P550W Series Air Dryers



User's Guide

Models covered:

P550W P550WH P550WLP P552W P552WH P552WLP





WARNING:

This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer/birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

1. Welcome & Congratulations

Congratulations on your purchase of a new ALTEC AIR P550W Series Air Dryer! We here at ALTEC AIR are very proud of our products and we are committed to providing you with the best value and service possible.

We are sure that you will be satisfied with your new air dryer and would like to thank you for choosing ALTEC AIR for your air dryer requirements. We also hope that you will continue to choose us for your future air pressure and related product purchases.

For information about this and other ALTEC AIR products, please visit us on the web at:

www.AltecAIR.com

2. Introduction

PLEASE READ THIS USER'S GUIDE THOROUGHLY AND SAVE FOR FUTURE REFERENCE.

This User's Guide is provided for the benefit of our customers and contains information and direction specific to the ALTEC AIR P550W Series Air Dryers. Models covered include P550W, P550WH, P550WLP, P552W, P552WH, and P552WLP. This guide covers topics including safety, specifications, installation, registration, operation, testing, maintenance, replacement parts, service, and troubleshooting issues. Observation and compliance with this User's Guide will ensure the maximum life and efficiency of your air dryer.

This User's Guide should be read thoroughly prior to installing, operating, or servicing the air dryer in order to become familiar with the recommended procedures. This will minimize the possibility of personal injury or damage to the unit due to improper operation or handling.

3. Table of Contents

1. Welcome & Congratulations
2. Introduction
3. Table of Contents4
4. Safety & Warning Information6
5. Overview & Specifications
5.1 Product Description8
5.2 Key Features
5.3 P550W Series Air Dryer Models8
5.4 Technical Specifications9
5.5 Dryer Function Overview10
6. Installing Your Dryer11
6.1 Safety & Warning Information11
6.2 Before You Begin12
6.3 Included Contents13
6.4 Required Tools and Materials13
6.5 Installation Steps14
6.6 Installation Checklist21
7. Registering Your Dryer22
8. Operating Your Dryer23
8.1 Safety & Warning Information23
8.2 Depressurizing the Dryer24
8.3 Powering the Dryer ON & OFF24
8.4 Using the Front Panel Display25
8.5 Identifying Dryer Alarms27
8.6 Accessing the Setup Menu29
8.7 Using the System Setup Menu30
8.8 Using the Alarm Setup Menu36
8.9 Connecting to Common Alarm Terminals
46

8.10 Connecting to Power Fail Alarm
Terminals46
8.11 Connecting via Web Browser47
8.12 Using the Status Screen48
8.13 Using the Configuration Screen50
8.14 Using the Event Screen51
8.15 Using the Firmware Screen52
8.16 Connecting via SNMP53
9. Testing Your Dryer54
9.1 Safety & Warning Information54
9.2 Measuring Compressor Amp Draw55
9.3 Measuring Compressor Voltage56
9.4 Measuring Incoming Voltage57
9.5 Testing Consistent Heatless Dryer
Cycling58
9.6 Testing Unloader Valve60
9.7 Measuring Heatless Dryer Solenoid
Voltage61
9.8 Testing62
9.9 Air Dryer Fan62
9.10 Testing Compressor ON/OFF Cycling 63
9.11 Testing High Compressor Last Run
Time Alarm64
9.12 Testing Humidity Alarm and System
Shutdown65
9.13 Testing High Outlet Pressure Alarm67
9.14 Testing Low Outlet Pressure Alarm68
9.15 Testing Air Fittings & Hoses for Leaks
69
10. Maintaining Your Dryer
10.1 Safety & Warning Information72
10.2.6 Month Maintenance

11. Replacement Parts & Accessories76

10.3 8,000 Hour Maintenance......75

ALTEC AIR, LLC

P550W Series Air Dryers User's Guide

13.15 Compressor Won't Build Pressure89
13.16 Compressor Excessive AMP Draw89
13.17 High Compressor Last Run Time
Alarm
13.18 Can't Create a High Compressor Last
Run Time Alarm90
13.19 Compressor Rapid ON/OFF Cycling.91
13.20 Contacting ALTEC AIR Technical
Support92
14. Appendix93
14.1 Wiring Diagram93
14.2 Set Point Limits and Defaults94
14.3 SNMP Parameters95
15. Limited Warranty Agreement96
Registration Reminder96
16. Contacting ALTEC AIR97
16.1 General97
16.2 Sales97
16.3 Service97
16.4 Technical Support97
17. Notes98

4. Safety & Warning Information

This section contains general information about safety and warning points to consider and adhere to during installation, operation, and maintenance of your air dryer. PLEASE READ THIS SECTION BEFORE PERFORMING ANY OPERATION OR PROCEDURE ON YOUR AIR DRYER.

Additional warnings specific to an operation or procedure will also be presented throughout the following sections. These will include the A symbol as well as a label of "<u>WARNING!</u>", "<u>CAUTION!</u>", or "<u>IMPORTANT!</u>". Please be sure to pay close attention for these warnings and read them as you encounter them.



WARNING!

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air Dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



CAUTION!

Proper Installation & Maintenance as outlined in this User's Guide is extremely important to ensure the reliability and longevity of the equipment as well as prevent damage or personal injury.



CAUTION!

Depressurizing the air Dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the Control Board without depressurizing the air Dryer first, or **damage to the Control Board will occur.**



CAUTION!

Incoming power to Dryer must be:

- 15 amp service recommended
- 110 125 VAC, 50/60 Hz for P550W models
- 208 253 VAC, 50/60 Hz, 1 Phase for P552W models



IMPORTANT!

Performing routine maintenance as outlined in the *Maintaining Your Dryer* section will ensure optimal performance over the lifecycle of your air Dryer.



IMPORTANT!

Performing procedures not described in this User's Guide or installing components not supplied by ALTEC AIR is NOT RECOMMENDED AND MAY VOID THE WARRANTY.

5. Overview & Specifications

5.1 Product Description

The P550W Series Air Dryers from ALTEC AIR are designed to intake wet ambient air and remove the moisture for delivery to applications requiring a constant, ondemand source of dry, pressurized air. This process is fully automatic and will remain consistent with minimal required periodic maintenance. These dryers are designed specifically for indoor use.

The P550W Series Air Dryers employ a fully digital operating platform offering the most accurate readings of dryer variables, removable access panel allowing easier access for adjustment and maintenance, and ultra-quiet compressor with an industry leading maintenance interval of 8,000 hours.

5.2 Key Features

- LCD display of all operating parameters
- Solid state microprocessor-based circuitry eliminates costly maintenance
- Accurate humidity sensing within $\pm 0.1\%$ RH
- Quietest Dryer on the market less than 50 dBA
- Oil-less compressors with 8,000-hour maintenance interval

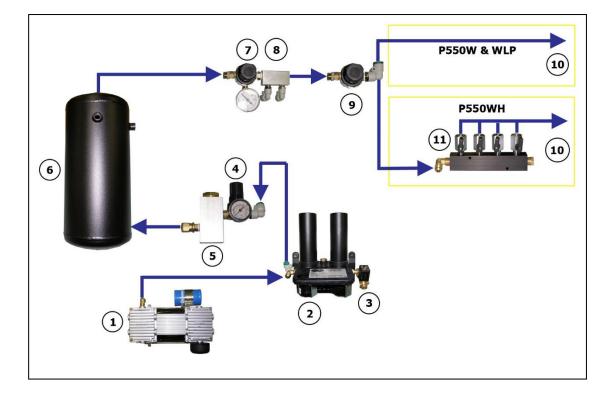
5.3 P550W Series Air Dryer Models

Model	Description
P550W	Single Pressure Outlet, 110 - 125 VAC, 2 - 15 PSI
P550WH	4-Bank Outlet Manifold, 110 - 125 VAC, 2 - 15 PSI
P550WLP	Low Pressure, Single Pressure Outlet, 110 – 125 VAC, 0.30 – 7.50 PSI
P552W	Single Pressure Outlet, 208 - 253 VAC, 2 - 15 PSI
P552WH	4-Bank Outlet Manifold, 208 - 253 VAC, 2 - 15 PSI
P552WLP	Low Pressure, Single Pressure Outlet, 208 - 253 VAC, 0.30 - 7.50 PSI

5.4 Technical Specifications

	P550W	P550WH	P550WLP	P552W	P552WH	P552WLP
Output Capacity	Normal: Up to 350 SCFD (9.9 SCMD) continuous Maximum: 550 SCFD (15.6 SCMD) emergency					
Power Requirements	110 - 125 VAC, 50 / 60 Hz, 7.0 Amps			208 - 253 VAC, 1 Phase, 50 / 60 Hz, 3.5 Amps		
Outlet Pressure Range	2 – 15 PSI (13.8-103.4 KPa)		0.3 - 7.5 PSI (2-52.7 KPa)	2 – 15 PSI 13.8-103.4 KPa		0.30 – 7.50 PSI 2-52.7 KPa
Outlet Air Humidity	Less than 2% RH					
Compressor Type	Two-cylinder, 1/2 HP, oil-less type					
Drying Method	Heatless Desiccant					
Operating Temperature Range	40° to 85° F (optimal) 4.4° - 30° C					
Noise Level	51 dBA at 3', 48 dBA at 10'					
Alarms	Standard alarms – complete readings of all critical measurement points, individual alarm indication display, including SNMP communication					
Outlet Connections	3/8" O.D. tube fitting	3/8" Press-to- lock, 4- bank manifold with shut off valves	3/8" O.D. tu	C	3/8" Press-to- lock, 4- bank manifold with shut off valves	3/8" O.D. tube fitting
Dimensions	12" D x 17.25" W x 27" H (30.5 cm D x 43.815 cm W x 68.6 cm H)					
Net Weight	74 lbs (33.6 Kg)					

5.5 Dryer Function Overview



#	Component	Description
1	Compressor	Compresses drawn in ambient air.
2	Heatless Dryer	Removes moisture from compressed air.
3	Unloader Valve	Relieves excess Compressor head pressure.
4	Capacity Control Valve	Regulates System Pressure and prevents air from
		bleeding back through the Heatless Dryer.
5	Humidity Sensor	Measures the Humidity of the compressed air.
6	Air Tank	Stores dry compressed air.
7	Static Pressure Regulator	Regulates the Static Pressure (17 PSI).
		Maintains constant pressure on the Flow Block
		for accurate Flow measuring.
8	Flow Block	Measures the Flow of compressed air.
9	Outlet Pressure Regulator	Regulates the Outlet Pressure.
10	Pressure Outlet	Outputs the pressure set by the Outlet Pressure
		Regulator.
11	4-Bank Outlet Manifold	Distributes the air into 4 separate outlets.

6. Installing Your Dryer

6.1 Safety & Warning Information



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air Dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



CAUTION!

Proper Installation & Maintenance as outlined in this User's Guide is extremely important to ensure the reliability and longevity of the equipment as well as prevent damage or personal injury.



CAUTION!

Incoming power to Dryer must be:

- 15 amp service recommended
- 110 125 VAC, 50/60 Hz for P550W models
- 208 253 VAC, 50/60 Hz, 1 Phase for P552W models



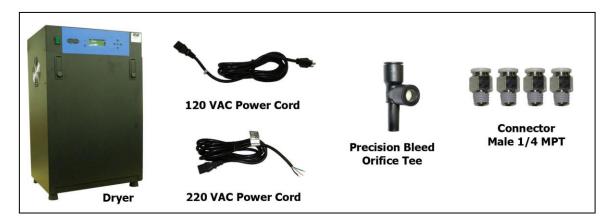
IMPORTANT!

Performing procedures not described in this User's Guide or installing components not supplied by ALTEC AIR is NOT RECOMMENDED AND MAY VOID THE WARRANTY.

6.2 Before You Begin

- 6.2.1 Carefully inspect the unit, including the shipping box as well as the air Dryer, for ANY DAMAGE CAUSED BY SHIPPING. If any shipping damage is detected, it is important to file a claim with the shipping company prior to continuing the installation procedures.
- **6.2.2** Read the entire *Installing Your Dryer* section to familiarize yourself with the components and procedures before performing the air Dryer installation.
- **6.2.3** Verify the installation location of the air Dryer:
 - **6.2.3.1** Well ventilated and free from abrasive dust or chemicals.
 - **6.2.3.2** Ambient temperature is between 40° to 85° F (4.4° and 30°C). **NOTE:** Higher temperatures will decrease component lifespan.
 - **6.2.3.3** Meets the following power requirements:
 - 110 125 VAC for P550W, P550WH and P550WLP models
 - 208 253 VAC, 1 Phase for P552W, P552WH and P552WLP models
 - All models require 50/60 Hz and minimum 15 amp service
- **6.2.4** Notify the alarm center of the installation and potential for alarms during the process (as necessary).

6.3 Included Contents



- (1) P550W Series Air Dryer
- (1) Installation Guide (not shown)

Package located inside the Dryer:

- (1) 120 VAC Power Cord (P550W, P550WH, P550WLP)
- (1) 220 VAC Power Cord (P552W, P552WH, P552WLP)
- (4) Connector, Male 1/4 MPT (P550WH, P552WH)
- (1) Tee Tube Union
- (1) Precision Bleed Orifice Fitting
- (1) User's Guide (not shown)

6.4 Required Tools and Materials

- Medium adjustable wrench
- Box Cutter

- Cup of soapy water
- 1-inch paint brush (recommended)

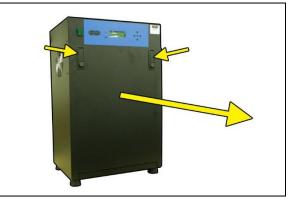
6.5 Installation Steps

6.5.1 Using a box cutter remove the Dryer from box and all shipping materials.

NOTE: If ANY SHIPPING DAMAGE is detected, file a claim with the shipping company prior to continuing the installation procedures.

6.5.2 Open panel locking latches and remove the front panel.

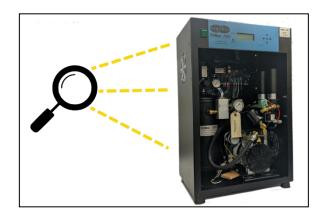




6.5.3 Check for loose parts, hoses, or wiring.

NOTE: If ANY SHIPPING

DAMAGE is detected, file a claim with the shipping company prior to continuing the installation procedures.

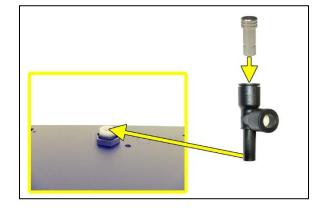


6.5.4 Remove the ship-loose contents package.



For SINGLE Outlet dryers:

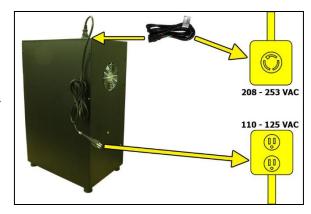
- **6.5.5** Remove the Plug from the Outlet Port by pressing the ferrule down then pulling the plug upward.
- **6.5.6** Install the Plug into the included Precision Bleed Orifice Fitting and then into the dryer Outlet Port.



For 4-Port Outlet dryers:

- **6.5.7** Remove four (4) Outlet Port plugs.
- **6.5.8** Install four (4) Outlet Port Connectors.
- **6.5.9** Place the Dryer at the desired operating location:
 - Place the Dryer on a leveled surface
 - For rack install use Universal Rack Mounting Kit P011674 (section 11.4)
 - For wall install use Wall Mounting Kit P011773 (section 11.4)

- 6.5.10 Verify that the Dryer is powered OFF.
- **6.5.11** Plug AC Power Cord to Dryer.
- **6.5.12** Wire or plug the power cord into:
 - 110 125 VAC power outlet for P550W, P550WH, and P550WLP models



- 208 253 VAC, 1 phase, power outlet for P552W, P552WH, and P552WLP models.
 - Line Black (Brown)
 - Neutral White (Blue)
 - Ground Green (Green/Yellow)
- 6.5.13 Power the Dryer ON.

NOTE: The compressor and heatless Dryer will start, creating air flow through the Outlet Port.

For 4-Port Outlet dryers:

6.5.14 Open the first Outlet Port slightly to create a small amount of air flow.

6.5.15 Set the System Pressure:

With Compressor running:6.5.15.1 Pull the Capacity Control Valve knob out.



- 6.5.15.2 Turn the knob until the reading on the pressure gauge is 50 PSI.
- 6.5.15.3 Push the knob in to lock.



6.5.16 Let the Dryer run until the Humidity drops below 2%. (may take up to 15 minutes).

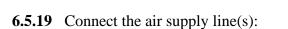
NOTE: Press the **RESET** button if the Dryer goes into **SHUTDOWN** mode.

6.5.17 Power the Dryer OFF.

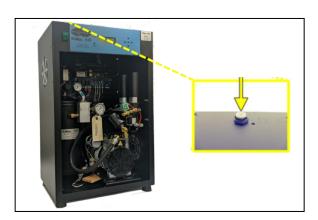
For SINGLE Outlet dryers:

6.5.18 Remove the Precision Bleed Orifice fitting from the Outlet Port by pressing the ferrule down then pulling the fitting upward.

NOTE: Save this fitting for use in low flow applications.



For SINGLE Outlet dryers:6.5.19.1 Connect a 3/8" air supply line to the Outlet Port.

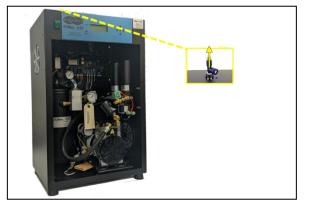


For 4-Port Outlet dryers:

6.5.19.2 Connect up to four(4) 3/8"air supply lines to the Outlet Ports.

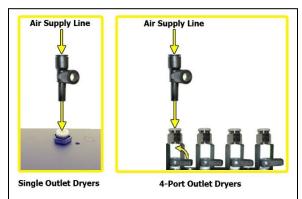
Open Outlet Ports as required.





NOTE: For all dryers with minimal FLOW:

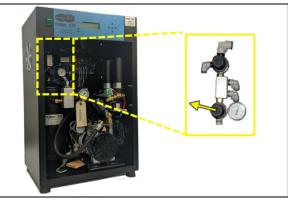
Install the included Precision Bleed Orifice fitting to maintain a constant air flow.



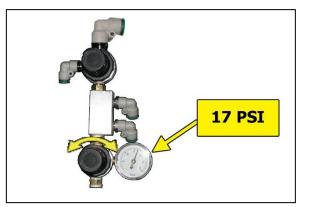
6.5.20 Power the Dryer **ON**.

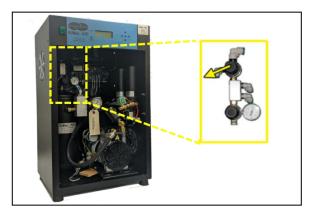


6.5.21 Set the Static Pressure:6.5.21.1 Pull Static Pressure Regulator knob out.



- **6.5.21.2** Turn knob until the reading on the pressure gauge is **17 PSI**.
- 6.5.21.3 Push knob in to lock.
- **6.5.22** Set the Outlet Pressure:
 - 6.5.22.1 Pull the Outlet Pressure Regulator knob out (or loosen the retaining nut – LP Models).





6.5.22.2 Turn knob until Outlet Pressure (**OUTP**) reading is at the desired setting.

6.5.22.3 Push knob in to lock (or tighten the retaining nut – LP Models)

6.5.23 Check for air leaks:

NOTE: This is a general procedure that can be applied to any fitting or hose that has air pressure in it. **DO NOT SOAP TEST THE HUMIDITY SENSOR FITTING. DAMAGE TO THE SENSOR MAY OCCUR.**

With Compressor NOT running:

6.5.23.1 Listen for any 'hissing' sounds which may indicate a fitting or hose air leak.

With Compressor running:

6.5.23.2 Use a 1-inch paint brush to dab soapy water on the air fitting or hose connection to be tested.



If air bubbles appear at the

connection, this indicates that air is leaking from the connection.

If any leaks are detected, take steps to seal them off (as necessary):

- *Tighten the fitting*
- Re-connect the hose end
- Replace the fitting / hose / component

6.5.24 Re-install the front panel.

6.5.25 **REGISTER YOUR DRYER.** See section 7. for details.

6.6 Installation Checklist

- □ No shipping damage was detected.
- □ Dryer location meets the following requirements:
 - Well ventilated
 - Free from abrasive dust or chemicals
 - \circ Ambient temperature is between 40° and 85° F (optimal)
- □ System Pressure is set to 50 PSI.
- □ Static Pressure is set to 17 PSI.
- \Box No air leaks are present in the system.
- □ No alarms are present on the Display Panel.

7. Registering Your Dryer

Please take a moment to register your ALTEC AIR P550W Series Air Dryer. Registering is necessary to activate the Limited Warranty on your product. Once you register, you are eligible to receive free technical support, as well as updates concerning your ALTEC AIR products.

Register Online at	www.AltecAIR.com/registration
Or by Phone	1-800-521-5351 (option 2)

Have the following information available:

Model #:	Serial #:	Serial #: Location Name:			
Company Name:	Location N				
Shipping Address:					
City:	State:	Zip Code:			
Contact Name:	Phone #: () - ext.			
Email:					

8. Operating Your Dryer

8.1 Safety & Warning Information



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air Dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



IMPORTANT!

Performing procedures not described in this User's Guide or installing components not supplied by ALTEC AIR is NOT RECOMMENDED AND MAY VOID THE WARRANTY.

8.2 Depressurizing the Dryer

- CAUTION: Be careful when removing air hose. System is pressurized.
- **8.2.1** Disconnect air hose from the quick disconnect connector located on top of Outlet Pressure Regulator.



- **8.2.2** To prevent pressure from building back up, power the Dryer **OFF** (*See section* 8.3).
- **8.2.3** Reconnect air hose.

8.3 Powering the Dryer ON & OFF



CAUTION!

Incoming power to Dryer must be:

- 15 amp service recommended
- 110 125 VAC, 50/60 Hz for P550W models
- 208 253 VAC, 50/60 Hz, 1 Phase for P552W models

8.4 Using the Front Panel Display

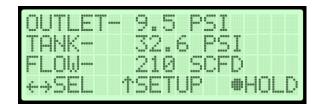


CAUTION!

The Display Screen is covered by a clear protective layer that guards against Electrostatic Discharge (ESD). DO NOT REMOVE THIS LAYER.

- **8.4.1** ALARM LED Indicates an alarm is present.
- **8.4.2 RESET Button** Clears an alarm and allows the system to continue operating.
- 8.4.3 HOLD Button Freezes the current information screen on the display.When pressed again, it will allow the information screens to begin cycling again.
- **8.4.4** Arrow Buttons Used to navigate screens and set values
- **8.4.5 Display Screen** Shows the current Dryer readings. Will cycle between the following information screens (unless the **HOLD** button has been pressed):

8.4.5.1 Tank Screen



OUTLET – Outlet Pressure regulated by the Outlet Pressure Regulator

TANK – Air Tank pressure

FLOW – Outlet flow of the dryer

8.4.5.2 Runtime Screen



DUTY CYCLE: (Time Running)/(Time Running + Time Off)%

LAST RUN – How many minutes the compressor ran during the last Air Tank pressurization cycle.

TOTAL TIME – How many hours the compressor has run since the last Comp Run Reset.

8.4.5.3 System Status Screen



SYS STATUS: ONLINE if dryer working normally, SHUTDOWN

during temperature or humidity alarm

CABINET – Cabinet Temperature

HUMIDITY – Outlet Humidity

8.5 Identifying Dryer Alarms

8.5.1 High Outlet Pressure Alarm -

Occurs when the Outlet Pressure

(OUTP) rises above the alarm set

point for more than one (1)

minute.

OUTLET- TANK- FLOW-	9.5 PSI	
TANK-	32.6 PS	
FLOW-	210 SCF	
é⇒SEL	†SETUP	<pre> HOLD </pre>

(Default setting is 10.0 PSI for Standard models / 7.50 PSI for LP models) See section 13.5 for troubleshooting information.

8.5.2 Low Outlet Pressure Alarm –

Occurs when the Outlet Pressure (**OUTP**) drops below the alarm set point for more than one (1) minute.

OUTLE	- 9.5 PSI LALR
TANK-	32.6 PSI
FLOW-	210_SCFD
é⇒SEL.	TSETUP #HOLD

(Default setting is 2.0 PSI for Standard models / 0.30 PSI for LP models) See section 13.7 for troubleshooting information.

8.5.3 High Flow Rate Alarm –

Occurs when the Flow Rate (**FLOW**) rises above the alarm set point for more than one (1) minute. (Default setting is 500 SCFD)



See section 13.11 for troubleshooting information.

8.5.4 High Humidity Alarm –

Occurs when the Humidity level rises above the alarm set point for more than one (1) minute. (Default setting is 10.0%)

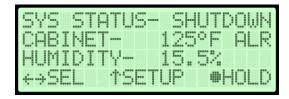
SYS :	STATUS-	- SHUTDOL	ŀN
CABI		81°F	
HUMII		15.5%AL	
é÷SEI	. 19E	TUP #HOL	D

If this alarm is present for one (1) minute or more, the air Dryer will go into **SHUTDOWN** mode to prevent saturated air from being delivered to the supply line.

See section 13.9 for troubleshooting information.

8.5.5 High Cabinet Temperature Alarm -

Occurs when the temperature in the cabinet rises above 120°F for more than ten (10) seconds.



If this alarm is present for three (3) minutes or more, the Compressor will **SHUTDOWN** to protect against damage due to overheating. Once the temperature lowers to 112°F the Compressor will re-start. *See section Ofor troubleshooting information.*

8.5.6 High Compressor Last Run Time Alarm –

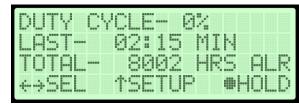
Occurs when the compressor takes longer to pressurize the air tank than the set point for the alarm. (Default setting is 3:00 minutes)



See section 13.17 for troubleshooting information.

8.5.7 Compressor Total Hour Alarm –

Occurs when the compressor has reached an 8,000 hour maintenance interval. Perform the required maintenance.



See section 10.3 for maintenance information.

8.6 Accessing the Setup Menu

The P550W has three (3) Setup sections:

- **System Setup** Used to set specific values for the system.
- Alarm Setup– Used to set the alarm thresholds for specific readings. Once the threshold is reached (or exceeded) this results in an alarm. Each of these thresholds is factory programmed with a default value. Many of can be modified to levels based upon your specific application.
- Network Setup Used to configure network settings including the IP Address, Subnet Mask, Gateway Address, and Keyword.

NOTE: Reference Appendix Section 14.2 for Limits, Defaults, and Formats.

- 8.6.1 Press the Up (↑) Arrow Button to access the Setup Menu.
- 8.6.2 Press the Up (↑) & Down (↓)Arrow Buttons to Select the required menu option.
- SYSTEM 1 : ONLINE HUMIDITY- 1.9% DUTY CYCLE- 29% ↔SEL ↑SETUP ●HOLD SYSTEM SETUP ALARM SETUP NETWORK SETUP +ESC ↑↓SEL ●ENTER
- 8.6.3 Press the Enter (●) Button to access the menu selected or press the Left
 (←) Arrow Button to Escape to the information screens.

8.7 Using the System Setup Menu

In the Setup Menu:

- 8.7.1 Press the Up (↑) & Down (↓) Arrow Buttons to Select the "S" in System Setup.
- 8.7.2 Press the Enter (●) Button to access System Setup.

SYSTEM ALARM (. - - ²	
NETWORK +ESC	⊂ SETUP ↑↓SEL	•ENTER

8.7.3 Set Alarm Delay (default setting is ON) -

8.7.3.1 Press the Enter (●)Button to access the edit screen.

	S		T	β	LC	R	4	D	AΥ	
					C	FF	-			
				* 1	c		-, 1	1	 	
÷t	:3	C		1.4	bC	-rae	01	1		te

- 8.7.3.2 Press the Up & Down Arrow Buttons to Select the correct choice ($\underline{O}n$ or $\underline{O}ff$).
- 8.7.3.3 Press the Enter (●)Button to submit the selection.

SE	Т	ALA	ARM	D	ELAY
		0)FF		
		*	IC.		mCatae
		13	koe	1	Tenter

8.7.3.4 Press the Left (←) &
Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

SET	ALARM DELAY
	OFF
HKb	. YUU_SUKE_¥ N
	î î↓Sel @Enter

- 8.7.3.5 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- **8.7.4** Press the Up (\uparrow) Arrow Button to access the next screen.

8.7.5 Set Start Up Delay (default setting is 0 seconds) -

8.7.5.1 Press the Enter (●)Button to access the edit screen.

	S		T			-				-			 	P	Y		
ļ									_		N	_					
																S	
÷		5	0	ľ	÷	b	C	ľ	0	1	1		Ŀ.,	ľ	U.	8	ľ,

8.7.5.2 Press the Up & Down Arrow Buttons to Select the digit to change.

SE	ΓS	STAR	(TU	ΡD	ELAY
	6	3 <u>0</u> S	EC	OND	S
	(RP	INGE		0-1	0)
		<u>†</u> 4	Se	1	●Enter

- 8.7.5.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- **8.7.5.4** Press the Enter (\bullet) Button to submit the new setting.

8.7.5.5 Press the Left (←) &
Right (→) Arrow Buttons to
Select the correct choice
(<u>Y</u>es or <u>N</u>o).

S		T	S	T	A	R	T	U	Ρ		D	L	Α	Ŷ	
											D				
	A	R		Y	0	U		5	U	R		Y		N	
					Ť	÷	C	h	9				m	t	er

- 8.7.5.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- **8.7.6** Press the Up (\uparrow) Arrow Button to access the next screen.

8.7.7 Reset Compressor Total Time -

- 8.7.7.1 Press the Enter (●)Button to access the reset screen.
- 8.7.7.2 Press the Left (←) &
 Right (→) Arrow Buttons to
 Select the correct choice
 (<u>Y</u>es or <u>N</u>o).

RES	ET SYS	1 COMP
TOTAL	. TIME-	3256 HRS
÷Esc	t↓Scro	11 •Enter



- 8.7.7.3 Press the Enter (●) Button to confirm the selected choice. This will reset the Total Time to zero (0).
- **8.7.8** Press the Up (\uparrow) Arrow Button to access the next screen.

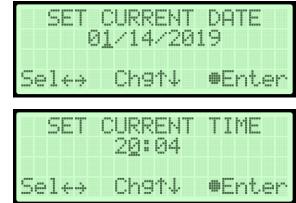
8.7.9 Reset to Factory Default Values -

- 8.7.9.1 Press the Enter (●)Button to access the reset screen.
- 8.7.9.2 Press the Left (←) &
 Right (→) Arrow Buttons to
 Select the correct choice
 (<u>Y</u>es or <u>N</u>o).

 RESET TO FACTORY DEFAULT VALUES
 +Esc ↑↓Scroll ●Enter
 RESET TO FACTORY DEFAULT VALUES ARE YOU SURE Y N ●Enter

- 8.7.9.3 Press the Enter (●) Button to confirm the selected choice. This will reset all settings to Factory Default Values
- **8.7.10** Press the Up (\uparrow) Arrow Button to access the next screen.
- 8.7.11 Set Date -
 - 8.7.11.1 Press the Enter (●)Button to access the edit screen.
 - 8.7.11.2 Press the Left (←) &
 Right (→) Arrow Buttons to Select the digit to change.
 - 8.7.11.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.

SET CURRENT DATE 01/14/2019 +Esc ↑↓Scroll ●Enter



8.7.11.4 Press the Enter (\bullet) Button to submit the new setting.

8.7.11.5 Press the Left (←) &
Right (→) Arrow Buttons
to Select the correct
choice (<u>Y</u>es or <u>N</u>o).



8.7.11.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.

8.7.12 Set Time -

8.7.12.1 Press the Enter (\bullet) Button to access the edit screen.

8.7.12.2 Press the Left (←) &
Right (→) Arrow Buttons to Select the digit to change.

	S		I			U 2					T	T	I	M	E	
÷E	s	С		t	Ļ	S,	c	r	o	1	1			n	t.	e
			T		0		Ð	R		ŀ.J	1		T	M		
	S		T			U 2					T	T	I	M		

8.7.12.3 Press the Up (**↑**) &

Down (\downarrow) Arrow Buttons to Change the value of the selected digit.

8.7.12.4 Press the Enter (\bullet) Button to submit the new setting.

8.7.12.5 Press the Left (←) &
Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

SET	CURRENT TIME
	20:04
HKL	YUU SUKE Y N
26163	Ch9↑↓ ●Enter

8.7.12.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.

		I	R	M	W	A	R			U	P	D	A	T		
	Ų		R	S	Ι	0	Ν	:		0						
		I	В					:		0		1		Ø		
éΕs	C				Ť	÷	5	0	1			U	P	d	3	te

8.7.1 Firmware Update –

- **8.7.1.1** Insert a USB drive containing an appropriate ".pgz" firmware file from Altec Air into the USB A port on the control board.
- **8.7.1.2** Press the Enter (●) Button to access the

Firmware Update Screen.



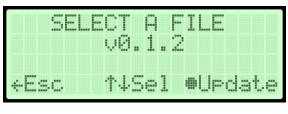
8.7.1.3 Enter the device

keyword and press the Enter (\bullet) Button to access the firmware update screen.

- 8.7.1.4 Select the correct file version using the Up (↑) and Down (↓) Buttons
- **8.7.1.5** Press the Enter (●) button to select the file
- 8.7.1.6 Press the Left (←) &
 Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o) and begin the update.

8.7.2 System Units-

- 8.7.2.1 Press the Enter (●)Button to access the edit screen.
- 8.7.2.2 Press the Up (↑) andDown (↓) Arrow Buttons to Change the value.
- **8.7.2.3** Press the Enter (●) Button to submit the new setting.
- 8.7.2.4 Press the Left (←) & Right (→) Arrow Buttons to Select the correct choice (Yes or No).







8.7.2.5 Press the Enter (●)Button to confirm the selected choice. This will lock in the new setting.



8.7.3 Set device type-

- **8.7.3.1** This screen allows you to set the device type, if your board is new, or the incorrect device type has been configured
- **8.7.3.2** Press the Enter (\bullet) Button to access the edit screen.
- **8.7.3.3** Press the Up (\uparrow) and Down (\downarrow) Arrow Buttons to Change the value.
- 8.7.3.4 Press the Enter (●)Button to submit the new setting.



8.7.3.5 Press the Left (←) &

Right (\rightarrow) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

8.7.3.6 Press the Enter (●) Button to confirm the selected choice. This will reset the device and lock in the new setting.

8.8 Using the Alarm Setup Menu

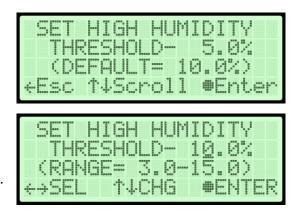
In the Setup Menu:

8.8.1 Press the Up (↑) & Down (↓)
Arrow Buttons to Select the "<u>A</u>" in Alarm Setup.



- **8.8.2** Press the Enter (\bullet) Button to access Alarm Setup.
- 8.8.3 Set High Humidity Threshold (default setting is 10%) –

- 8.8.3.1 Press the Enter (●)Button to access the edit screen.
- 8.8.3.2 Press the Left (←) &
 Right (→) Arrow Buttons to select the digit to change.



- 8.8.3.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- **8.8.3.4** Press the Enter (\bullet) Button when to submit the new setting.
- 8.8.3.5 Press the Left (←) & Right
 (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

SE	ТΗ	IGH	HUMI	DITY
	HRE	SHOL	D- 1	0.0%
A			SURE	
SEL	÷÷	140	h9	@ENTER

- 8.8.3.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- **8.8.4** Press the Up (\uparrow) Arrow Button to access the next screen.
- 8.8.5 Set High Outlet Threshold (default setting is 20.00 PSI)
 - 8.8.5.1 Press the Enter (●)Button to access the edit screen.



8.8.5.2 Press the Left (←) & Right (→) Arrow Buttons to Select the digit to change.

- 8.8.5.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- 8.8.5.4 Press the Enter (●)Button when to submit the new setting.

SE	THI	GH OU1	I E T
THRE	SHOL	D- 10.	.5 PSI
ARE	YOU	SURE	ΥN
é⇒Se	1 1	4Ch9	•Enter

- **8.8.5.5** Press the Left (\leftarrow) & Right (\rightarrow) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).
- **8.8.5.6** Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- **8.8.6** Press the Up (\uparrow) Arrow Button to access the next screen.

8.8.7 Set Low Pressure Threshold (default setting is 0.30 PSI) –

8.8.7.1 Press the Enter (●)Button to access the edit screen.

	SE	Т	0	W	OUT	'L.E	T
	ES	1 1	LD			2	PSI
(D		AU	LT		0.3	S P	SI)
÷Es	C	$\uparrow \downarrow$	Sc	ro	11	•	nter

- 8.8.7.2 Press the Left (←) & Right (→) Arrow Buttons to Select the digit to change.
- 8.8.7.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- **8.8.7.4** Press the Enter (\bullet) Button when to submit the new setting.
- 8.8.7.5 Press the Left (←) & Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

- **8.8.7.6** Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- **8.8.8** Press the Up (\uparrow) Arrow Button to access the next screen.
- **8.8.9** Set High Flow Threshold (default setting is 500 SCFD)
 - 8.8.9.1 Press the Enter (●)Button to access the edit screen.



- 8.8.9.2 Press the Left (←) & Right (→) Arrow Buttons to Select the digit to change.
- 8.8.9.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- **8.8.9.4** Press the Enter (\bullet) Button when to submit the new setting.
- 8.8.9.5 Press the Left (←) & Right (→) Arrow Buttons to Select the correct choice (Yes or No).
- 8.8.9.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- **8.8.10** Press the Up (\uparrow) Arrow Button to access the next screen.
- 8.8.11 Set High Duty Cycle (default setting is 70%)
 - 8.8.11.1 Press the Enter (●)Button to access the edit screen.

SET	Н	IGH	DUTY	CYCLE
	[-	RESH	OLD-	70%
	(DB	EFAU	LT=	70%)
÷ES(2 (†↓SC	ROLL	•ENTER

- 8.8.11.2 Press the Left (←) & Right (→) Arrow Buttons to Select the digit to change.
- 8.8.11.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- **8.8.11.4** Press the Enter (\bullet) Button when to submit the new setting.
- 8.8.11.5 Press the Left (←) & Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).
- **8.8.12** Press the Up (\uparrow) Arrow Button to access the next screen.

In the Setup Menu:

- 8.8.13 Press the Up (↑) & Down (↓) Arrow Buttons to Select the "<u>N</u>" in Network Setup.
 - 8.8.13.1 Press the Enter (●)Button to access NetworkSetup.

SYSTEM	ISETUP	
	SETUP	
NEIWUR	K SETUP	MENTER
*====	14266	

- 8.8.14 Enter Keyword (default Keyword is 123456)
 - 8.8.14.1 Press the Left (←) &
 Right (→) Arrow Buttons to Select the digit to change.



- 8.8.14.2 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.
- **8.8.14.3** Press the Enter (\bullet) Button to submit the Keyword.

8.8.15 Set IP Address (default is 192.168.1.102) -

- **8.8.15.1** Press the Enter (\bullet) Button to access the edit screen.
- 8.8.15.2 Press the Left (←) &
 Right (→) Arrow Buttons to Select the digit to change.
- **8.8.15.3** Press the Up (\uparrow) & Down (\downarrow) Arrow Buttons

to Change the value of the selected digit.

8.8.15.4 Press the Enter (\bullet) Button when to submit the new setting.

8.8.15.5 Press the Left (←) &
Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

SET	r ip	ADDRESS
		100.240
ARE	a fass' fass'	SURE <u>y</u> n
Seley	Ch9	†↓ ●Enter

- 8.8.15.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- 8.8.16 Set Subnet Mask (default is 255.255.255.000) -
 - 8.8.16.1 Press the Enter (●)Button to access the edit screen.

	Т 5.	SUE 255		T 55		0 K
+Esc	Ť	↓Sc	ro	11	œE	nter

- 8.8.16.2 Press the Left (←) & Right (→) Arrow Buttons to Select the digit to change.
- 8.8.16.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.



- **8.8.16.4** Press the Enter (\bullet) Button when to submit the new setting.
- 8.8.16.5 Press the Left (←) &
 Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

SET	SUBNET MASK
	.255.255. 0
, ARE	THE THREE THREE
Sele+	Ch9↑↓ ●Enter

- 8.8.16.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.
- 8.8.17 Set Gateway Address (default is 000.000.000) -
 - **8.8.17.1** Press the Enter (\bullet) Button to access the edit screen.
 - 8.8.17.2 Press the Left (←) &
 Right (→) Arrow Buttons to Select the digit to change.
 - **8.8.17.3** Press the Up (\uparrow) & $\Box = 1 \leftrightarrow i$ Down (\downarrow) Arrow Buttons to Change the value of the selected digit.



GATEWAY

8.8.17.4 Press the Enter (•) Button when to submit the new setting.

RDDRESS

8.8.17.5 Press the Left (←) &
Right (→) Arrow Buttons to Select the correct choice (Yes or No).



8.8.17.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.

8.8.18 Set SNMP Trap Server (default is 000.000.000) -

- **8.8.18.1** Press the Enter (\bullet) Button to access the edit screen.
- 8.8.18.2 Press the Left (←) &
 Right (→) Arrow Buttons to Select the digit to change.
- **8.8.18.3** Press the Up (\uparrow) & $\leftrightarrow 5 = 1$ to Change the value of the selected digit.
- 8.8.18.4 Press the Enter (●)Button when to submit the new setting.

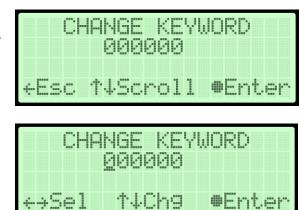
+Esc 14Scroll @Enter SET SNMP TRAP SERVER 192.168.100.211	SE												52					
SET SNMP TRAP SERVER 192.168.100.211	÷Ε	s	c		t	4.	s	c	m	0	1	1		E	m	t.	e	r
192.168.100.211																		
	c E			9	K	M	p		-			p	C		R			

SET SNMP TRAP SERVER 192.168.100.211 ARE YOU SURE Y N ↔Sel ↑↓Ch9 ●Enter

- 8.8.18.5 Press the Left (←) & Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).
- 8.8.18.6 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.

8.8.19 Change Keyword (default is 123456) -

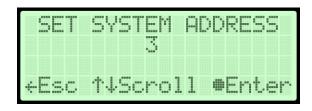
- **8.8.19.1** Press the Enter (\bullet) Button to access the edit screen.
- 8.8.19.2 Press the Left (←) &
 Right (→) Arrow Buttons to Select the digit to change.
- 8.8.19.3 Press the Up (↑) & Down (↓) Arrow Buttons to Change the value of the selected digit.



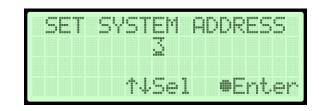
- **8.8.19.4** Press the Enter (\bullet) Button when to submit the new setting.
- 8.8.19.5 Press the Left (←) &
 Right (→) Arrow Buttons to Select the correct choice (Yes or No).



- **8.8.19.6** Press the Enter (●) Button to confirm the selected choice. This will lock in the new settings
- 8.8.20 Set Monitoring System Address (default is 0)
 - 8.8.20.1 Press the Enter (●)Button to access the edit screen.



- **8.8.20.2** Press the Up (\uparrow) & Down (\downarrow) Arrow Buttons to Change the value
- 8.8.20.3 Press the Enter (●)Button when to submit the new setting.



8.8.20.4 Press the Left (←) &
Right (→) Arrow Buttons to Select the correct choice (<u>Y</u>es or <u>N</u>o).

SE	T	SY	ST	EM	A	DD	RE	55
				3_				
	kt:	Y	ŲΨ	2	ųκ	Ŀ.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	¥	N
			1.4	20	1		Εn	ter

8.8.20.5 Press the Enter (●) Button to confirm the selected choice. This will lock in the new setting.

8.8.21 View MAC address

8.8.21.1 The device MAC

address can be viewed

from the network setup menu

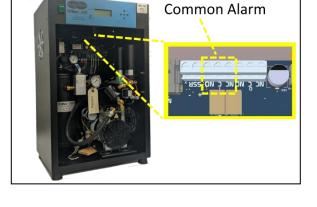
99:	 	ORE 9D:	 16	
+ESC	↑↓S	EL		

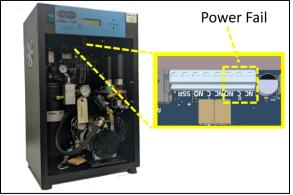
8.9 Connecting to Common Alarm Terminals

- **8.9.1** Locate the external Common Alarm pins on the Control Board
- **8.9.2** Wire the Common Alarm wire pair to the Control Board as required:
 - **COMMON & NO** for CLOSE ON ALARM operation.
 - NC & COMMON for OPEN ON ALARM operation.
- **8.9.3** Close Panel.

8.10 Connecting to Power Fail Alarm Terminals

- **8.10.1** Open Panel (see section 0).
- **8.10.2** Locate the external Power Fail pins on the Control Board.
- **8.10.3** Wire the Power Fail Alarm wire pair to the Control Board as required:
 - **PWR FAIL** & NC for CLOSE ON ALARM operation.
 - NO & PWR FAIL for OPEN ON ALARM operation
- 8.10.4 Close Panel.





8.11 Connecting via Web Browser

If the Air Dryer IS connected to an IP network:

- The Air Dryer must be configured with a valid IP Address, Subnet Mask, and Gateway Address for the network.
- An IP cable is connecting the Air Dryer to the network.
- Use a computer that is on the same network as the air Dryer.
- Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser.

If the Air Dryer IS NOT connected to an IP network and has not been configured with IP information:

- Use the default IP Address (192.168.1.102) of the air dryer to connect.
- Use an IP Cable (may require Cross-over cable) plugged directly into a Laptop/PC and the other end plugged into the UTP Port on the control board of the Air Dryer.
- Configure the network card on the Laptop/PC to use the IP Address *192.168.1.101*. This will make the Laptop/PC compatible with the Air Dryer.
- Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser.

8.11.1 Type the IP Address of the P550W Series air Dryer in the Address text box of the web browser. The default is 192.168.1.102

The Web Browser connection offers five (4) screens to the user:

- **Status Screen** Displays the readings and alarms monitored in the P550W Series Air Dryer. Provides remote ALARM RESET.
- **Setup** All configurations of Set Points, Setups, and Keyword can be made in this screen.
- Event Screen Displays all events such as alarms, changes made, and alarm resets registered by the P550W Series Air Dryer. This screen is informational only.
- Firmware Screen Allows the user to upload any software updates or upgrades to the Air Dryer.

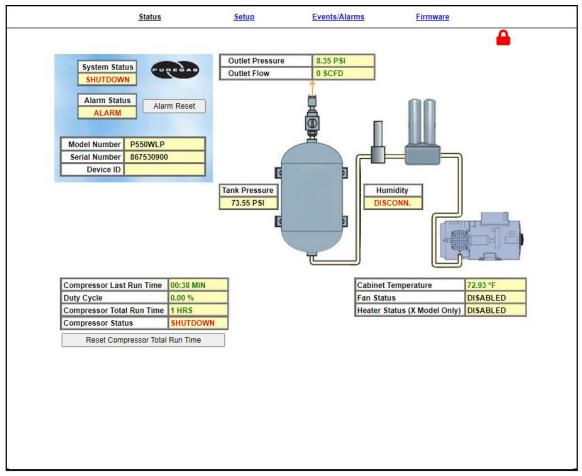
8.11.2 Click on the Menu Bar selection to access a specific screen.



8.12 Using the Status Screen

Displays the readings and alarms monitored in the P550W Series Air Dryer.

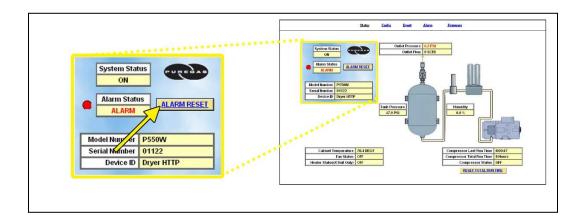
Provides remote ALARM RESET.



- Readings are displayed in **BLACK** unless an alarm is present.
- Alarms are displayed in **RED** next to the parameter in alarm.
- Alarm Status will display Alarm if any alarms are present.
- Keyword validation is required for ALARM RESET and RESET TOTAL RUN TIME.

8.12.1 Resetting an Alarm

8.12.1.1 Click on the **ALARM RESET** Button to remotely reset Air Dryer alarms displayed on Status Screen.



- **8.12.1.2** Enter Keyword (default is 123456)
- **8.12.1.3** Click on **SUBMIT** Button when done.

8.13 Using the Configuration Screen

All configuration of Set Points, Setups, and Keyword can be made in this screen.

NOTE: Reference Appendix section 14.2 for Limits, Defaults, and Formats.

<u>Status</u>	<u>Setup</u>	Events/Alarms	<u>Firmware</u>	
SYSTEM SETUP				-
Description		Set	tting	
Alarm Delay		0 ON	OFF	
Startup Delay		NONE	~	
Units		Imperial	~	
Current Date		05/0	5/2021	
Current Time		11	:21	
Device ID				
Keyword		**	****	
ALARM SETUP		Reset All Alarm Settings	To Factory Default Values	
Description	Default	Range	Current Setting	Unit
High Flow	500.0	0.0 - 900.0	900	S CFD
High Outlet Pressure	7.5	0.3 - 7.5	12.0	PSI
Low Outlet Pressure	0.3	0.3 - 7.5	6.5	PSI
High Humidity	10.0	3.0 - 15.0	10.0	%
High Duty Cycle	70	0 - 99	70	%
High Compressor Last Run Time	3:00	1:00 - 59:59	03:00	MIN: SEC
NETWORK SETUP			·	
Description		Set	tting	
IP Address		10.0).0.41	
Subnet Mask		255.25	5.255.0	
Gateway Address		192.1	168.1.1	
SNMP Trap Server Address 1		0.0).0.0	
SNMP Trap Server Address 2		0.0).0.0	
SNMP Trap Server Address 3		0.0).0.0	
).0.0	

- Values in **BLUE** represent the current setting.
- The Enter Key is used to change values.
- Clicking the value in the keyword box allows you to configure a new Keyword.
- Keyword validation is required for the following:
 - Changing a Set Point value
 - Changing the Keyword

8.14 Using the Event Screen

Displays all events such as alarms, changes made, and alarm resets registered by the P550W Series Air Dryers. This screen is informational only.

	<u>Status</u>	<u>Setup</u>	Events/Alarms	<u>Firmware</u>			
Event Type	Description			Timestamp			
Parameter Change	High Flow Thresho	old Changed From "1500.	5/6/2021, 9:54:38 AM	5/6/2021, 9:54:38 AM			
Parameter Change	Low Outlet Pressu	ire Threshold Changed Fr	5/6/2021, 9:52:18 AM				
Alarm	High Humidity Syst	stem 1 (System SHUTDOV	5/6/2021, 9:49:24 AM				
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	5/6/2021, 9:46:18 AM				
Parameter Change	Setting Device type	e to : P550WLP	5/6/2021, 9:45:57 AM	5/6/2021, 9:45:57 AM			
Alarm	High Humidity Syst	stem 1 (System SHUTDOV	5/6/2021, 9:35:55 AM	5/6/2021, 9:35:55 AM			
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	5/6/2021, 9:32:50 AM	5/6/2021, 9:32:50 AM			
Alarm	High Humidity Sys	stem 1 (System SHUTDOV	5/4/2021, 1:26:05 PM	5/4/2021, 1:26:05 PM			
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	5/4/2021, 1:23:00 PM				
Alarm	High Humidity Sys	stem 1 (System SHUTDOV	4/29/2021, 10:17:49 AM				
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	.2)	4/29/2021, 10:14:43 AM			
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	.2)	4/27/2021, 2:20:24 PM			
Info	Unit Power On (Fin	Unit Power On (Firmware: 0.3.7 Library: 0.1.2)		4/27/2021, 1:40:44 PM			
Info	Unit Power On (Fin	On (Firmware: 0.3.7 Library: 0.1.2)		4/27/2021, 1:38:48 PM			
Info	Unit Power On (Fin	On (Firmware: 0.3.7 Library: 0.1.2)		4/27/2021, 1:15:48 PM			
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	.2)	4/27/2021, 12:59:42 PM			
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	4/27/2021, 11:50:36 AM				
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	.2)	4/27/2021, 11:23:58 AM	4/27/2021, 11:23:58 AM		
Parameter Change	LOGGING STOPPE	D		4/27/2021, 9:36:51 AM			
Info	Unit Power On (Fin	mware: 0.3.7 Library: 0.1.	.2)	4/26/2021, 4:05:57 PM			
Parameter Change	LOGGING STARTE	D	4/26/2021, 4:05:57 PM				
Info	Unit Power On (Firmware: 0.3.6 Library: 0.1.2)			4/26/2021, 3:18:06 PM			

8.15 Using the Firmware Screen

Displays the current firmware version of the P550W Series Air Dryers.

<u>Status</u>	<u>Setup</u>	Events/Alarms	<u>Firmware</u>	
Current Version:	Firmware Version: 0.3.7	Library Version: 0.1.2		
New Version File:	Choose File No file chos	sen		
		CCEPT	,	
	A	CCEPT		

- Current Version: Displays the current firmware version of the P550W Air Dryer.
- New Version File: Displays the new location and new firmware version chosen.
- The **BROWSE** Button allows you to locate the new firmware file.
- The ACCEPT Button is used to change values.
- Keyword validation is required to update firmware.

8.15.1.1 Click the **ACCEPT** Button when done

8.16 Connecting via SNMP

Using SNMP to connect and communicate with the P550W Series Air Dryer is dependent upon the specific SNMP Management software used on your network. This software requires a SNMP Definition & Configuration File (MIB file) in order to properly communicate with the Air Dryer.

The files for the P550W Series Air Dryers can be downloaded from our website (AltecAIR.com) under the Product Support section SNMP Files link. It is necessary to import this file into your SNMP operating software.

NOTE: Reference Appendix section 14.3 for a list of SNMP Parameters including Limits, Defaults, and Formats.

9. Testing Your Dryer

9.1 Safety & Warning Information



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air Dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



CAUTION!

Depressurizing the air Dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the control board without depressurizing the air Dryer first, or **damage to the control board will occur.**

9.2 Measuring Compressor Amp Draw



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some these components to become hot when in operation or standby.

With the Compressor running:

- **9.2.1** Open Panel (see section 0).
- **9.2.2** Locate wire #5 coming directly from the compressor.



9.2.3 Use an Amp Meter to measure the running amps.
With the compressor running, the running amps should measure
5.0 amps or below for 120V units or 2.5 amps or below for 240V units.

If the compressor measures over

5.0/2.5 running amps, see section 13.16 for troubleshooting information.9.2.4 Close Panel.

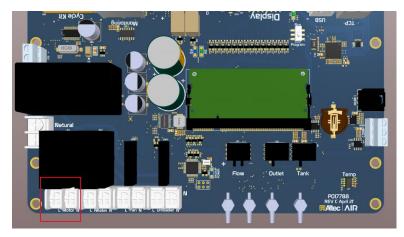
9.3 Measuring Compressor Voltage



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. It is highly recommended that you remove all jewelry before performing any procedures.

- **9.3.1** Open Panel (see section 0).
- **9.3.2** Locate the relay terminal block on the control board inside the air Dryer.



With the Compressor running:

9.3.3 Use a Voltmeter to measure across the board terminals where wires #5 and #6 are connected.

The voltage should measure **120 VAC** (**120V models**) or **240 VAC** (**240V models**)

With the Compressor NOT running:

9.3.4 Use a Voltmeter to measure across the board terminals were wires #5 and #6 are connected.

The voltage should measure

0 VAC

If any of the voltage measurements are different than indicated above, the Control Board is defective and should be replaced. See sections 11.1 for part detail and 11.5 for ordering information.

9.3.5 Close Panel.

9.4 Measuring Incoming Voltage



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. It is highly recommended that you remove all jewelry before performing any procedures.

- **9.4.1** Open Panel (see section 0).
- **9.4.2** Locate the Incoming **POWER** connector inside the Dryer.

- **9.4.3** Use a Voltmeter to measure the voltage (inside Dryer):
 - **9.4.3.1** Place the probes between the Power connector and terminal insulation so that they touch the metal contacts for BLACK (BROWN)



wire and WHITE (BLUE) wire.

The voltage should measure **110 - 125 VAC** for the P550W, P550WH and P550WLP or **208 - 253 VAC** for the P552W, P552WH and P552WLP.

If the incoming voltage measures less than indicated above, it is recommended that steps be taken at your facility to increase the power to the recommended level of voltage.

9.4.4 Close Panel.

9.5 Testing Consistent Heatless Dryer Cycling

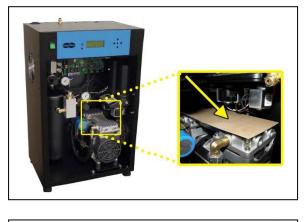


WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.

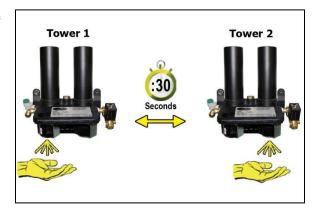
With the Compressor running:

- **9.5.1** Open Panel (see section 0).
- **9.5.2** Place a piece of insulating material over the compressor for this test (*i.e. piece of cardboard*).
- **9.5.3** Locate the heatless Dryer purge solenoids inside the air Dryer





- **9.5.4** Place your hand beneath the purge solenoids to feel for purging air. Air should:
 - Purge from Tower 1 side
 - Purge from Tower 2 side **30 Seconds** later
 - Purge from Tower 1 side
 30 Seconds later
 - ...and so on.
- **9.5.5** Remove insulating material from top of the compressor.
- 9.5.6 Close Panel.





If the Heatless Dryer is not cycling consistently as described, see section 13.13 for troubleshooting information.

9.6 Testing Unloader Valve

With the Compressor running:

9.6.1 Locate the Unloader Valve on the right side of the heatless Dryer.



9.6.2 Place your hand over the Unloader Valve to feel for air flow.

Air should **NOT** flow from this fitting continuously. Air should only be released in a short burst when the compressor shuts off.



If air flows from this valve continuously the Unloader Valve is either defective and should be replaced. See sections 11.3 for part detail and 11.5 for ordering information.

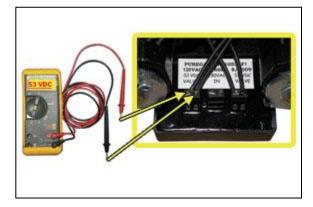
9.7 Measuring Heatless Dryer Solenoid Voltage

With the Compressor running:

- 9.7.1 Locate the Heatless Dryer Cycle Timer. The timer has three (3) sets of terminals (from left-to-right): "VALVE" – Left solenoid "IN" – Incoming power "VALVE" – Right solenoid
- **9.7.2** Use a Voltmeter to measure the DC voltage across each set of "VALVE" terminals.

Continue to measure for up to 45 seconds if no voltage is initially measured.





The voltage should measure **53 Volts DC for 110V units and 106VDC for 240V units**.

If the voltage is incorrect, this is an indication that the Cycle Timer is defective and should be replaced. See sections 11.3 for part detail and 11.5 for ordering information.

9.8 Testing

9.9 Air Dryer Fan

NOTE: To test the fan, the cabinet temperature must be above 90° F.

9.9.1 Place your hand outside the Dryer to feel for air being blown outwards.



NOTE: The fan will turn OFF when the cabinet temperature is below 80° F.

If the fan is not blowing air outwards as described:

- Verify the cabinet temperature is above 90°F.
- Check for loose wiring. Refer to the Wiring Diagram (section 14.1)
- *Replace defective fan (see sections 11.1 for part detail and 11.5 for ordering information).*
- Replace defective control board if fan does not respond properly to temperature changes (see sections 11.1 for part detail and 11.5 for ordering information).

9.10 Testing Compressor ON/OFF Cycling

9.10.1 When the Unit Screen
(8.4.5.1) appears on the display, press the HOLD
Button on the Front Panel to freeze that screen.

With Compressor running:

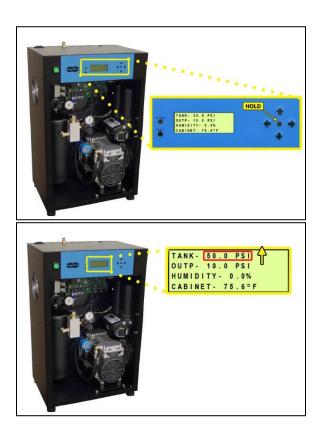
9.10.2 Verify the compressor shuts down when the tank pressure (TANK) reaches 50.0 PSI.

If the tank pressure (**TANK**) fails to reach 50 PSI, see section 13.15 for troubleshooting information.

With Compressor NOT running:

- CAUTION: Be careful when removing Air hose. System is pressurized.
- **9.10.3** Depressurize air Dryer (see section 8.2.1)
- 9.10.4 Verify the compressor turns on when the tank pressure (TANK) falls to 20.0 PSI.





9.10.5 Reconnect air hose.

If the Compressor Cycling fails either test described, it indicates a problem with the Control Board which will need to be replaced. See sections 11.1 for part detail and 11.5 for ordering information.

9.11 Testing High Compressor Last Run Time Alarm

• **CAUTION**: Be careful when removing Air hose. System is pressurized.

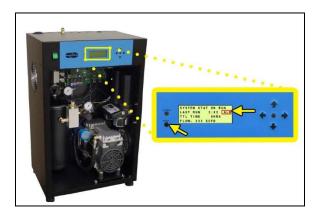
NOTE: For this test, allow the Display Screen to cycle through the information screens.

9.11.1 Start timing when the compressor turns on.

9.11.2 Depressurize air Dryer (see section 8.2.1)

This prevents the compressor from shutting down.

When the compressor runs for 3:00 minutes (unless adjusted to a different Set Point by the user), a High Compressor Last Run Time (LAST RUN) alarm should appear on the System Screen.



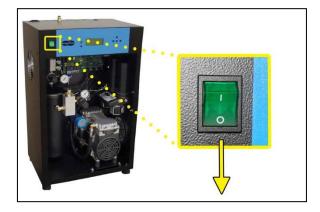
9.11.3 Reconnect air hose.

9.11.4 Press the **RESET Button**.

If you are unable to create a High Compressor Last Run Time (LAST RUN) alarm as described, see section 13.18 for troubleshooting information.

9.12 Testing Humidity Alarm and System Shutdown

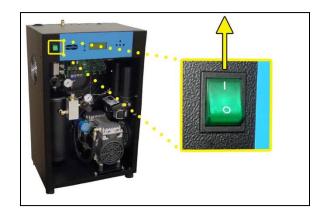
- **CAUTION**: Be careful when removing Air hose. System is pressurized.
- 9.12.1 Power the air Dryer OFF.



- **9.12.2** Depressurize air Dryer (see section 8.2.1)
- **9.12.3** Unscrew and remove the Humidity Sensor from the Humidity Block.



9.12.4 Power the air Dryer **ON**.

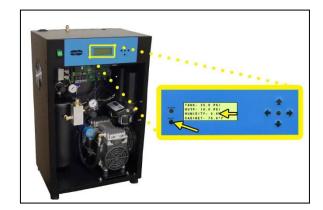


Allow the Humidity reading to rise over 10.0%.

- **9.12.5** After three (3) minutes, verify that a Humidity Alarm appears and the Dryer goes into **SHUTDOWN** mode.
- **9.12.6** Replace the Humidity Sensor into the Humidity Block.



9.12.7 Press the **RESET Button** to clear the Humidity alarm.



If you are unable to create a Humidity / Shutdown alarm as described, see section 13.10 for troubleshooting information.

9.13 Testing High Outlet Pressure Alarm

9.13.1 Make a note of the current Outlet Pressure (**OUTP**) reading.



- 9.13.2 Pull the Outlet Pressure Regulator knob out (or loosen the retaining nut – LP Models).
- **9.13.3** Turn knob clockwise until Outlet Pressure (**OUTP**)



reading climbs **over 10.0 PSI** (**over 7.50 PSI** - LP Models).

After one (1) minute, the High Pressure Alarm should appear on the display.

- **9.13.4** Turn Outlet Pressure Regulator knob counterclockwise until Outlet Pressure (**OUTP**) reading lowers to the reading recorded in step 9.13.1
- 9.13.5 Push knob in to lock (or

tighten the retaining nut – LP Models).

9.13.6 Press the **RESET Button**.

If you are unable to create a High Outlet Pressure Alarm as described, see section 13.6 for troubleshooting information.

9.14 Testing Low Outlet Pressure Alarm

9.14.1 Make a note of the current Outlet Pressure (**OUTP**) reading.





- **9.14.2** Pull the Outlet Pressure Regulator knob out (or loosen the retaining nut – LP Models).
- **9.14.3** Turn knob counterclockwise until Outlet Pressure (**OUTP**) reading



drops **below 2.0 PSI** (**below 0.30 PSI** – LP Models).

After one (1) minute, the Low Pressure Alarm should appear on the display.

- **9.14.4** Turn Outlet Pressure Regulator knob clockwise until Outlet Pressure (**OUTP**) reading rises to the reading recorded in step 9.14.1
- TANK- 35.8 PSI OUTP- 6.5 PSI HUMIDITY- 0.0% CABINET- 75.6°F
- **9.14.5** Push knob in to lock (or tighten the retaining nut LP Models).

9.14.6 Press the **RESET Button**.

If you are unable to create a Low Outlet Pressure Alarm as described, see section 13.8 for troubleshooting information.

9.15 Testing Air Fittings & Hoses for Leaks

NOTE: This is a general procedure that can be applied to any fitting or hose that has air pressure in it. **DO NOT SOAP TEST THE HUMIDITY SENSOR FITTING. DAMAGE TO THE SENSOR MAY OCCUR.**

With Compressor NOT running:

9.15.1 Listen for any 'hissing' sounds which may indicate a fitting or hose air leak.

With Compressor running:

9.15.2 Use a 1-inch paint brush to dab soapy water on the air fitting or hose connection to be tested.

If air bubbles appear at the connection, this indicates that air is leaking from the connection.



If any leaks are detected, take steps to seal them off (as necessary):

- *Tighten the fitting*
- *Re-connect the hose end*
- *Replace the fitting / hose / component*

10. Maintaining Your Dryer

In order to ensure that your P550W Series Air Dryer continues to operate efficiently and reliably, ALTEC AIR recommends performing the following maintenance procedures at the specified Six Month and 8,000 Hour intervals.

It is also recommended that you print out the included *Six Month Maintenance (section 0)* and *8,000 Hour Maintenance (section 10.3)* log sheets and record all completed maintenance for historical tracking and reference purposes.

The log sheets include a Section reference column which indicates the User's Guide section containing the information about the specific procedure. Please refer to these sections for detailed procedural information.

NOTE: When operating at higher ambient temperatures, it is recommended that maintenance be performed more frequently.

NOTE: After 16,000 hours of run time, ALTEC AIR recommends sending in your compressors and heatless dryers for a complete and comprehensive rebuild by our Service Department technicians. *See sections 12.1 and 12.2 for information on services and contacting ALTEC AIR*.

10.1 Safety & Warning Information



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air Dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



CAUTION!

SHUT DOWN IMMEDIATELY FOR REPAIRS if the air

compressor shows any evidence of overheating or presents excessive noise.



CAUTION!

Depressurizing the air Dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the Control Board without depressurizing the air Dryer first, or **damage to the Control Board will occur.**



IMPORTANT!

Performing routine maintenance as outlined in the *Maintaining Your Dryer* section will ensure optimal performance over the lifecycle of your air Dryer.



IMPORTANT!

Performing procedures not described in this User's Guide or installing components not supplied by ALTEC AIR is NOT RECOMMENDED AND MAY VOID THE WARRANTY.



IMPORTANT!

After performing any maintenance, always soap test pressure fittings to check for air leaks. Also, check for any loose or disconnected wiring.

10.2 6 Month Maintenance

MODEL:	LOCATION NAME:
SERIAL NUMBER:	ADDRESS:
DATE INSTALLED:	

Procedure	Section	6	12	18	24	30
Install Six Month Maintenance Kit	11.4					
Read & Record Flow Rate (FLOW)	8.4					
Measure & Record	0.2					
Compressor Amp Draw	9.2					
Measure & Record Incoming Voltage						
(must be 110 - 125 VAC for P550W, P550WH and						
P550WLP models and	9.4					
must be 208 - 253 VAC for P552W, P552WH and						
P552WLP models)						
Test High & Low Outlet Pressure Alarms	9.13 &					
	9.14					
Set System Pressure (50 PSI)	0					
Set Static Pressure (17 PSI)	6.5.21					
Set Outlet Pressure	6.5.15					
Test Consistent Heatless Dryer Cycling	9.5					
Test Fan	9.8					
Test Compressor ON/OFF Cycling	9.10					
Test High Compressor Last Run Time Alarm	9.11					
Test Humidity Alarm & System Shutdown	9.12					
Test Air Fittings for Leaks	9.15					
Visually Inspect Inside & Outside of Unit for Loose		_	_	_	_	_
Wiring or Hardware						
Maintenance Perf	formed by:					
Date of Ma	intenance:					

Maintenance Interval (Months)

NOTE: COPY OR PRINT THIS PAGE AND KEEP IT WITH THE AIR DRYER

10.3 8,000 Hour Maintenance

Under typical operating conditions:

8,000 hours of run time will occur between one (1) and two (2) years of use. This will be identified by a **TTL TIME** Alarm on the display.

MODEL:	LOCATION NAME:
SERIAL NUMBER:	ADDRESS:
DATE INSTALLED:	

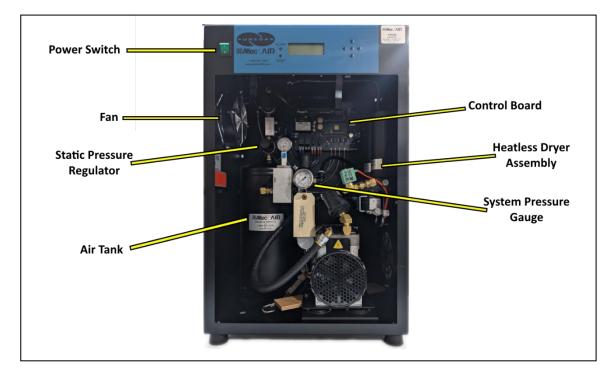
			Maintena	nce Interv	al (Hours)	
Procedure	Section	8,000	16,000	24,000	32,000	40,000
Install 8,000 Hour Maintenance Kit	11.4					
Read & Record Flow Rate (FLOW)	8.4					
Measure & Record	9.2					
Compressor Amp Draw	9.2					
Set System Pressure (50 PSI)	0					
Set Static Pressure (17 PSI)	6.5.21					
Set Outlet Pressure	6.5.15					
Test Consistent Heatless Dryer Cycling	9.5					
Test Compressor ON/OFF Cycling	9.10					
Test Air Fittings for Leaks	9.15					
Reset TTL TIME Reading to Zero						
Visually Inspect Inside & Outside of Unit for Loose						
Wiring or Hardware						
Maintenance Per	formed by:					
Date of Ma	intenance:					

Maintenance Interval (Hours)

NOTE: COPY OR PRINT THIS PAGE AND KEEP IT WITH THE AIR DRYER

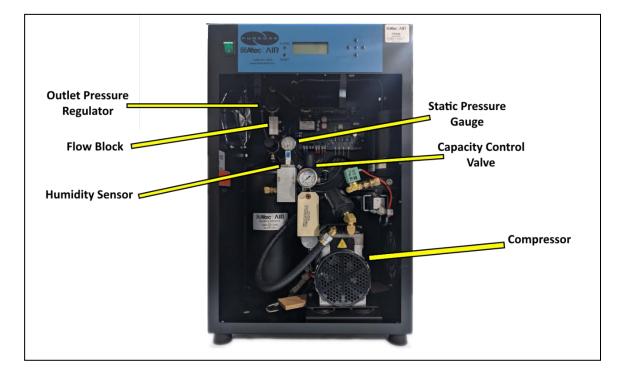
11. Replacement Parts & Accessories

11.1 Dryer Parts



Description	Part Number	Quantit y	Recommend Spare
Power Switch	M038428	1	
Fan	P4080 (120VAC) P40801 (240VAC)*	1	
Static Pressure Regulator	P010279	1	
Air Tank		1	
Control Board	P013708	1	✓ (1)
Heatless Dryer Assembly	See section 11.3 for detail		l
System Pressure Gauge	P010695	1	
Heater (X Units Only)	P3175 (120VAC) P3176 (240 VAC)*	1	

*552 units with serial numbers after 10/21/2021 will use 220VAC parts. 552 units built before 10/21/2021 will use120VAC parts

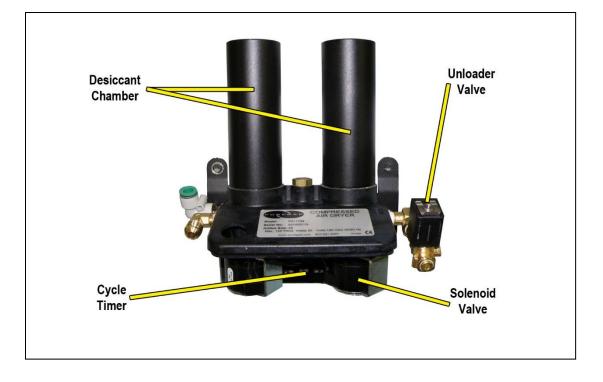


11.2 Dryer Parts cont.

Description	Part Number	Quantity	Recommend Spare
Precision Bleed Orifice Fitting	P013349	1	
Outlet Pressure Regulator -			
Standard Pressure Low Pressure	P010279 P012316	1	
Flow Block		1	
Humidity Sensor	P	013401	
Static Pressure Gauge (0-30 PSI)	P8345	1	
Capacity Control Valve	P010492	1	✓ (1)
Air Compressor Assembly	P011639 (120VAC) P018263 (220VAC)*	1	

*552 units with serial numbers after 10/21/2021 will use 220VAC parts. 552 units

built before 10/21/2021 will use120VAC parts



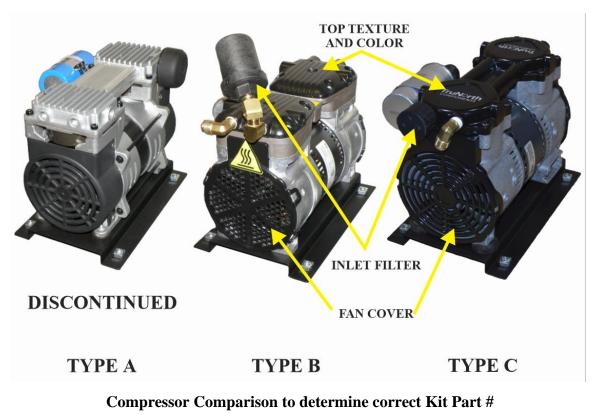
11.3 Heatless Dryer Assembly Parts

Description	Part Number	Quantity	Recommend
Description	I alt Number	Quantity	Spare
Heatless Dryer	P011738 (120VAC)	1	
	P018262 (220VAC)*		
Desiccant Chamber	P2004036	2	
Cycle Timer	P010530F1 (120VAC)	1	
	P01053021 (240VAC)*		
Unloader Valve	P011839 (120VAC)	1	
	P017481 (240VAC)*		
Solenoid Valve	In 8,000 Hour Maintenance Kit. See section 11.4 for detail.		

*552 units with serial numbers after 10/21/2021 will use 220VAC parts. 552 units built before 10/21/2021 will use120VAC parts

11.4 Accessories for Your Dryer

	Description	Part Number	Recommend Spare	
Kits for units with "Type B" Compressor				
(See de	etail comparison on next page to d	letermine Compress	sor Type)	
	Six Month Maintenance Kit Includes air intake filter and compressor muffler	P018301	√ (2)	
	8,000 Hour Maintenance Kit Includes heatless Dryer maintenance kit and compressor maintenance kit.	P013479	√ (1)	
	Kits for units with "Type (C" Compressor		
(See de	etail comparison on next page to d	etermine Compress	sor Type)	
	Six Month Maintenance Kit Includes air intake filter and compressor muffler	100518517	✓ (2)	
	8,000 Hour Maintenance Kit Includes heatless Dryer maintenance kit and compressor maintenance kit.	100518515	✓ (1)	
	Additional Access	sories		
	Universal Rack Mounting Kit Includes mounting brackets and hardware for 19" or 23" racks.	P011674		
切	Wall Mounting Kit Includes mounting brackets and hardware.	P011773		
	Cycle Kit Allows multiple dryers to be cycled.	P08033W		
Ó.	Cycle Kit Interface Kit	PVDW34		



* (Type A – No Longer Available)

11.5 Ordering Parts from ALTEC AIR



IMPORTANT!

Instruction for the replacement of individual listed components goes beyond the scope of this User's Guide and will not be covered. Please refer to the information included with the specific replacement part for this instruction.

Once you have identified your required parts and accessories, contact the ALTEC AIR Inside Sales / Service department to order:

(800) 521-5351 (**option 2**) Fax – (303) 657-2205 <u>sales@AltecAIR.com</u> <u>parts@AltecAIR.com</u>

Page 80 of 98

P011658 - Rev. U

12. Service & Repair

Only ALTEC AIR can offer factory direct rebuilds backed by a 6 month factory

warranty.

- 2 week turnaround time
- Estimates available upon request
- Minimum service charge fee applies

12.1 Services Offered

- Piston Compressor Rebuild
 - Replace motor bearings, piston rod assemblies, and install a complete compressor maintenance kit.
 - Test air flow, air pressure, and electrical performance
- Heatless Dryer Rebuild
 - Replace desiccant, o-rings, check valves, springs, and complete solenoid assembly
 - Test proper component operation
- Desiccant Tower Repack
 - Clean out tower and replace desiccant, filter, and o-ring
- Circuit Board Repair (Limited to current model boards only)
- Complete Dryer Repair

12.2 Initiating a Service Transaction

- Contact our Parts & Service Department at **1-800-521-5351 (option 3)** to obtain a Return Authorization (RA) number.
- Carefully package the item(s) to be returned.
- Mark the Return Authorization (RA) number on the outside of the shipping container.
- Include the main address and phone number of the individual to contact for related inquiry and follow-up information.
- Include the purchase order number.

13. Troubleshooting Your Dryer

13.1 Before You Call ALTEC AIR

PLEASE READ THIS SECTION FIRST. It is important that you use the following sections in order to diagnose and attempt to fix the problem with your air Dryer before placing a call to ALTEC AIR Technical Support.

This troubleshooting guide is intended to simplify the isolation of problems, present possible causes, provide test procedures for verification, and suggest corrective actions to restore the air Dryer back to normal operation. Each section begins with the most likely cause(s) of the issue. Otherwise, they start from the simplest possibilities and progress to more complicated ones.

This troubleshooting guide is designed to be easy to follow and very effective when used properly. It is suggested to always start at the beginning of the specific problem section and continue in sequence, following the procedures indicated.

13.2 Safety & Warning Information



WARNING!

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



WARNING!

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



WARNING!

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air Dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



CAUTION!

Depressurizing the air Dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the Control Board without depressurizing the air Dryer first, or **damage to the Control Board will occur.**



CAUTION!

Do not test the Humidity Sensor with an ohm meter or apply any DC voltage. This will render the Humidity Sensor defective.



IMPORTANT!

Performing procedures not described in this User's Guide or installing components not supplied by ALTEC AIR is NOT RECOMMENDED AND MAY VOID THE WARRANTY.

13.3 Air Dryer Won't Power ON

Possible Cause	Check	Corrective Action
POWER Switch in	Verify POWER switch	Turn POWER switch
OFF position	is in the ON position	to the ON position
	(section 8.3)	(section 8.3)
No incoming voltage to	Measure incoming	Troubleshoot facility
air Dryer	voltage (section 9.4)	power supply to air
		Dryer

13.4 Display Screen Not Functioning

Possible Cause	Check	Corrective Action
Dryer experienced a		Power the air Dryer
power spike		OFF for 15+ seconds.
		Power the air Dryer
		ON.
Ribbon cable	Verify ribbon cable	Reconnect the ribbon
disconnected	from the decal is	cable properly.
	connected at the display	
	board	

13.5 High Outlet Pressure Alarm

Possible Cause	Check	Corrective Action
Outlet Pressure set too	Verify Outlet Pressure	Adjust Outlet Pressure
high	(OUTP) reading	Regulator
	(section 8.4.5.1)	
High Outlet Pressure	Verify High Outlet	Raise High Outlet
Alarm set point too low	Pressure Alarm set	Pressure Alarm set
-	point	point
	-	-

13.6 Can't Create a High Pressure Alarm

Possible Cause	Check	Corrective Action
Defective Outlet	Verify that the Outlet	Replace Outlet Pressure
Pressure Regulator	Pressure Regulator can	Regulator if unable to
	be adjusted	adjust pressure
		(section 11.2)
High Outlet Pressure	Verify High Outlet	Adjust Outlet Pressure
Alarm set point higher	Pressure Alarm set	Regulator so that Outlet
than default setting	point	Pressure (OUTP)
		reading climbs over
		verified set point
		(section 9.13)
Defective Control	Verify that the Outlet	Replace Control Board
Board	Pressure (OUTP)	(section 11.1) if Outlet
	reading is higher than	Pressure (OUTP)
	the High Outlet	reading is over verified
	Pressure Alarm set	High Outlet Pressure
	point (above)	Alarm set point for
		more than 1 minute and
		fails to create an alarm.

13.7 Low Outlet Pressure Alarm

Possible Cause	Check	Corrective Action
Outlet Pressure set too	Verify Outlet Pressure	Adjust Outlet Pressure
low	(OUTP) reading	Regulator
	(section 8.4.5.1)	
High Flow condition	Verify Flow Rate	Troubleshoot High
	(FLOW) reading is not	Flow condition
	higher than expected	(section 13.11)
Low Outlet Pressure	Verify Low Outlet	Lower the Low Outlet
Alarm set point too	Pressure Alarm set	Pressure Alarm set
high	point	point
Leak in the air system	With no outlet flow,	Tighten any loose
	test fittings and hoses	connections as required
	for leaks (section 9.15)	

13.8 Can't Create a Low Pressure Alarm

Possible Cause	Check	Corrective Action
Defective Outlet	Verify that the Outlet	Replace Outlet Pressure
Pressure Regulator	Pressure Regulator can	Regulator if unable to
	be adjusted	adjust pressure
		(section 11.2)
Low Outlet Pressure	Verify Low Outlet	Adjust Outlet Pressure
Alarm set point lower	Pressure Alarm set	Regulator so that Outlet
than default setting	point	Pressure (OUTP)
		reading drops below
		verified set point
		(section 9.14)
Defective Control	Verify that the Outlet	Replace Control Board
Board	Pressure (OUTP)	(section 11.1) if Outlet
	reading is lower than	Pressure (OUTP)
	the Low Outlet	reading is under
	Pressure Alarm set	verified Low Outlet
	point (above)	Pressure Alarm set
		point for more than 1
		minute and fails to
		create an alarm.

13.9 High Humidity



CAUTION!

Do not test the Humidity Sensor with an ohm meter or apply

any DC voltage. This will render the Humidity Sensor defective.

Possible Cause	Check	Corrective Action
Low System Pressure	Verify System Pressure	Adjust System Pressure
		to 50 PSI, ± 2 PSI.
Low Flow Rate	Verify Flow Rate	Install the included
	(FLOW) reading is low	Precision Bleed Orifice
		fitting to maintain a
		constant air flow.
High Humidity Alarm	Verify High Humidity	Raise High Humidity
set point too low	Alarm set point	Alarm set point
	If Flow Rate is low,	Over 10% not
	allowing a higher alarm	recommended
	set point (up to 10%)	recommended
	will allow Dryer to run	
	within acceptable	
	levels.	
Defective Humidity	Perform the Testing	Troubleshoot Can't
Sensor	Humidity Alarm and	Create a High Humidity
	System Shutdown test	Alarm / Shutdown
	(section 9.12)	condition
		(section 13.10)
Heatless Dryer not	Verify consistent	Troubleshoot
cycling between towers	Heatless Dryer cycling	Inconsistent Heatless
	(section 9.5)	Dryer Cycling
		condition
Defective Control	Unnlug Uumiditu	(section 13.13)
Board	Unplug Humidity Sensor from Control	If Humidity did not drop to 0%, replace
Doald	Board (see section 11.1	Control Board (section
	for Board location)	11.1)
	Humidity reading	11.1 /
	should drop to 0%	
		l

13.10 Can't Create a High Humidity Alarm / Shutdown

These troubleshooting steps assume that the Humidity Element is removed from the Humidity Block during the *Testing Humidity Alarm and System Shutdown* (section 9.12) procedures.

Possible Cause	Check	Corrective Action
Humidity Sensor Cable	Verify that Humidity	Connect Humidity
disconnected	Sensor cable is	Sensor cable
	connected to the	
	Control Board	
Defective Humidity	Verify that Humidity	Replace Humidity
Sensor	reading fails to climb	Sensor (section 11.2)
	higher than 15% or	
	creates sporadic	
	readings	
Defective Control	Verify that Humidity	Replace Control Board
Board	reading is over 15% for	if no alarm is created
	more than 1 minute	and system does not
		shut down (section 11.1
)

13.11 High Flow Rate Alarm

Possible Cause	Check	Corrective Action
Air leak in downstream cable outside of Dryer	Verify Flow Rate (FLOW) reading is not higher than expected	Fix downstream problem
Air leak inside of Dryer	Test fittings and hoses for leaks (section 9.15)	Reconnect or replace bad fitting / hose
High Flow Alarm set point too low	Verify High Flow Alarm set point	Raise High Flow Alarm set point

13.12 High Cabinet Temperature Alarm

Possible Cause	Check	Corrective Action
Fan Failure	Verify fan is running	Check for loose fan
	(section 9.8)	wiring (section 14.1)
		Replace defective fan
		(section 11.1)
High Ambient	Verify temperature of	Lower the ambient
Temperature	Dryer operating	temperature of the
	location. Recommended	Dryer's operating
	ambient temperature is	location
	40°-85°F.	

13.13 Inconsistent Heatless Dryer Cycling

Possible Cause	Check	Corrective Action
Defective Solenoid	Measure voltage going	If 53 VDC (120V unit)
Valve	to the Heatless Dryer	or 110 VDC (240V
	Solenoid Valves	unit) IS present, replace
	(section 9.7)	Solenoid Valves
		included in the 8,000
		Hour Maintenance Kit
		(section 11.4)
Defective Cycle Timer	Measure voltage going	If 53 VDC (120V unit)
	to the Heatless Dryer	or 110 VDC (240V
	Solenoid Valves	unit) IS NOT present,
	(section 9.7)	replace the Cycle Timer
		(section 11.3)

13.14 Compressor Doesn't Operate

Possible Cause	Check	Corrective Action
Defective compressor	Measure compressor	If voltage is good,
	voltage	replace compressor
	(section 9.3)	(section 11.2)
		or send it in for repair
		(section 12.)
Defective control board	Measure compressor	If measurements are
	voltage	incorrect, replace
	(section 9.3)	control board (section
		11.1)
System is in Shutdown	On the Display Panel,	Press the RESET
state	verify that the system is	Button
	in SHUTDOWN state	

Possible Cause	Check	Corrective Action
Low System Pressure	Verify System Pressure	Adjust System Pressure
		to 50 PSI, ± 2 PSI.
Defective Unloader	Test Unloader Valve	Replace Unloader
Valve	operation (section 9.6)	Valve
		(section 11.3)
	If this is continuously	
	flowing high amounts	
	of air, the Unloader	
	Valve is defective.	
Leak in air system	Check all hoses and	Connect, tighten, or
	fittings between	replace leaking
	compressor and Air	component
	Tank for air leaks	
	(section 9.15)	

13.15 Compressor Won't Build Pressure

13.16 Compressor Excessive AMP Draw

Possible Cause	Check	Corrective Action
Restriction in air line	Remove Discharge	If measurement is
	Hose from compressor	below the
	(hose to the heatless	recommended amps,
	Dryer)	trace hoses from
		compressor to Unloader
	Re-measure	Valve looking for
	Compressor AMP	restrictions or kinks
	Draw	
	(section 9.2)	
Compressor failing	Remove Discharge	If measurement is still
	Hose from compressor	above the
	(hose to the heatless	recommended amps,
	Dryer)	replace the compressor
		(section 11.2)
	Re-measure	or send it in for repair
	Compressor AMP	(section 12.)
	Draw	
	(section 9.2)	

Possible Cause	Check	Corrective Action
Low System Pressure	Verify System Pressure	Adjust System Pressure to 50 PSI, ± 2 PSI.
High Flow condition	Verify Flow Rate (FLOW) reading is not higher than expected	Troubleshoot High Flow condition (section 13.11)
Defective Unloader Valve	Test Unloader Valve operation (section 9.6) If this is continuously flowing high amounts of air, the Unloader Valve is defective.	Replace Unloader Valve (section 11.3)
Defective Heatless Dryer Solenoid Valve	Verify consistent Heatless Dryer cycling (section 9.5) If either side is continuously flowing high amounts of air, the Solenoid Valve is defective.	Replace Solenoid Valves included in the 8,000 Hour Maintenance Kit (section 11.4)
Defective control board	Measure voltages at control board (section 9.3)	If measurements are incorrect, replace control board (section 11.1)

13.17 High Compressor Last Run Time Alarm

13.18 Can't Create a High Compressor Last Run Time Alarm

Possible Cause	Check	Corrective Action
High Compressor Last	Verify High	Allow the compressor
Run Time Alarm set	Compressor Last Run	to run longer than the
point higher that the	Time Alarm set point	verified set point
default of 3:00 minutes		(section 9.11)
Defective Control	Verify that the	Replace Control Board
Board	compressor has run	(section 11.1) if the
	longer than the verified	compressor runs longer
	High Compressor Last	than the verified High
	Run Time Alarm set	Compressor Last Run
	point (abo	Time Alarm set point
	ve)	by 1 minute or more
		and fails to create an
		alarm.

13.19 Compressor Rapid ON/OFF Cycling

Possible Cause	Check	Corrective Action
Defective control board	Measure voltages at	If measurements are
	control board	incorrect, replace
	(section 9.3)	control board (section
		11.1)

13.20 Contacting ALTEC AIR Technical Support

Please read the *Before You Call ALTEC AIR* section (13.1)

Once you have exhausted all the potential problems and solutions covered in the *Troubleshooting Your Dryer* section, and you still require further assistance to correct a problem, contact ALTEC AIR Technical Support:

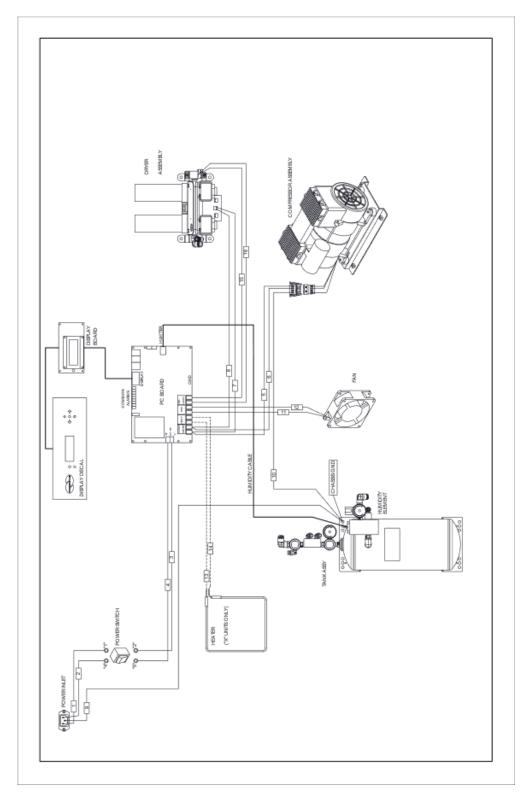
(800) 521-5351 (option 1)

Have the following information available:

Trouble Ticket # (if following-up on a pre	evious call):
Technician Name:	Phone #:
Model #:	Serial #:
Company Name:	Location Name:
City: State:	

14. Appendix

14.1 Wiring Diagram



14.2 Set Point Limits and Defaults

Description	Minimum Value	Maximum Value	Default Value	Unit of Measurement
System Pressure			50	PSI
Static Pressure			17	PSI
Outlet Pressure (LP UNITS)	2.0 (0.30)	15.0 (7.50)		PSI
Alarm Delay	OFF	ON	ON	
Startup Delay	0	10	0	Seconds

14.2.1 System Adjustments

14.2.2 Alarm Set Points

Description	Minimum Value	Maximum Value	Default Value	Unit of Measurement	Shutdown
High Flow Alarm	0	900	500	SCFD	
High Outlet Pressure Alarm (LP UNITS)	0.6 (0.31)	20.0 (7.50)	10.0 (7.50)	PSI	
Low Outlet Pressure Alarm (LP UNITS)	0.5 (0.30)	19.9 (7.49)	2.0 (0.30)	PSI	
High Humidity Alarm	3	15	10	%	YES
High Compressor Last Run Time Alarm	2:00	5:00	3:00	Minutes	
High Cabinet Temperature Alarm			120	Deg F	YES
Compressor Total Run Time Alarm			8000	Hours	

14.2.3 System Operations

Description	ON Value	OFF Value	Default Value	Unit of Measurement
Compressor	20.0	50.0		PSI
Fan	90	80		Deg F

14.3 SNMP Parameters

Device ID	Alphanumeric (Defined by Customer)
Device Model	Alphanumeric (Factory Preset)
Device Firmware Version	Numeric (Factory Preset)
Current Date/Time	Numeric (mm/dd/yy hh:mm)
IP Address	Numeric (xxx.xxx.xxx.xxx)
Subnet Mask	Numeric (xxx.xxx.xxx.xxx)
Gateway Address	Numeric (xxx.xxx.xxx.xxx)
SNMP Trap Server Address	Numeric (xxx.xxx.xxx.xxx)
SNMP Read Community String	Alphanumeric (6-14 digits, Default =
(also sets SNMP Trap Community String)	"public")
SNMP Write Community	Alphanumeric (6-14 digits, Default = "123456"
Status Readings (Read-Only)	
Outlet Pressure Reading	Numeric (PSI)
Tank Pressure Reading	Numeric (PSI)
Humidity Reading	Numeric (%)
Flow Reading	Numeric (SCFD)
Cabinet Temperature Reading	Numeric (DEG F)
Compressor Total Run Time Reading	Numeric (Hours)
Compressor Last Run Time Reading	Numeric (Seconds)
System Status	ON / SHUTDOWN
Compressor Status	ON / OFF
Fan Status	ON / OFF
Heater Status (Outdoor Unit Only)	ON / OFF
Alarm Readings (Read-Only)	
High Flow Alarm	OK / Alarm
High Outlet Pressure Alarm	OK / Alarm
Low Outlet Pressure Alarm	OK / Alarm
High Humidity Alarm	OK / Alarm
High Cabinet Temperature Alarm	OK / Alarm
High Compressor Last Run Time Alarm	OK / Alarm
Maintenance Required Alarm	OK / Alarm
Total Alarm	OK / Alarm
Configuration Settings (Read-Write)	
High Flow Alarm Threshold	Numeric (SCFD)
High Outlet Pressure Alarm Threshold	Numeric (PSI)
Low Outlet Pressure Alarm Threshold	Numeric (PSI)
High Humidity Alarm Threshold	Numeric (%)
High Compressor Last Run Time Alarm Threshold	Numeric (Seconds)
Reset Compressor Total Run Time Reading	Numeric (Hours)
Start Up Delay	Numeric (Seconds)
Alarm Reset	RESET
Alarm Delay	ON / OFF
Marm Traps Sent to SNMP Server	
High Flow	
High Outlet Pressure	
Low Outlet Pressure	
High Humidity	
High Cabinet Temperature	
High Compressor Last Run Time	

15. Limited Warranty Agreement

ALTEC AIR products carry a one (1) year warranty against defective workmanship and material. This period starts at date of shipment. Not included are the components subject to normal replacement during a year's operating time.

No claims for labor in replacing defective parts or for consequential damages will be allowed. Replacement parts will be invoiced in the regular way, with invoices subject to adjustment after the parts claimed defective are examined at our factory. In addition, no material or parts will be accepted at our factory for in-warranty repairs or credit without previous authorization from ALTEC AIR.

Responsibility for damages incurred in transit will be borne by the user and the user in turn should file any damage claim against the carrier. All warranty items are F.O.B. Broomfield, Colorado. Freight charges are the responsibility of the user.

This warranty shall not apply to any ALTEC AIR product which shall have been repaired or altered in any way by anyone other than ALTEC AIR or authorized personnel so as to affect, in our judgment, its proper functioning or reliability, neither will it apply to any product which has been subject to misuse, negligence, or accident. The installation of unauthorized non ALTEC AIR parts will void the warranty on those ALTEC AIR products.

Registration Reminder

If you haven't already done so, please take a moment to register your ALTEC AIR P550W Series Air Dryer. **Registering is necessary to activate this Limited Warranty on your product.** Once you register, you are eligible to receive free technical support, as well as updates concerning your ALTEC AIR products.

See Section 7. for details on Registering Your Dryer.

16. Contacting ALTEC AIR 16.1 General ALTEC AIR, LLC 226A Commerce Street Broomfield, Colorado 80020 (800) 521-5351 (303) 427-3700 Fax – (303) 657-2233 info@AltecAIR.com www.AltecAIR.com

16.2 Sales

(800) 521-5351 (**option 2**) Fax – (303) 657-2205

sales@AltecAIR.com parts@AltecAIR.com

16.3 Service

(800) 521-5351 (**option 3**) Fax – (303) 657-2205

16.4 Technical Support

(800) 521-5351 (option 1)

DON'T FORGET TO REGISTER YOUR DRYER!

See Section 7. for details on Registering Your Dryer.

17. Notes

 ·
-