

A-dec® SC Air Compressor

Service Guide

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Overview

Copyright and Regulatory Information

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Regulatory Information and Warranty

For required regulatory information and the A-dec warranty, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at www.a-dec.com.



For quick access to this document online, scan, tap, or click this QR code, which points to: a-dec.com/regulatory-guide.

Product Service

Product service is available through your local authorized A-dec dealer. For service information, or to locate an authorized dealer, contact A-dec at 1.800.547.1883 in the USA and Canada or 1.503.538.7478 worldwide, or visit www.a-dec.com.

Product Models and Versions Covered in This Document

Models	Versions	Description
SC3/SC3.120 SC5/ SC5.120/ SC7 SC10/SC12	n/a	Air Compressor

Requirements

Description of Operation

- On initial startup at 0 psi, the compressor pumps come on in a staggered startup, number 1 and then number 2, etc.
- The internal electronics continually monitor the pressure, turning the compressors off at 106 psi. Pump up times in seconds (+/- 1) 0 - 106 psi:
 - SC3 = 35, SC5 = 25, SC7 = 21, SC10 = 20, SC12 = 20
- When the pressure drops, the first compressor starts at 88 psi.
- If the pressure continues to drop, the motors start at the following psi:
 - 2 at 87, 3 at 86, 4 at 85, 5 at 84, 6 at 83



NOTE The number of total pumps depends on the compressor model.

- The normal ambient operating temperature range is 40 - 104 degrees.
- After 5 seconds of operation, the cooling fan turns on and runs for 10 minutes after the motor stops. The cooling fan may also run automatically if the internal compressor temperature is above 90° F.
- The compressor will display a high temperature warning at 106 degrees and will turn off automatically at 130 degrees. It will remain off until the ambient temperature drops below 90 degrees.
- The compressed air discharges moisture every 120 seconds of elapsed operation.



NOTE Low pressure displays on the touchscreen as pressure builds.



NOTE Effective December 2019 compressor pressure ranges were changed from 80 - 100 psi to 86 - 106 psi.

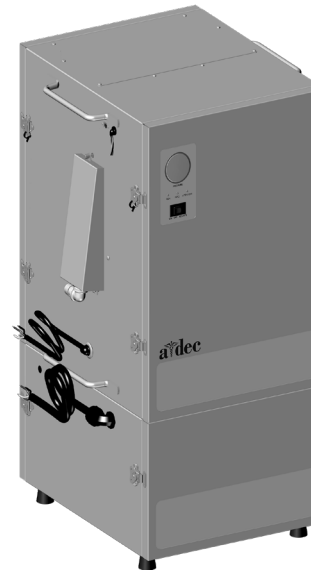
Compressor Models



Model	Number of Users	Number of Motors
SC3.120	1 - 3	2
SC5.120	3 - 5	3
SC3	1 - 3	2
SC5	3 - 5	3
SC7	5 - 7	4



NOTE Dedicated 120 V models SC3.120 and SC5.120 were added effective April 2021.

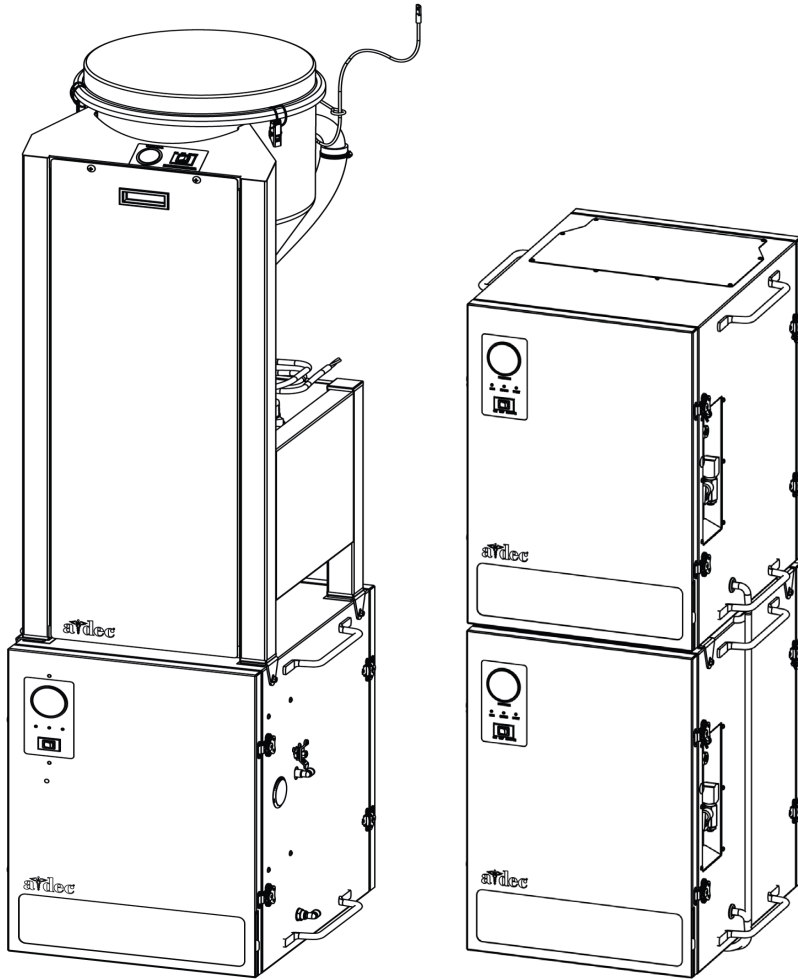


Model	Number of Users	Number of Motors
SC10	7 - 10	5
SC12	10 - 12	6

Stackable Options

Stackable

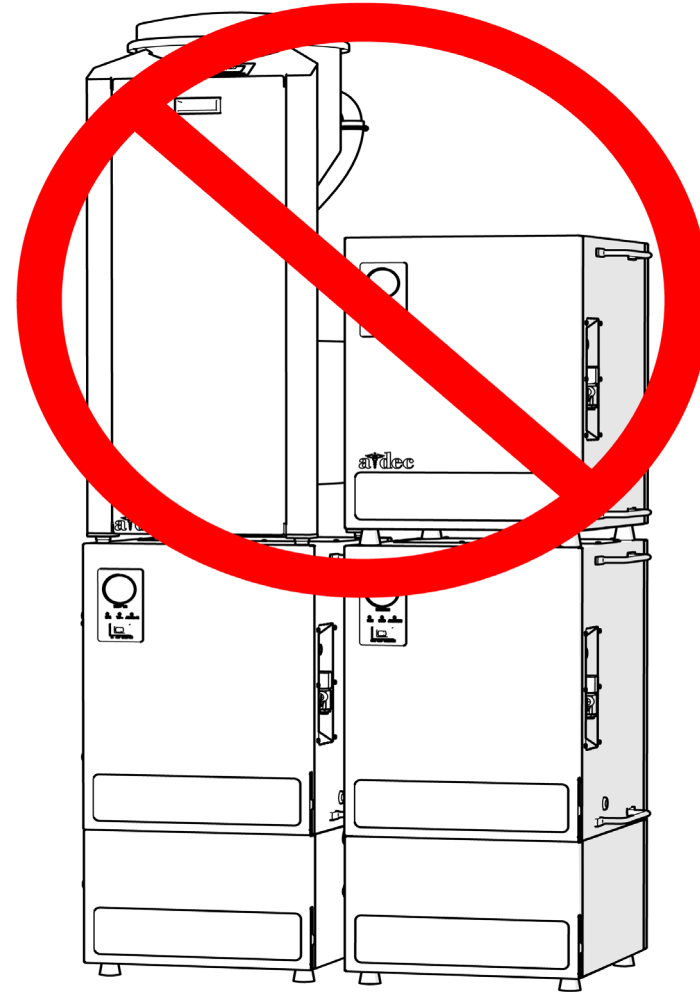
- Vacuum on top of compressor
- Compressor on top of compressor



SC3/SC5/SC7

Non-Stackable

- Vacuum on top of vacuum
- Vacuum on top of compressor with expansion module
- Compressor on top of compressor with expansion module



SC10/SC12

Site Specifications and Sizing Information

Model	Max Users	CFM @80 PSI	PSI Range	Total HP	Voltage Range	Amps	Breaker
SC3	3	3.7	86-106 *	1	215-240 **	6.0	15
SC5	5	5.8		1.5		8.8	15
SC7	7	7.6		2		11.1	15
SC10	10	8.8		2.5		14.1	20
SC12	12	10.6		3		16.5	20
SC3.120	3	3.7		1	108-133	11	15
SC5.120	5	5.8	1.5	16.5		20	

*86-106 PSI: Pressure range for compressors manufactured effective December 2019.

80-100 PSI: Pressure range for compressors manufactured before December 2019.

** 215-240 V: For units manufactured effective April 2021. Voltage outside of that range will require a buck-boost transformer. For units manufactured before April 2021, see “Electrical Requirements (Before April 2021)” on page 7.

Model	Dims - WxDxH Installed	Weight Installed	Dims - WxDxH Packaged	Weight Packaged	Sound db(A) *	BTU/Hr Max
SC3	23 x 23 x 27.5"	149	24 x 31 x 36"	160	58.6	2,600
SC5	23 x 23 x 27.5"	177	24 x 31 x 36"	183	59.4	3,800
SC7	23 x 23 x 27.5"	193	24 x 31 x 36"	202	60.6	5,000
SC10	23 x 23 x 39"	265	24 x 31 x 44"	278	61.4	6,400
SC12	23 x 23 x 39"	279	24 x 31 x 44"	292	61.7	7,650

*The sound level increases by 1 db(A) if the top plate of the compressor is removed.

When just the cooling fan runs (no pumps running), the db(A) level is 54.1.

HVAC Requirements

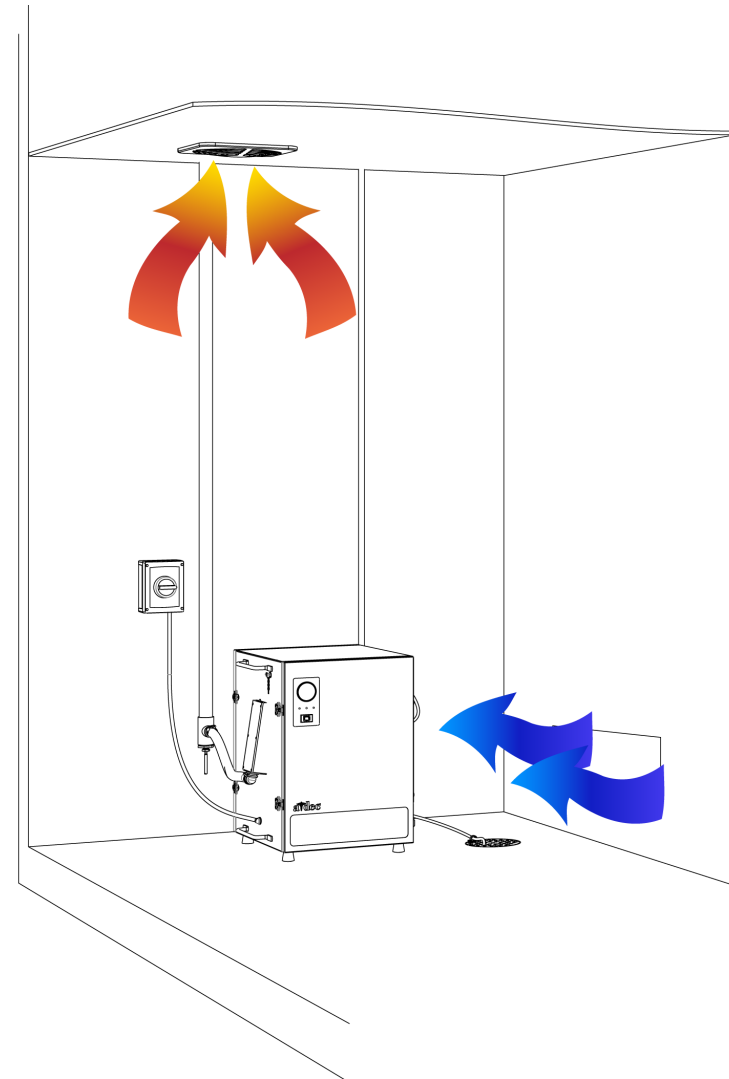
Adequate cooling air is required. All compressor models are installed and operated in a thermostatically or otherwise stable ambient temperature environment. Forced air and HVAC input are recommended for use in addition to an exhaust fan if normal ambient temperatures vary from specified operating temperature range.

The operating temperature range of the vacuum is 40° F to 104° F or 4.4 to 40° C.

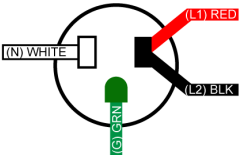
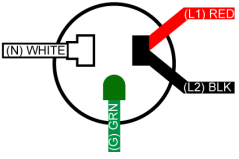
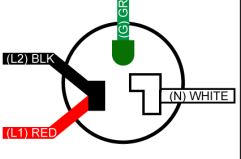
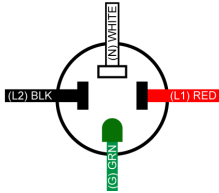
Compressor life is directly affected by the operating temperature.

Model	Maximum Heat Rejection (BTU/HR)	Cooling Fan* (CFM)
SC3	2,600	200
SC5	3,800	230
SC7	5,000	350
SC10	6,400	460
SC12	7,650	480

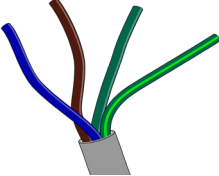
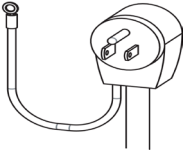
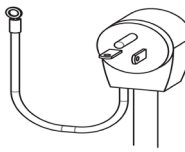
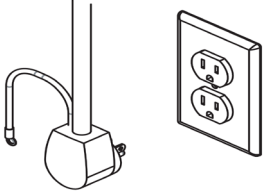
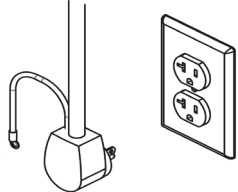
* Based on 80° F/27° C cooling air available and 100° F/38° C maximum mechanical room temperature. This does not account for overall mechanical room size and additional heat sources. Consult an HVAC specialist for proper temperature range.



Electrical Requirements (Before April 2021)

Wiring	SC3	SC5	SC7	SC10	SC12
115/120 V 3-WIRE (Hot, Neutral, Gnd)	15 Amp Circuit NEMA 5-15  12.5 Amps	20 Amp Circuit NEMA 5-20  17.4 Amps	30 Amp Circuit NEMA 5-30  23.2 Amps	50 Amp Circuit Hard Wire Only 29 Amps	50 Amp Circuit Hard Wire Only 34.8 Amps
208/230 V 3-Wire (Hot, Hot, Gnd)	Contact A-dec Customer Service				
*208/230 V 4-Wire (Hot, Hot, Neutral, Gnd) *Recommended Wiring	20 Amp Circuit NEMA 14-20 			30 Amp Circuit Hard Wire Only	
	5.8 AMPS	8.7 AMPS	11.6 AMPS	14.5 AMPS	17.4 AMPS

Electrical Requirements (Effective April 2021)

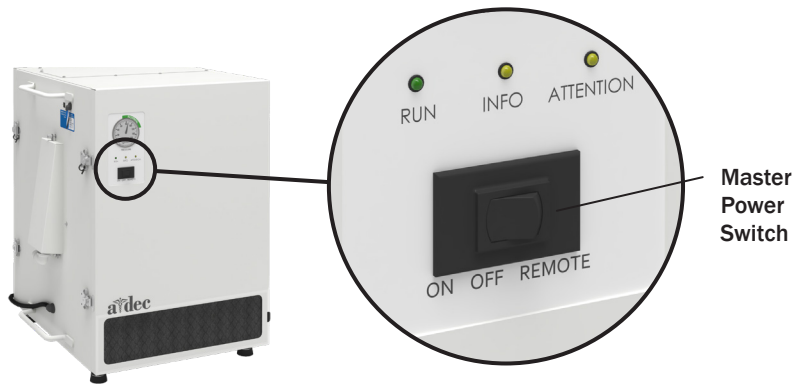
SC3	SC5	SC7	SC10	SC12	SC3.120	SC5.120												
Required Circuit Breaker Size																		
15 Amp	15 Amp	15 Amp	20 Amp	20 Amp	15 Amp Outlet Required	20 Amp Outlet Required												
 <p>Hard Wired Connection (Blue, Brown, Green, Green/Yellow)</p>					 <p>NEMA 5-15P Plug (w/extra ground)</p>	 <p>NEMA 5-20P Plug (w/extra ground)</p>												
Maximum Current Draw																		
SC3	SC5	SC7	SC10	SC12	SC3.120	SC5.120												
6.0 Amps	8.8 Amps	11.1 Amps	14.1 Amps	16.5 Amps	11.0 Amps	16.2 Amps												
p/n E0275 *																		
<p>*Acceptable voltage range is 215-240 VAC. Voltage outside of that range will require a buck-boost transformer.</p> <table border="1" data-bbox="100 943 716 1138"> <thead> <tr> <th>Function</th> <th>USA Color Code</th> <th>International Color Code</th> </tr> </thead> <tbody> <tr> <td>Line (Hot)</td> <td>Black</td> <td>Brown</td> </tr> <tr> <td>Neutral</td> <td>White</td> <td>Blue</td> </tr> <tr> <td>Ground</td> <td>Green</td> <td>Green/Yellow</td> </tr> </tbody> </table>					Function	USA Color Code	International Color Code	Line (Hot)	Black	Brown	Neutral	White	Blue	Ground	Green	Green/Yellow	<p>Requires 120 V, 15 Amp, NEMA 5-15P Outlet</p> 	<p>Requires 120 V, 20 Amp, NEMA 5-20P Outlet</p> 
					Function	USA Color Code	International Color Code											
Line (Hot)	Black	Brown																
Neutral	White	Blue																
Ground	Green	Green/Yellow																



CAUTION Electrical connections to mains supply (including a rewirable plug) must be installed by a licensed electrician or qualified service personnel.

Operate

Turn On/Turn Off Power

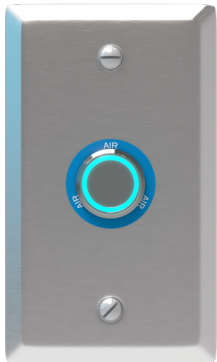


NOTE For longer periods of non-use, such as an extended shutdown of the office, disconnect power to the compressor to save energy and reduce the chance of air leaks in your piping system and treatment rooms.

Master Power Switch

The master power switch turns the vacuum on or off. It also overrides the other remote power functions. If your vacuum is connected to remote LED push-button controls or a Smart Shield touchscreen, this switch should be in the REMOTE position.

LED Push-Button Control
(single-button)



LED Push-Button Control
(four-button)



Optional LED Push-Button Controls

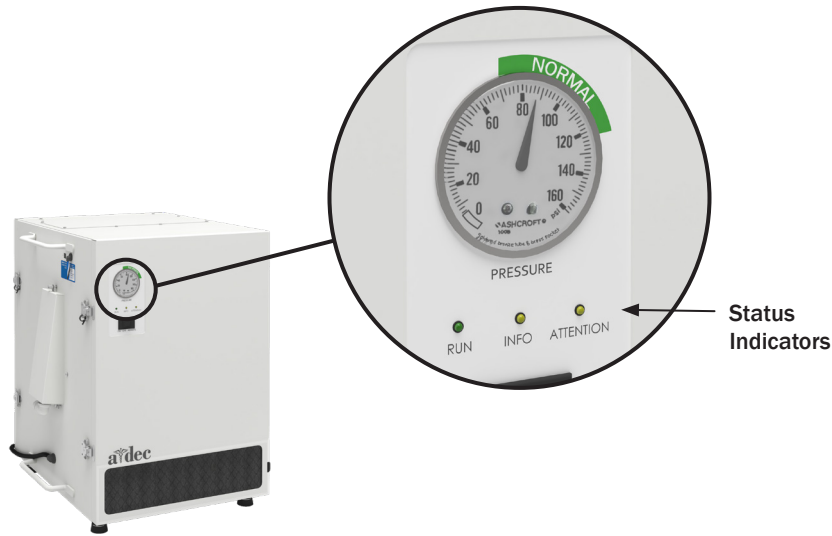
If you have LED push-button controls, press the button once to turn the vacuum unit on or off. Blue LED lighting indicates that the vacuum is on. If the LED does not illuminate, check and verify that the master power switch on the vacuum is in the REMOTE position.

Optional Smart Shield Touchscreen Controls

For configurations with the Smart Shield touchscreen, use the power switch icon at the bottom of the screen or tap the AIR icon to turn the compressor on or off. If the Smart Shield does not operate, check and verify that the master power switch on the compressor is in the REMOTE position. For more information on the touchscreen, see “Smart Shield Touchscreen Controls” on page 11.



Control Panel Gauge and Operational Status






Pressure Gauge

After initial startup, when the system is fully pressurized, the pressure gauge indicator should stay within the normal range. Contact your authorized A-dec dealer if the pressure remains outside this range during normal operation.

Status Indicators

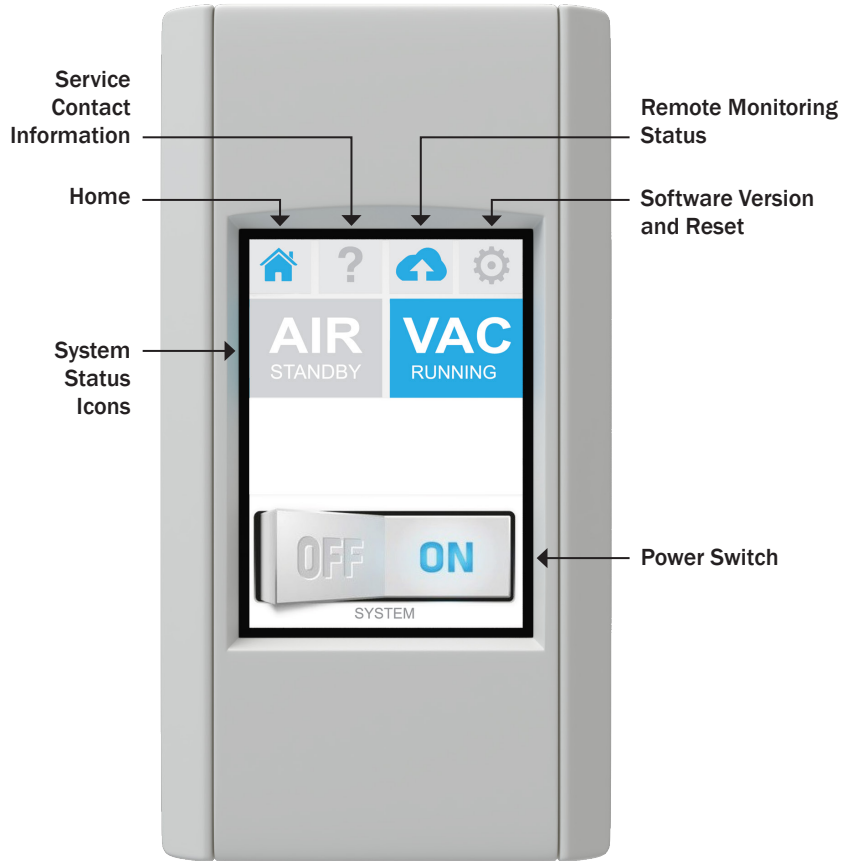
The control panel includes three status indicators. These illuminate differently, according to various conditions:

Indicator /Color	Illumination State	Condition
RUN/ Green 	Solid illumination. Flashes continuously.	A pump is running. The system is in standby (full pressure reached, no pumps running).
INFO/ Yellow 	Flashes once every 10 seconds. Flashes in intervals.	The unit is connected to power. The number of flashes per interval indicates the number of motors running.
ATTENTION/ Yellow 	Flashes in interval.	Fault code. For more information, see "Troubleshooting Tasks" on page 32.



NOTE In addition to hearing the motors and pumps operate, you may also hear other noises from the compressor. These are normal and come from the cooling fans, air dryer, and other components during various operational cycles.

Smart Shield Touchscreen Controls



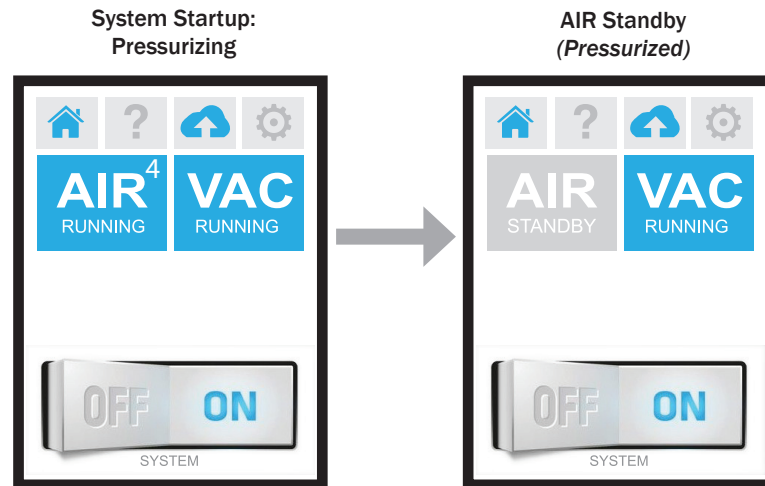
NOTE If the Smart Shield does not operate, check and verify that the master power switch on the compressor is in the REMOTE position. For more information, see "Troubleshooting Tasks" on page 32.

The optional Smart Shield touchscreen provides power control and system status of your mechanical room equipment.

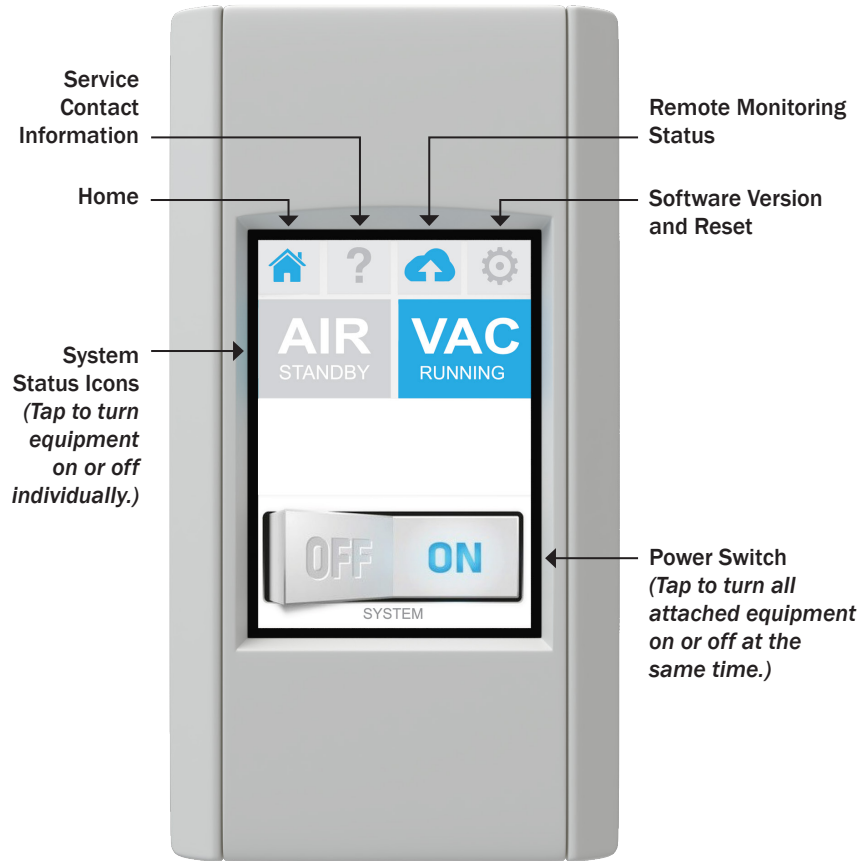
Tap the power switch icon at the bottom of the screen to turn all connected equipment on or off at the same time. Tap the blue system status icons to turn individual equipment on or off. These status icons also dynamically change according to the operational state of the equipment (see "Compressor System Status Icons" on page 12).

Compressor Startup

When you first start the compressor, Smart Shield displays the AIR RUNNING icon, which includes the number of motors currently running to increase air pressure (in the upper right corner of the icon). When the system has reached the normal operating pressure range, the AIR STANDBY icon appears.



Smart Shield Touchscreen Controls *(continued)*



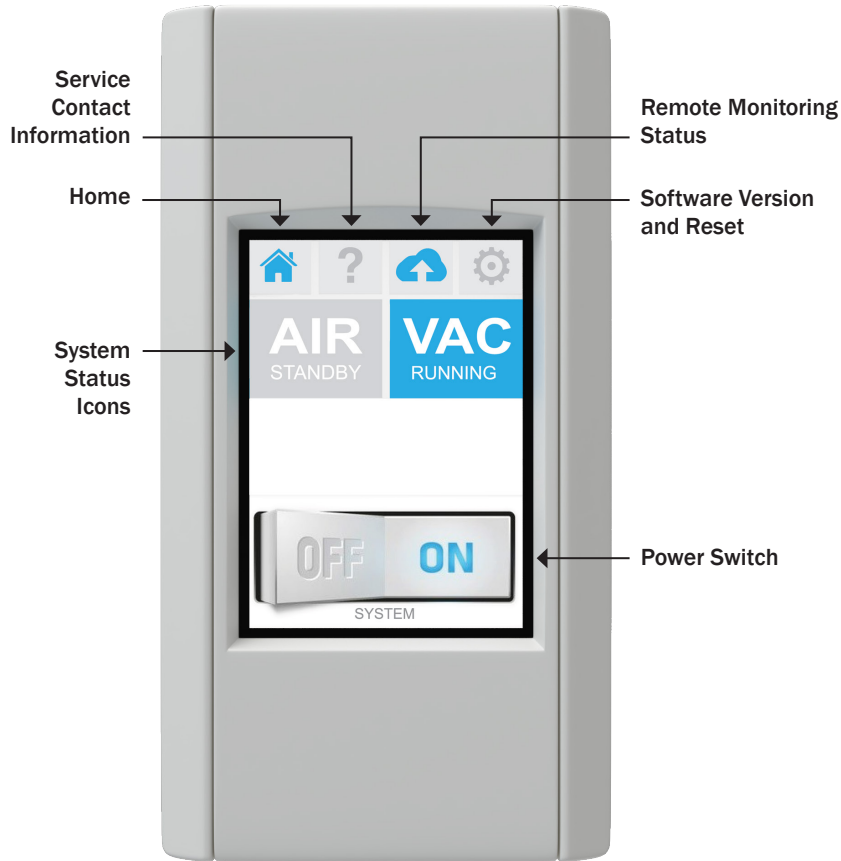
Compressor System Status Icons

Icon	State/Status
	Displays during initial startup while the compressor motors are pressurizing. The number in the upper right corner indicates how many motors are currently running, which varies per model (SC3: 2, SC5: 3, SC7: 4, SC10: 5, SC12: 6).
	Displays intermittently while the compressor motors are pressurizing the system, typically during initial system startup.
	Displays when the compressor motors have finished pressurizing the system.
	MANUAL appears on status icons when the master power switch on the compressor is in the ON or OFF position. To control power through the Smart Shield touchscreen, ensure that the master power switch on the compressor is in the REMOTE position.
	Displays when the compressor is turned off from the Smart Shield touchscreen controls.
	Displays when the annual maintenance interval is reached. This caution/reminder is reset whenever power to the system is disconnected.
	Displays when there is a fault in the system. Contact A-dec customer service.


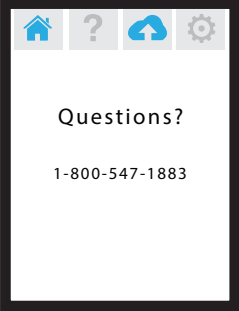

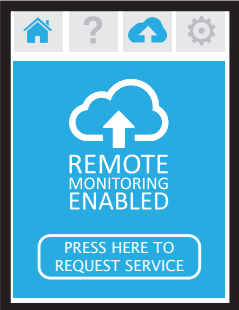

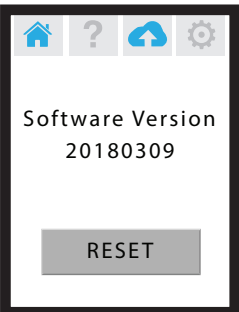


NOTE If additional warning icons appear on your screen and are not shown here, contact A-dec Customer Service for more information.

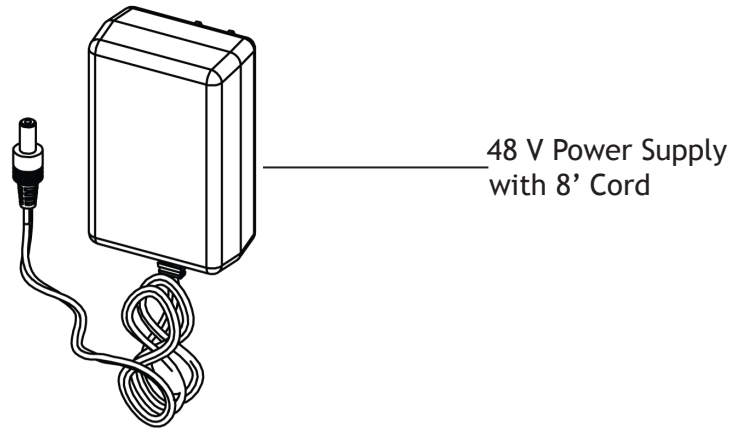
Smart Shield Touchscreen Controls *(continued)*



Additional Smart Shield Functions

Icon	State/Status
	 <p>Displays A-dec contact information.</p>
	 <p>Displays your status as enabled if you are registered with the remote monitoring service. For questions, contact A-dec Customer Service.</p>
	 <p>Displays software version. The reset button turns off the screen, reboots the software, and reloads the equipment status. For more information, see “Troubleshooting Tasks” on page 32.</p>

Mechanical Room Controls



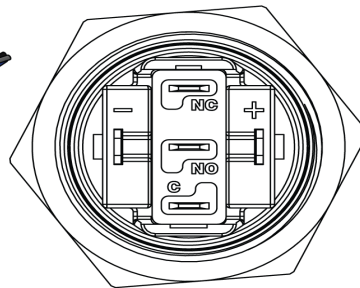
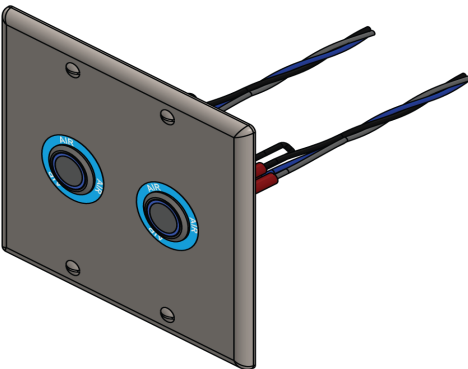
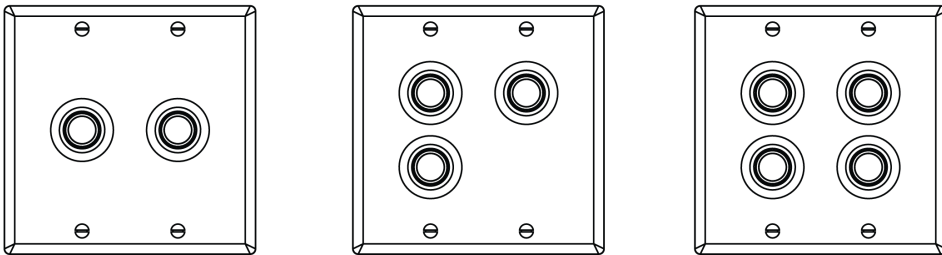
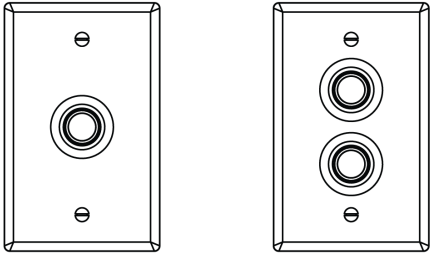
NOTE The firmware in the smart hub was updated in March 2020 to include a dedicated port for the touchscreen.



NOTE For further information on the smart hub, see the *A-dec Smart Shield Touchscreen Installation Guide*, (p/n 86.0993.00) available in the Resource Center at www.a-dec.com.

Mechanical Room Controls *(continued)*

LED Push-Button Controls



- Gray
- + Black - Run Signal
- NO Blue - 24 V Power
- C Orange - Stop/Close (optional)



NOTE For further information on LED push-button controls, see the *A-dec LED Push-Button Controls and Remote Monitoring Hub Installation Guide*, (p/n 86.1022.00) available in the Resource Center at www.a-dec.com.

Mechanical Room Controls *(continued)*

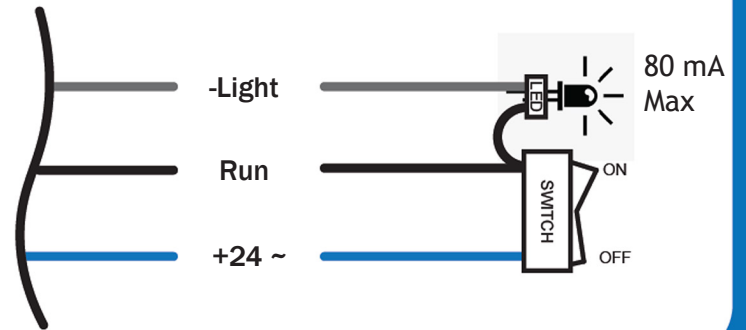
Mechanical Room 24 V Competitive Cross Reference

Mtg/Wire	A	B (Light)	C
A-dec	Blue + 24 VDC	Gray -Lamp	Black Run Signal
AirTechniques	Yellow	Brown	Orange
Midmark	Blue	White	Red
Dental EZ	Black	Brown	Yellow
Matrix	Red	Blue	White
Apollo	Blue	White	Red
Tech West	Blue	White	Red

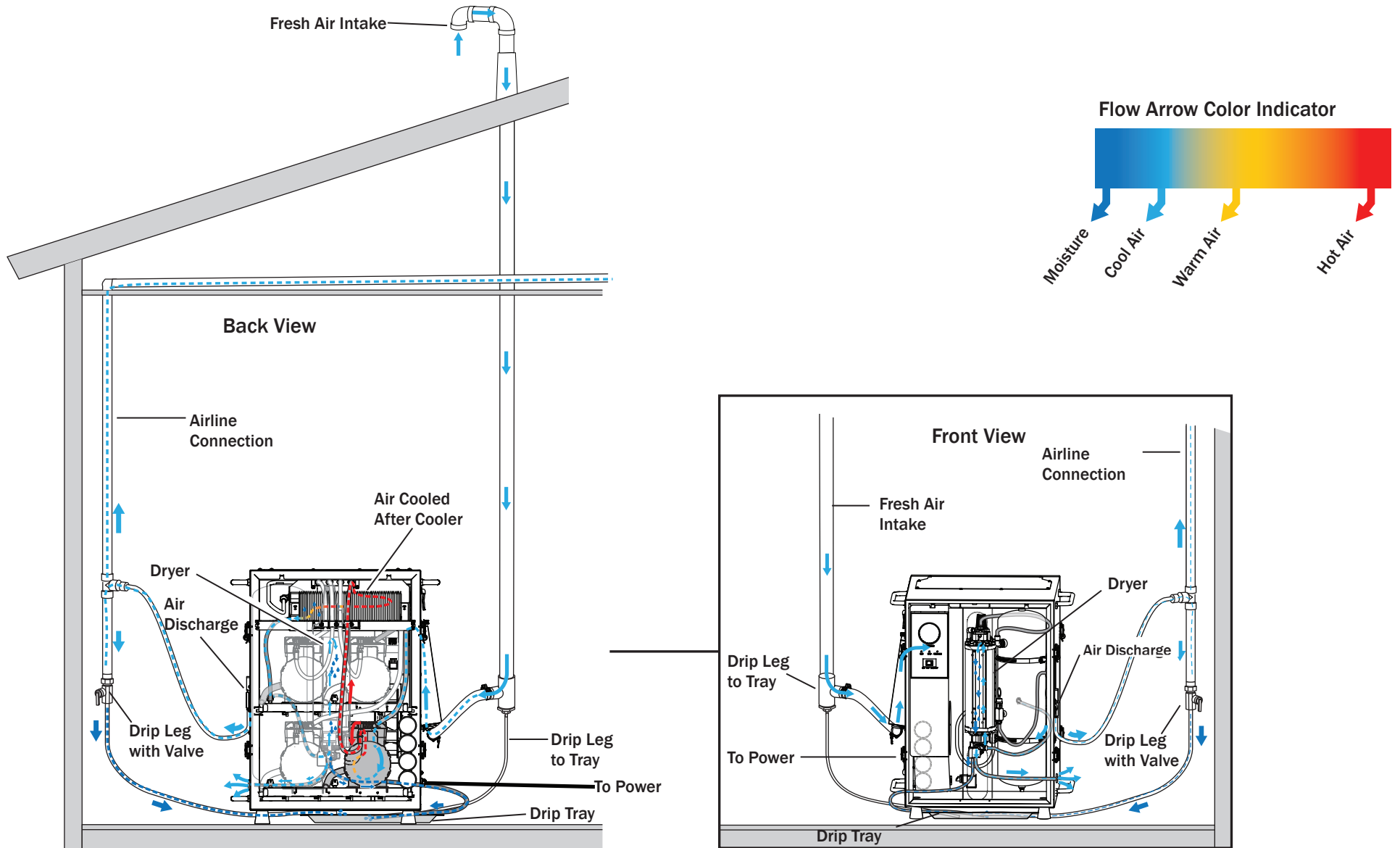
Remote Panel 24 V Wiring

Do Not Tie Together

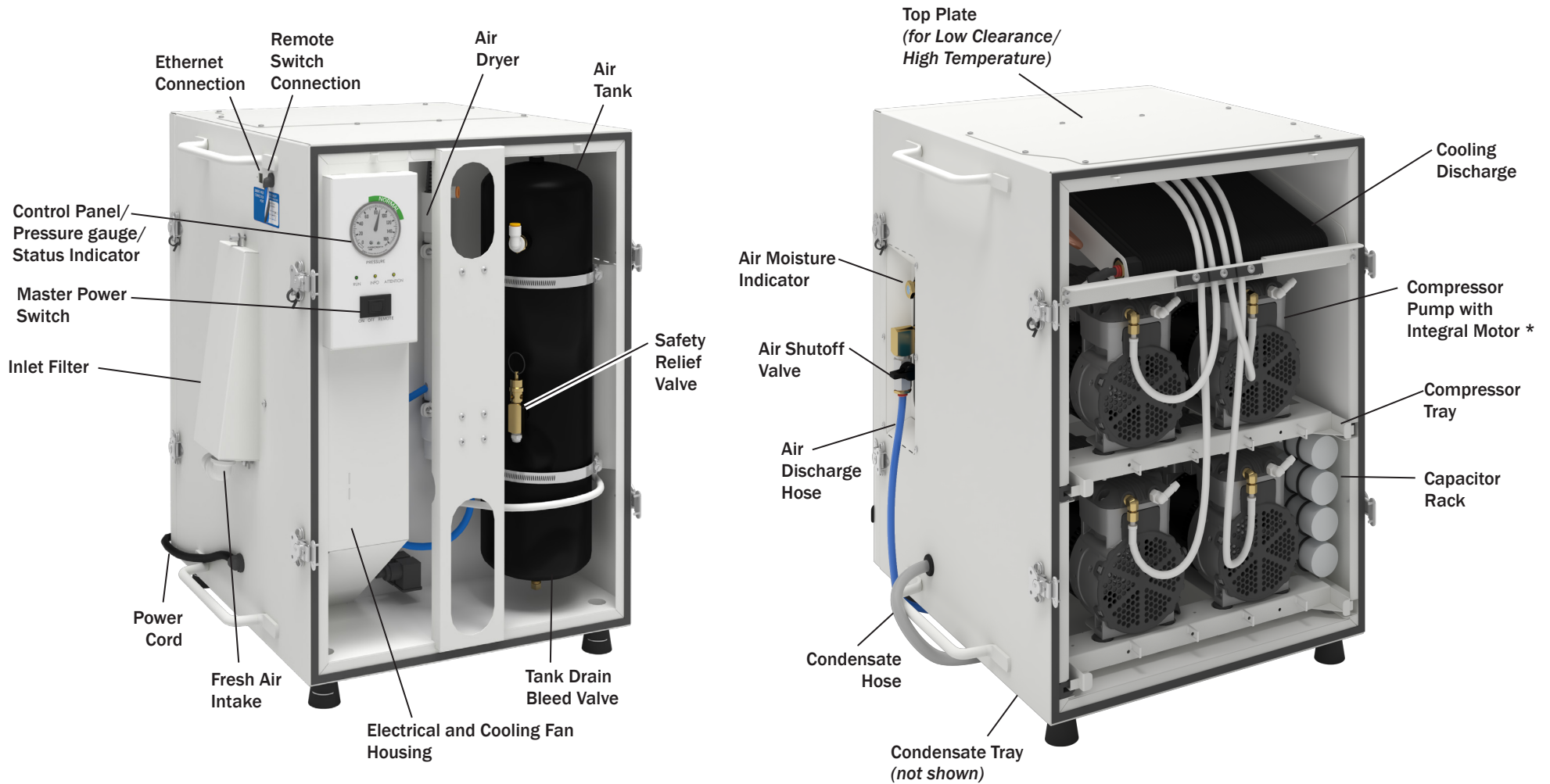
Remote Panel 24 V Wiring



Flow Diagram



Components



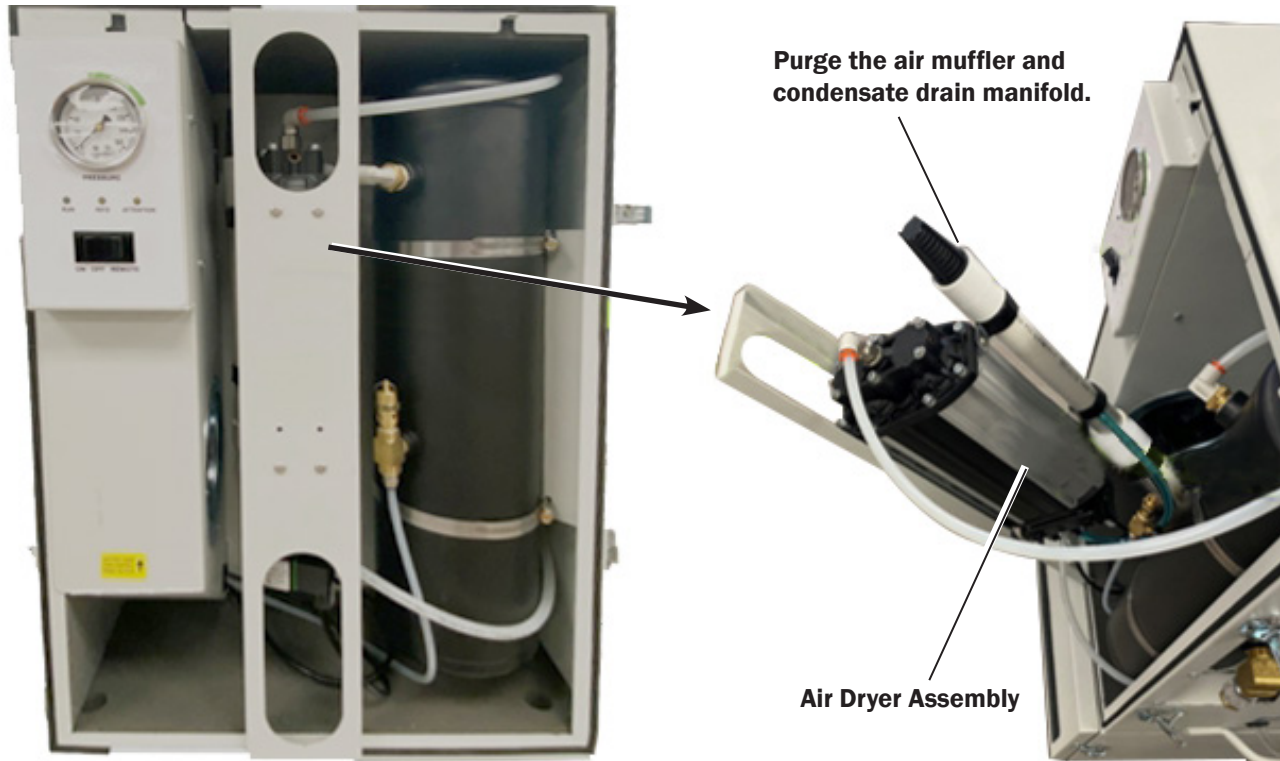
* See Motor Configurations on page 21.

Access the Dryer Module

Pull the metal frame down and out and lower the frame down to open the front cover.

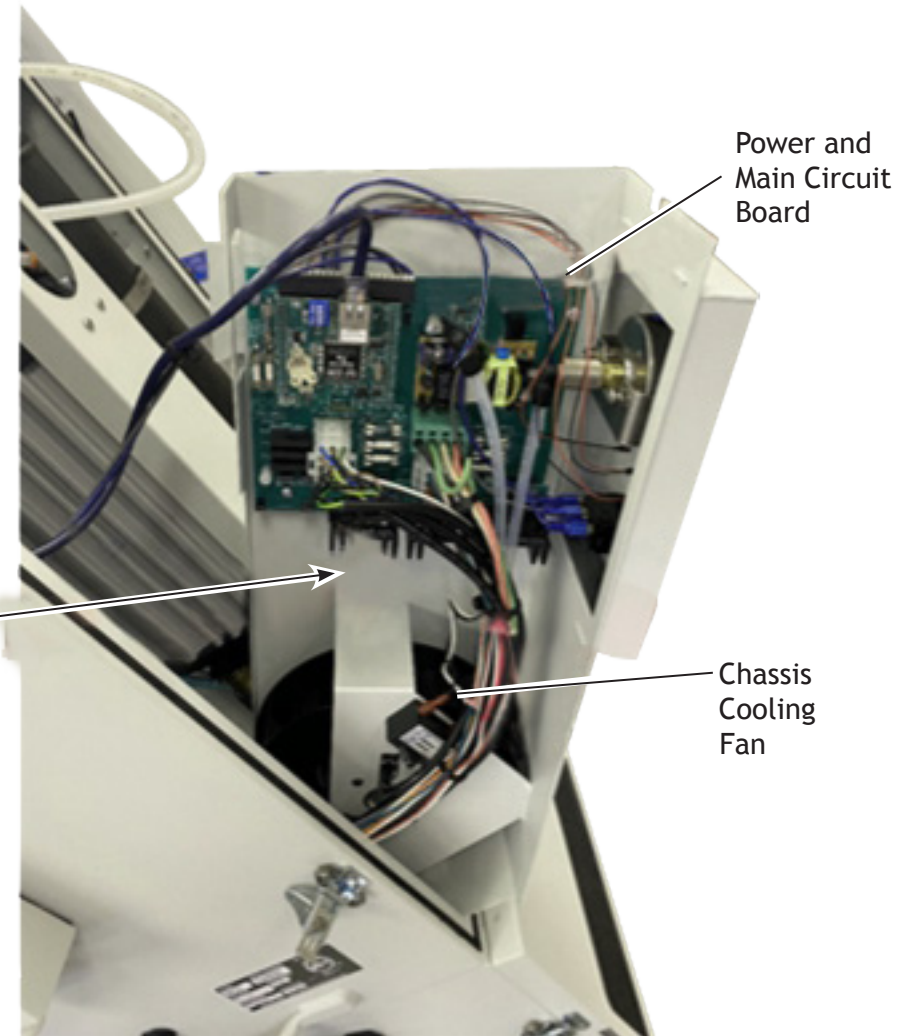


NOTE You may need to use a screwdriver to pry open the top of the frame.

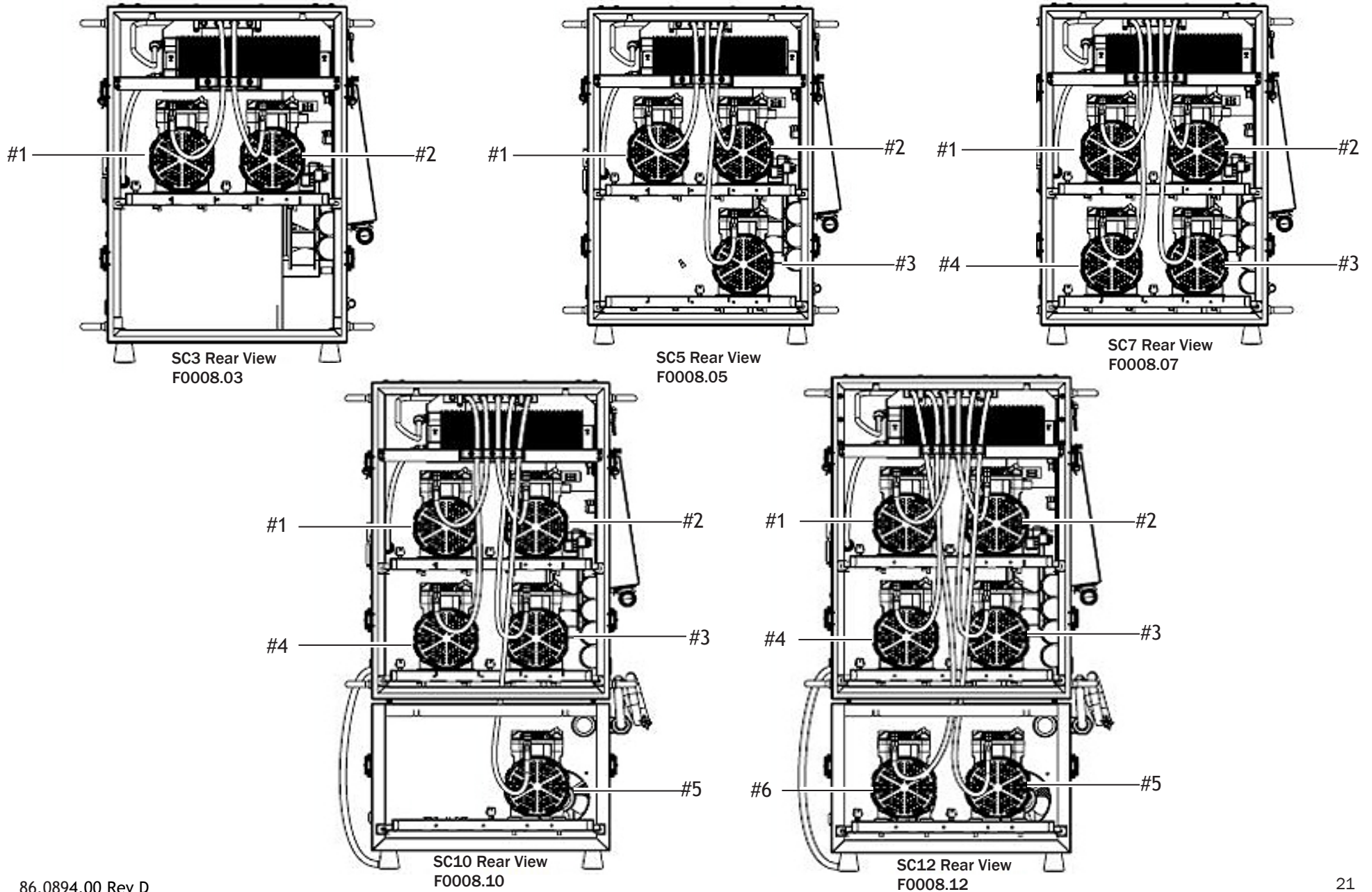


Access the Electrical Housing Assembly

To access the electrical controls, lift up on the lower cover and tilt it out. The housing will rest at an approximate 45 degree angle.



Motor Configurations



Maintain / Troubleshoot

Regular Maintenance Tasks



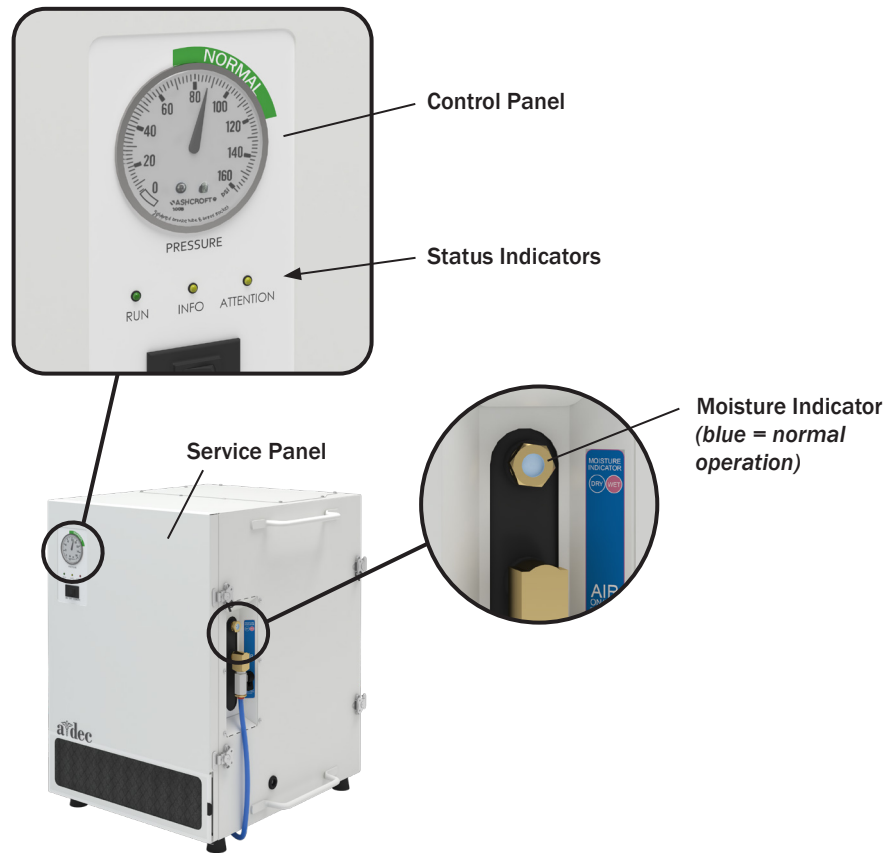
WARNING Before performing any maintenance function, disconnect main power to the compressor and ensure that all air pressure is relieved. Failure to do so may result in injury or equipment damage.



WARNING Make sure the compressor cabinet doors are installed before performing any operation. Failure to do so may result in injury or equipment damage.



CAUTION Do not lubricate the compressor with grease or oil. Bearings are permanently sealed with special lubrication.



See the table below for regular maintenance tasks.

Frequency	Items	Task/Procedure
Weekly	Control panel and moisture indicator.	<p>Visually inspect the control panel. If the air pressure does not remain in the normal operation zone after initial startup, contact A-dec Customer Service. Ensure that the RUN and INFO status indicators are illuminating properly (see "Status Indicators" on page 10 for more information).</p> <p>Visually inspect the moisture indicator.</p> <ul style="list-style-type: none"> Blue indicates normal operation. If the indicator is yellow, see "Air Dryer Troubleshooting" on page 34. If the indicator is pink, there may be moisture in the compressed air. Contact A-dec Customer Service.
Monthly	Exterior case and tubing connections.	Use a dry, lint-free cloth to dust off and clean the exterior. Listen for any air leaks.

Annual Filter Change Procedure



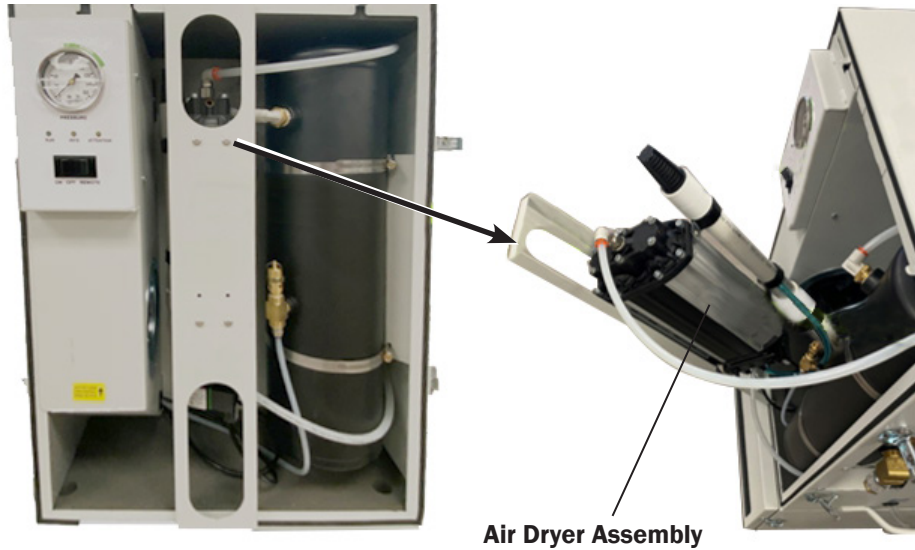
WARNING Before performing any maintenance function, disconnect main power to the compressor and ensure that all air pressure is relieved. Failure to do so may result in injury or equipment damage.

Frequency	Item	Task/Procedure
Yearly	Air filters: <ul style="list-style-type: none"> • Fresh air foam • Fresh air mesh • Ambient air screen 	Replace the fresh air and ambient air filters once a year. Turn off power to the compressor before following these steps: <ol style="list-style-type: none"> 1. Loosen and remove the fresh air filter housing thumbscrew, then remove the housing to access the fresh air filters. 2. Pull out and replace the foam and mesh filters. Reinstall the housing. 3. Slide the ambient air filter out from the front service panel and replace. * For air filter replacement, order the following maintenance kits: <ul style="list-style-type: none"> • p/n A0050, for model SC3/SC5/SC7 • p/n A0150, for model SC10/SC12
Every 5 years	Internal dryer cartridge filter.	Replace the internal dryer cartridge filter. For internal cartridge filter replacement, contact A-dec Customer Service.



NOTE The filter location is the same for compressor SC 10 and 12 models with the addition of a second Ambient Air Screen Filter on lower expansion module.

Five Year Dryer Cartridge Replacement Procedure



WARNING Before performing any maintenance function, disconnect main power to the compressor and ensure that all air pressure is relieved. Failure to do so may result in injury or equipment damage.



NOTE You may need to use a screwdriver to pry open the top of the frame.

To replace the internal dryer cartridge filter (p/n A0051).

1. Turn off power to the unit.
2. Release all air pressure.
3. Release the frame from the dryer and pull out the dryer.
4. Remove the top of the dryer.
5. Remove the dryer cartridge and O-rings.
6. Replace the new cartridge and O-rings.
7. Replace the dryer in the unit.

A0051
Dryer Cartridges
and O-rings



Line Voltage Diagrams (Before April 2021)

Line Voltage Locations (Before April 2021)

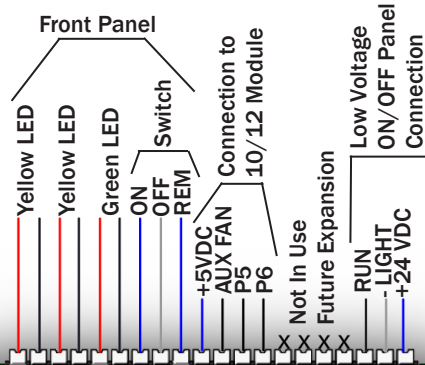


Set Meter for Volts DC

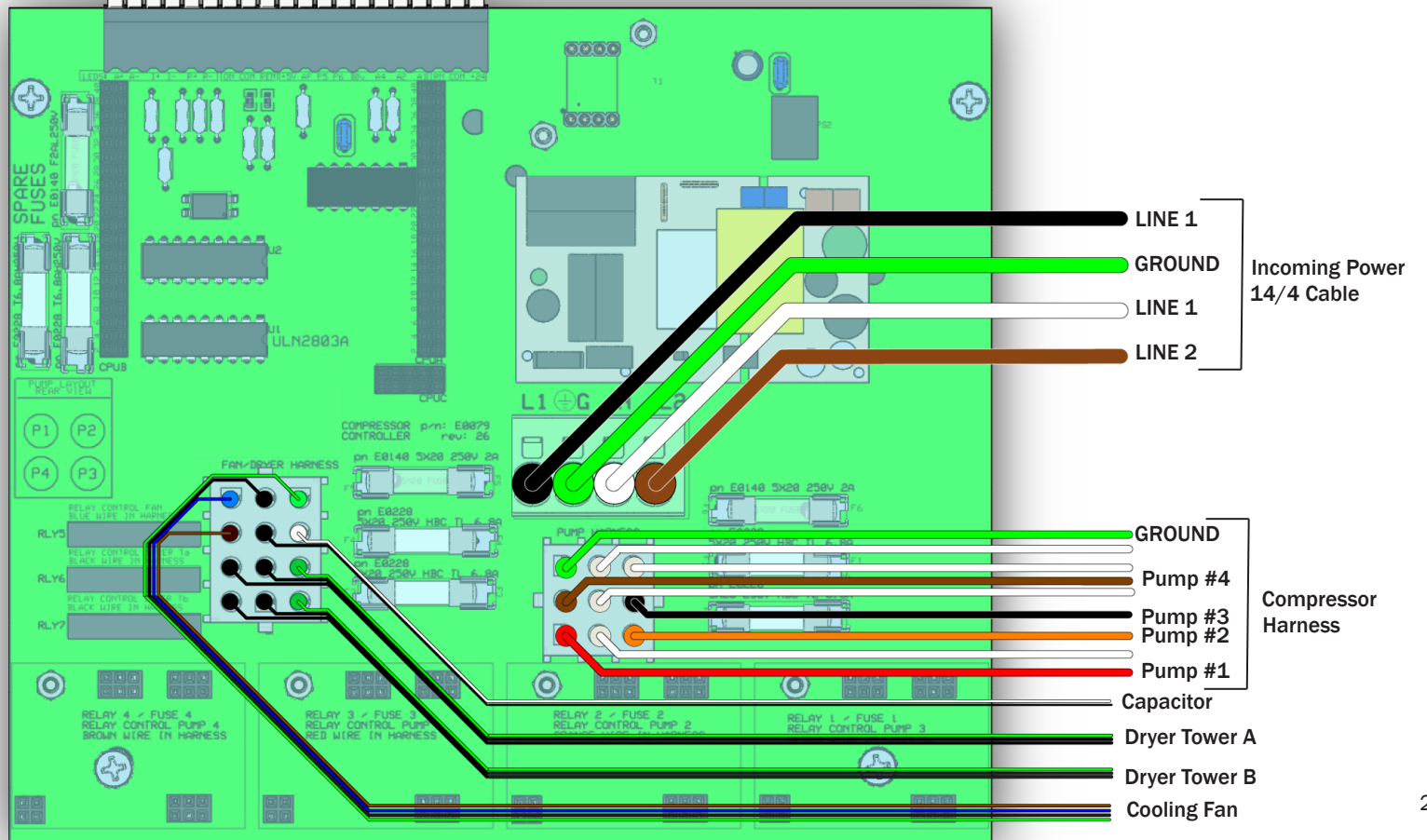
Value Should be Line Voltage

190 -260 VAC is Acceptable

120/208/240 V
3W+PE +/-10%



ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.



Test Voltages 115 V Locations *(Before April 2021)*

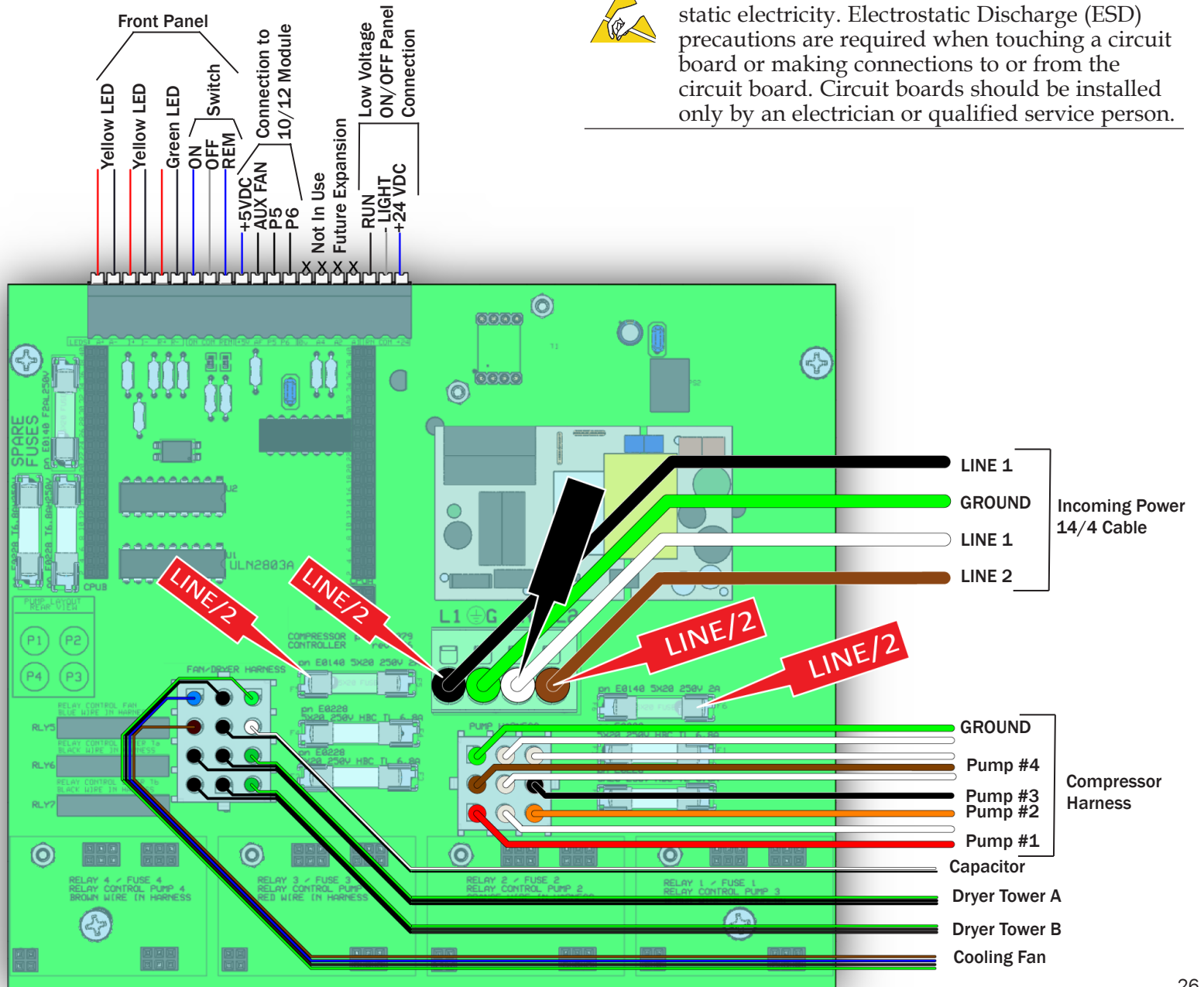


Set Meter for Volts DC

Value Should be Approx. Line Voltage/2 (Divided by 2)

105/130 VAC is Acceptable

Values to be +/- 5 at Each Location



ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

Test Voltages 24 V Locations (Before April 2021)

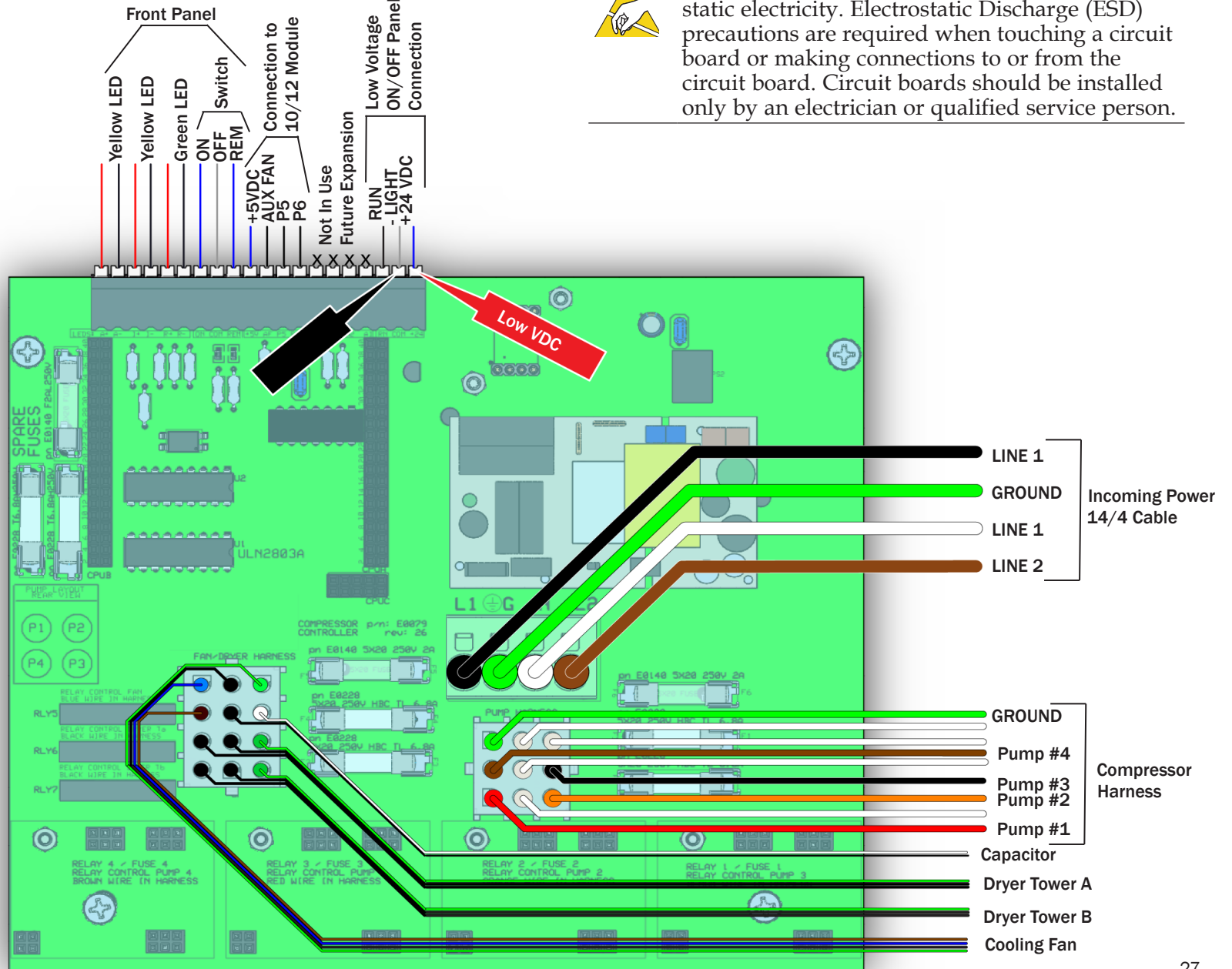


Set Meter for Volts DC

Value Should be Approx. 24 VDC

2–30 VDC is Acceptable

If lower than 18 VDC, Check Position of 115/230 V Switch



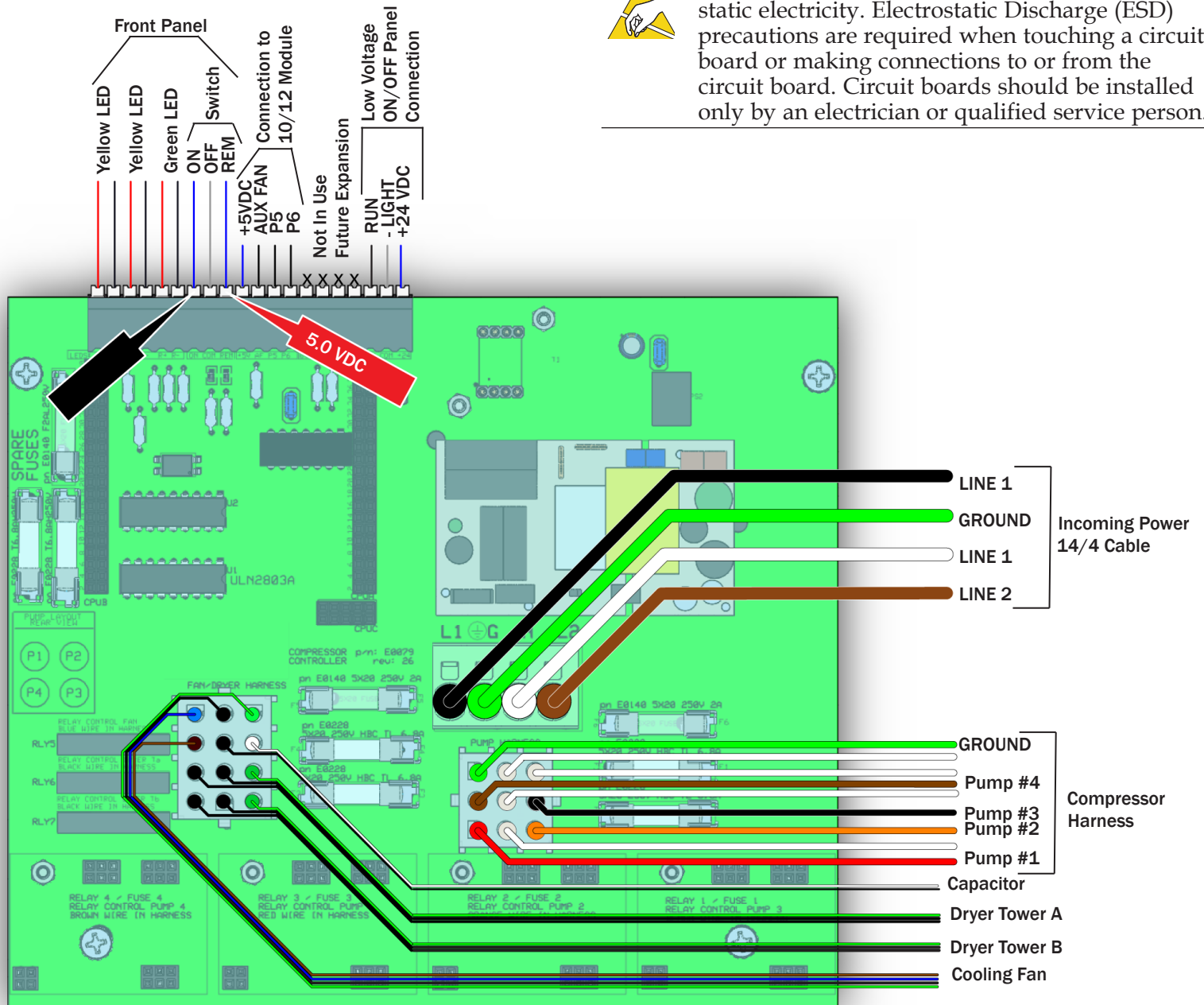
ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

Test Voltages 5 V Locations *(Before April 2021)*



Set Meter for Volts DC

Value Should be Approx. 5.0 VDC +/- 0.1



ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

Line Voltage Diagrams (April 2021)

Line Voltage Locations (Effective April 2021)

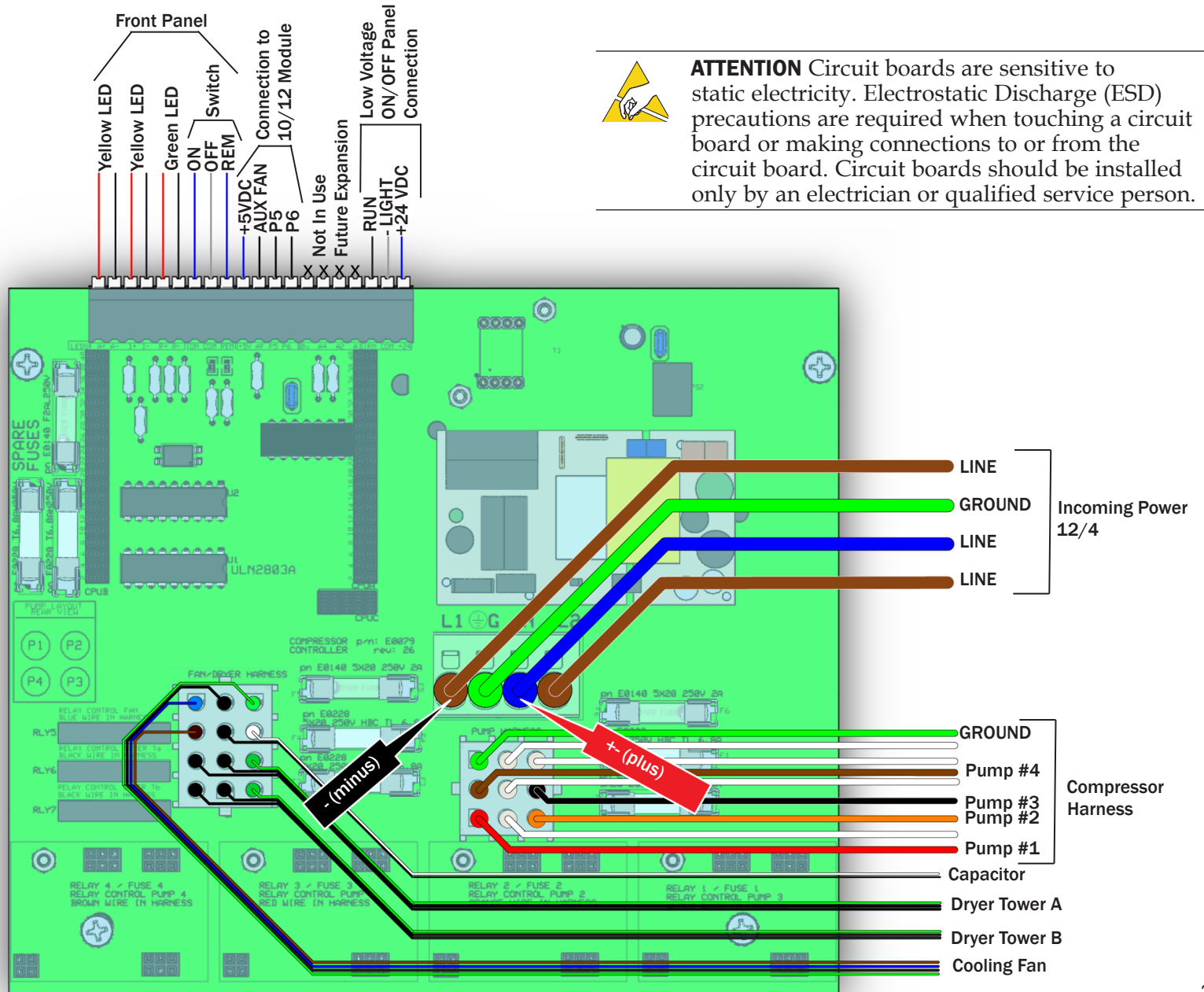


Set Meter for Volts AC

Value Should be Line Voltage

215-240 VAC is Acceptable for 230 V

108-133 is Acceptable for 120 V



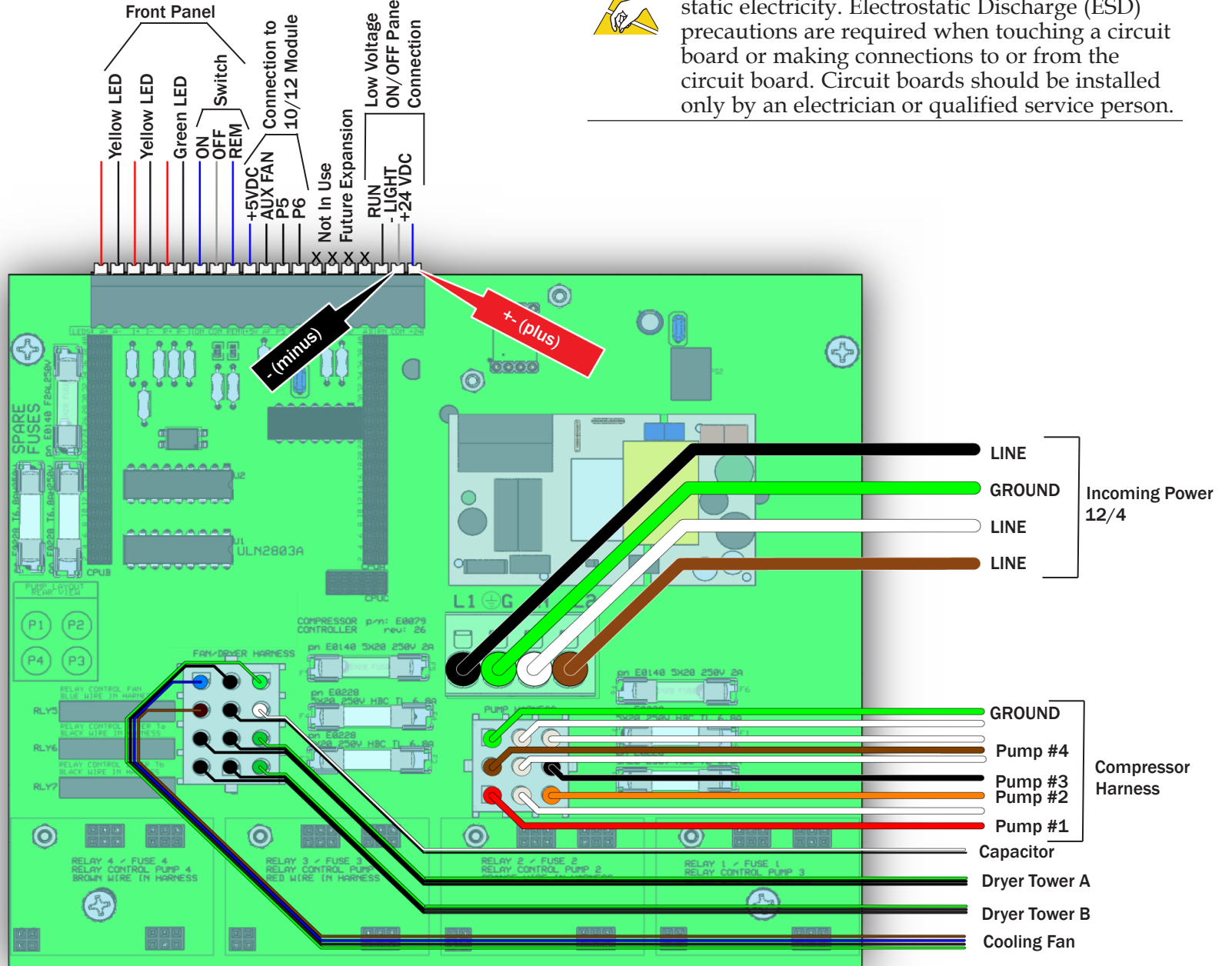
Test Voltages 24 V Locations *(Effective April 2021)*



Set Meter for Volts DC

Value Should be Approx. 24 VDC

20 VDC is Acceptable

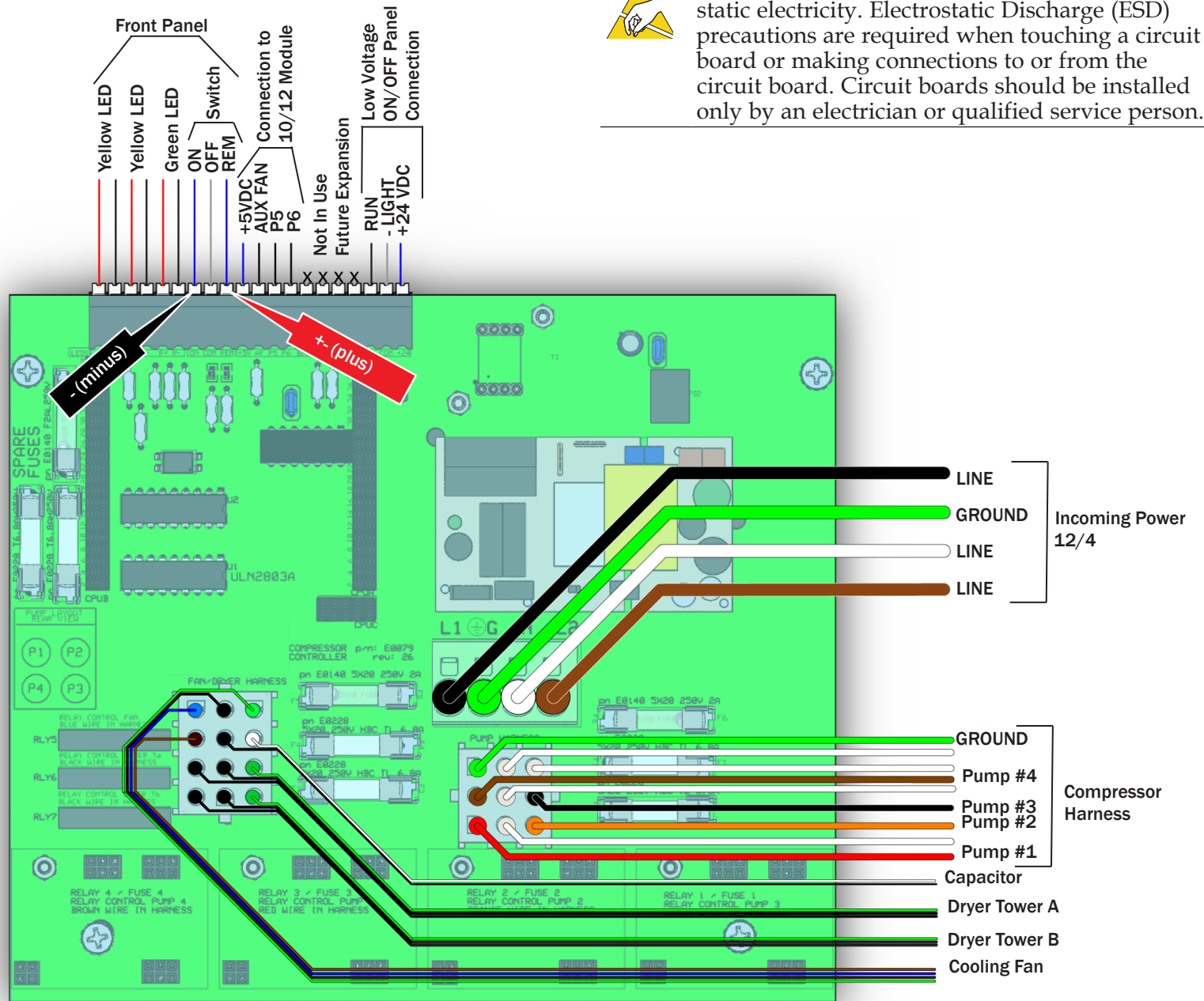


Test Voltages 5 V Locations *(Effective April 2021)*






Set Meter for Volts DC

Value Should be Approx. 5.0 VDC +/- 0.1



Troubleshooting Tasks

The following table is intended to help you identify common issues with the compressor that may or may not require attention.

Condition	Potential Cause	Procedure/Remedy
LED push-button or Smart Shield controls do not function.	Master power switch on the compressor is not in the REMOTE position.	Ensure that the master power switch on the compressor is in the REMOTE position. If it is, and you have push-button controls, contact a-dec Customer Service. If the master power switch is in the REMOTE position and you have the Smart Shield touchscreen, see the remedy below.
	Communication disruption/fault between system and Smart Shield touchscreen.	Tap on  at the top of the touchscreen, then tap RESET. If this does not resolve the condition, unplug the Smart Hub router power cord, wait 10 seconds, then plug it back in. If this does not resolve the condition, contact A-dec Customer Service.
Air pressure outside the normal range.	Incomplete initial startup and pressurization.	Check the INFO status indicator on the compressor control panel. If the indicator is flashing in intervals, the compressor pumps are still working to reach full pressurization. Recheck after the compressor has completed the initial startup sequence. If the pressure remains outside the normal range, contact A-dec Customer Service.
	A leak in the compressor, piping, or dental equipment.	<p>Turn the air shutoff valve to the OFF (or “closed”) position to help identify if the air leak is within the compressor or external to the compressor.</p> <div style="display: flex; align-items: center;">  <div style="text-align: center;">  </div> <div style="margin-left: 20px;"> <p>With the valve closed (which shuts off the air supply to the treatment rooms), watch the pressure gauge to see if the compressor has an internal leak. If you detect any leaks, contact A-dec Customer Service.</p> </div> </div>

Troubleshooting Tasks *(continued)*

Condition	Potential Cause	Procedure/Remedy
ATTENTION status indicator is flashing.		
1 time per interval	Excessive demand on the compressor (greater than 100 percent capacity).	Contact A-dec Customer Service
2-3 times per interval	High ambient temperature warning/shutdown.	Contact A-dec Customer Service.
4 times per interval	Annual maintenance timeout.	Schedule for annual maintenance service with A-dec Customer Service.
5 times per interval	5-year maintenance timeout.	Remove and replace the internal dryer cartridge filter.
6-12 times per interval *	Mechanical fault with motor or fan.	Contact A-dec Customer Service.
Moisture indicator is pink.	Dryer not cycling properly.	Contact A-dec Customer Service.
	Dryer cartridge past working life (5 years)	Remove and replace the internal dryer cartridge filter.
Excessive Vibration	Worn vibration/tray isolators.	Contact A-dec Customer Service.

*

- 6 = Motor 1
- 7 = Motor 2
- 8 = Motor 3
- 9 = Motor 4
- 10 = Motor 5
- 11 = Motor 6
- 12 = Internal cooling fan



NOTE Normal pump up times from 0 psi:
 SC3 = 35, SC5 = 25, SC7 = 21, SC10 = 20, SC12 = 20

Air Dryer Troubleshooting

The following conditions must be met for the dryer timers to function correctly.

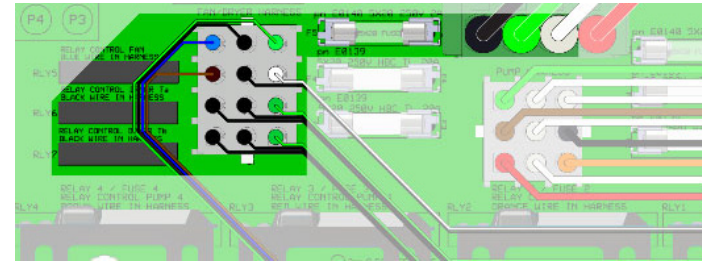
1. The machine is ON (ON/OFF/REMOTE switch) by one of the following.
 - The switch is in the ON position. (This is the preferred position for troubleshooting.)
 - The switch is in the REMOTE position and a low voltage push button is On.
 - The switch is in the REMOTE position and the A-dec Smart Shield Touchscreen control is in the ON position.

The dryer timer is controlled by the software in the compressor. The timer has two components (see the table below):

- Purge duration fixed at 45 seconds.
 - Purge interval that varies based on compressor model.
2. The dryer has two modes:
 - Advanced purge cycle: Operates for 10 cycles at approximately 10 minutes of run time.
 - Active when power is initially applied to the machine.
 - Active after the energy saving cycle completes.
 - Energy saving purge cycle: Operates for 10 cycles with extended duration based on demand.

Advanced Purge Cycle (x 10)						
Purge Interval Timing (minutes: seconds)	1:00					
Energy Saving Purge Cycles						
Number of pumps running	1	2	3	4	5	6
Purge Interval Timing (minutes : seconds)	6:40	3:20	2:13	1:40	1:20	1:06

3. Air dryer power is provided by the L1/N circuit and uses fuse F5.



NOTE Confirm that water is not entering the compressed air system. Water entering the air system from another source can cause improper troubleshooting.

Solenoid Valves Troubleshooting

Confirm Proper Purge of Solenoid Valves

1. Close the service valve to separate the compressor from the office air system.
2. Slowly turn the tank valve release air. Adjust Drain Valve to 70 PSI to activate all available pumps.
3. Adjust the Open/Close Valve to maintain 70-95 PSI.



NOTE If the system reaches 106 PSI, the pumps turn off. If pumps turn off, repeat steps 1 - 3 and adjust PSI to lower than 70 PSI.



NOTE Pressure range for compressors manufactured in December 2019 is increased to 86 - 106 PSI. Pressure range for compressors manufactured before December 2019 was 80 - 100 PSI.

4. Confirm the purge timing. See the table on page 34. If the purge does not fire:
 - Confirm that conditions of operation are met.
 - Check fuse F5. The cooling fan will not operate if the fuse is blown.
 - Disconnect power from machine.
 - Open the control panel.
 - Use a continuity meter across fuse F5. If the fuse is blown, replace it with same sized fuse.
 - Check voltage to the machine.
 - With control panel accessible, connect power to the machine.
 - The dryer is powered by L1 and NEUTRAL. See “Compressor Line Voltage Diagrams” on starting on page 29. The voltage range should be 105-130.
 - If no voltage is present, check the building wiring.
 - Check the dryer wiring.
 - Disconnect power.
 - Inspect the circuit board (Molex™ connection, relays, fuse F5).

- Inspect the dryer solenoid connections (x2) located on the bottom of dryer module.

Dryer Cable Solenoid Connection



Initial Startup Checklist



WARNING Keep hands clear of moving parts. The compressor can start automatically without warning.

- Inspect unit for any visible signs of damage that may have occurred in shipment or during installation.
- Verify the electrical connection attachments, and that incoming line voltage is within specification.
- Measure incoming voltage at the circuit board.
- Close service valve.
- Turn on the compressor. After turning on the power, the Advanced Dryer Purge may occur for 10-15 minutes. This may sound like the compressor is leaking air, but it is working correctly.
- Check that the system builds pressure above 86 psi.

With the compressor at operating pressure:

- Check for proper cycling operation, with a range of pressure between 86 - 106 psi.
- Check for system and operator leaks.
- Confirm that the drain tubing installation drains into the condensation tray.
- If remote buttons or a touchscreen is in use:
 - Set the Main power switch to the Remote position.
 - Verify the system turns on /off with remote switches or touchscreen.
- If the system uses remote monitoring, call A-dec Customer Service to confirm it is reporting.



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