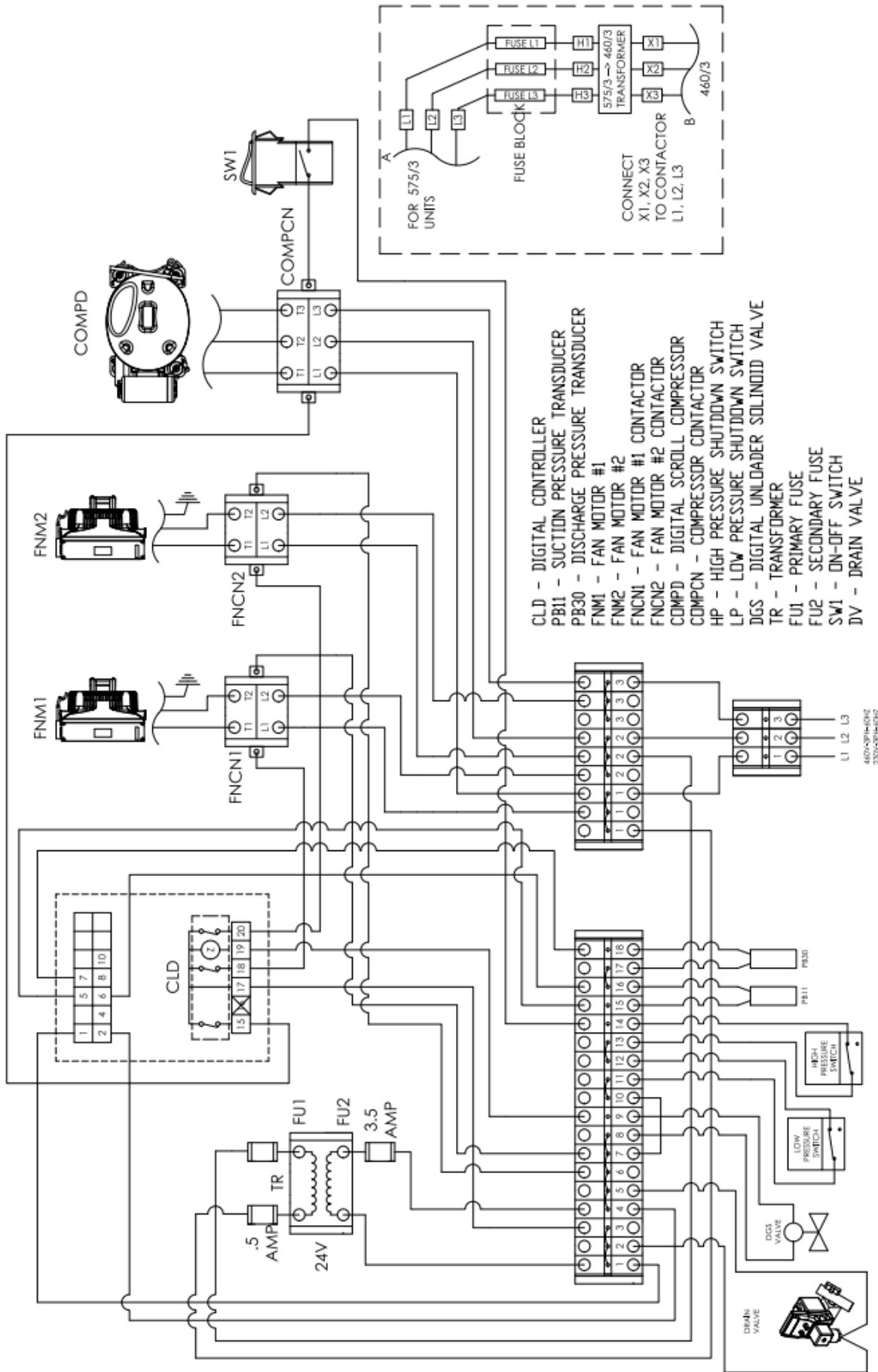


SIDE VIEW



FRONT VIEW

# ELECTRICAL SCHEMATICS



100520407 - C

