

# A-dec® SC Air Compressor

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SC3/ SC3.120/SC5/SC5.120/SC7



SC10/SC12

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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](http://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](http://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](http://www.a-dec.com).

## Product Models and Versions Covered in This Document

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

## Utility Requirements

 **CAUTION** Local regulation may require licensed plumbers and electricians to install the utilities. All plumbing and utilities must conform to prevailing local codes.

Electrical Specifications	SC3/SC3.120	SC5/SC5.120	SC7	SC10	SC12
Voltage*	230/120	230/120	230	230	230
Amps	6/11	8.8/16.2	11.1	14.1	16.5
Breaker Size (Amps)	15	15/20	15	20	20
* The voltage range is 215-240 for the 230 V units and 108-133 for the 120 V units.					

Performance ratings are at 80°F, 0 FASL, and 68% RH. For installations above 3000 FASL, use next size larger compressor.

Operation Specifications	SC3/ SC3.120	SC5/ SC5.120	SC7	SC10	SC12
Maximum Number of Users	3	5	7	10	12
Maximum CFM @ 80 PSI	3.7	5.8	7.6	8.8	10.6
PSI Range	86 - 106	86 - 106	86 - 106	86 - 106	86 - 106
Total HP	1	1.5	2	2.5	3

Acceptable voltage range is 215-240 VAC. Voltage outside of that range will require a buck-boost transformer that provides an incoming voltage adjustment of +/- 10%. A buck-boost transformer is to be used only with 230 V units.

Model	Size	Transformer p/n
SC3/SC5/SC7/SC10/SC12	.5 KVA	E0275

## Physical Characteristics

Characteristic	SC3	SC5	SC7	SC10	SC12
Dimensions - Installed (W/D/H - Inches)	23 x 23 x 27.5	23 x 23 x 27.5	23 x 23 x 27.5	23 x 23 x 39	23 x 23 x 39
Weight - Installed (lb)	149	177	193	265	279
Dimensions - Packaged (W/D/H - Inches)	24 x 31 x 36	24 x 31 x 36	24 x 31 x 36	24 x 31 x 44	24 x 31 x 44
Weight - Packaged (lb)	160	183	202	278	292
Sound - db(A) <sup>1</sup>	58.6	59.4	60.6	61.4	61.7
BTU/Hr Max	2600	3800	5000	6400	7650

*1 Increase sound level by 1 dB(A) if compressor top plate is removed. Cooling fan only (no pumps running) is 54.1 dB(A).*

## Documentation References

Document Title	Part Number
<b>Instructions for Use</b>	
<i>A-dec SC Air Compressor Instructions for Use</i>	86.0887.00
<b>Installation Guides</b>	
<i>A-dec SC Air Compressor Quick Reference</i>	86.0892.00
<i>A-dec SC Air Compressor Installation Guide</i>	86.0890.00
<b>Service Guide</b>	
<i>A-dec SC Air Compressor Service Guide</i>	86.0894.00

## HVAC Requirements

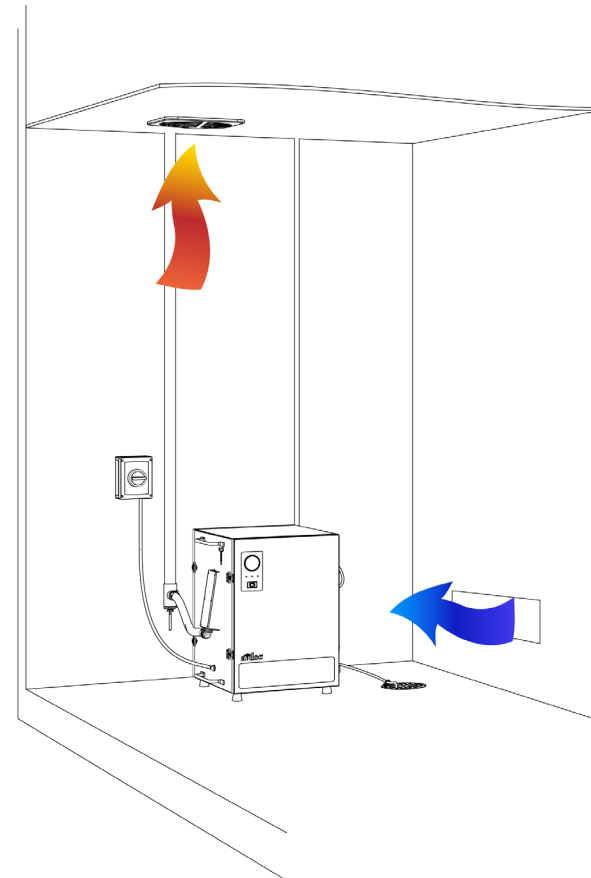
Equipment life is directly affected by the operating temperature of the mechanical room. Adequate cooling air is required for proper equipment operation. A-dec recommends all air compressor models be installed and operated in a stable, ambient temperature environment. Forced air and HVAC input should be used in addition to an exhaust fan if normal ambient temperatures vary from specified operating temperature range.

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

Model	Maximum Heat Rejection (BTU/Hr)	Cooling Fan* (CFM)
SC3	2600	200
SC5	3800	230
SC7	5000	350
SC10	6400	460
SC12	7650	460

\* Based on 80°F/ 27°C cooling air available and 100°F/ 38°C maximum mechanical room temperature. Does NOT include additional heat sources in the mechanical room.

Each compressor motor has an internal thermal cut-out switch set at 293°F (145°C).



## Main Supply / Plug Wiring Options

### Hard Wired / Disconnect Option

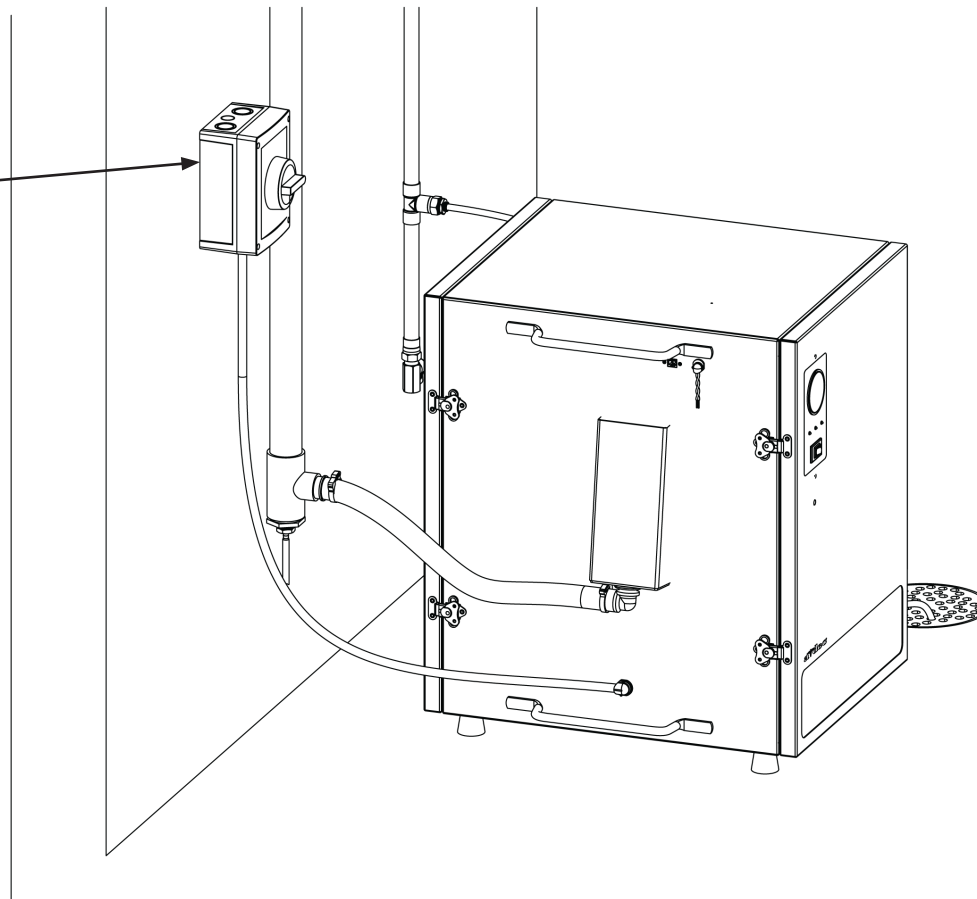


**WARNING** Electrical shock can occur if the product is improperly grounded. This equipment must be connected only to a supply mains with protective earth.

Hard wired electrical disconnect box  
(supplied by electrician).

6' power cord provided (230 V, blue,  
brown, two green and yellow)

120 V models include proper amperage  
rated plug installed.



## Plumbing



**NOTE** All installations must conform to local code and be performed by certified installers.

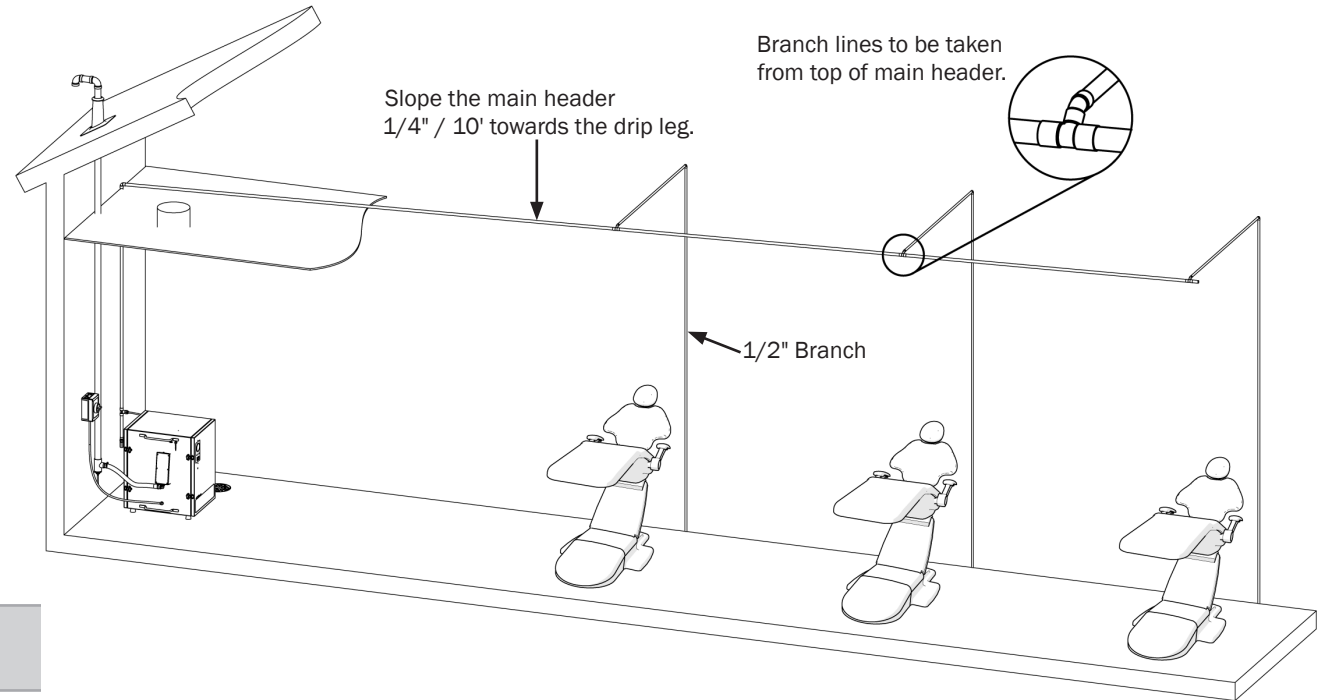
### Air Line Layout

- Use type L or K copper tube installed to NFPA99 Level 3 specification.

- Sizing recommendations:

Number of Operatories	Minimum Pipe Size
1 - 3	3/8"
4 - 6	1/2"
6 - 10	5/8"
10+	3/4" + consult Customer Service

- Sloped toward compressor or underground cleanout.





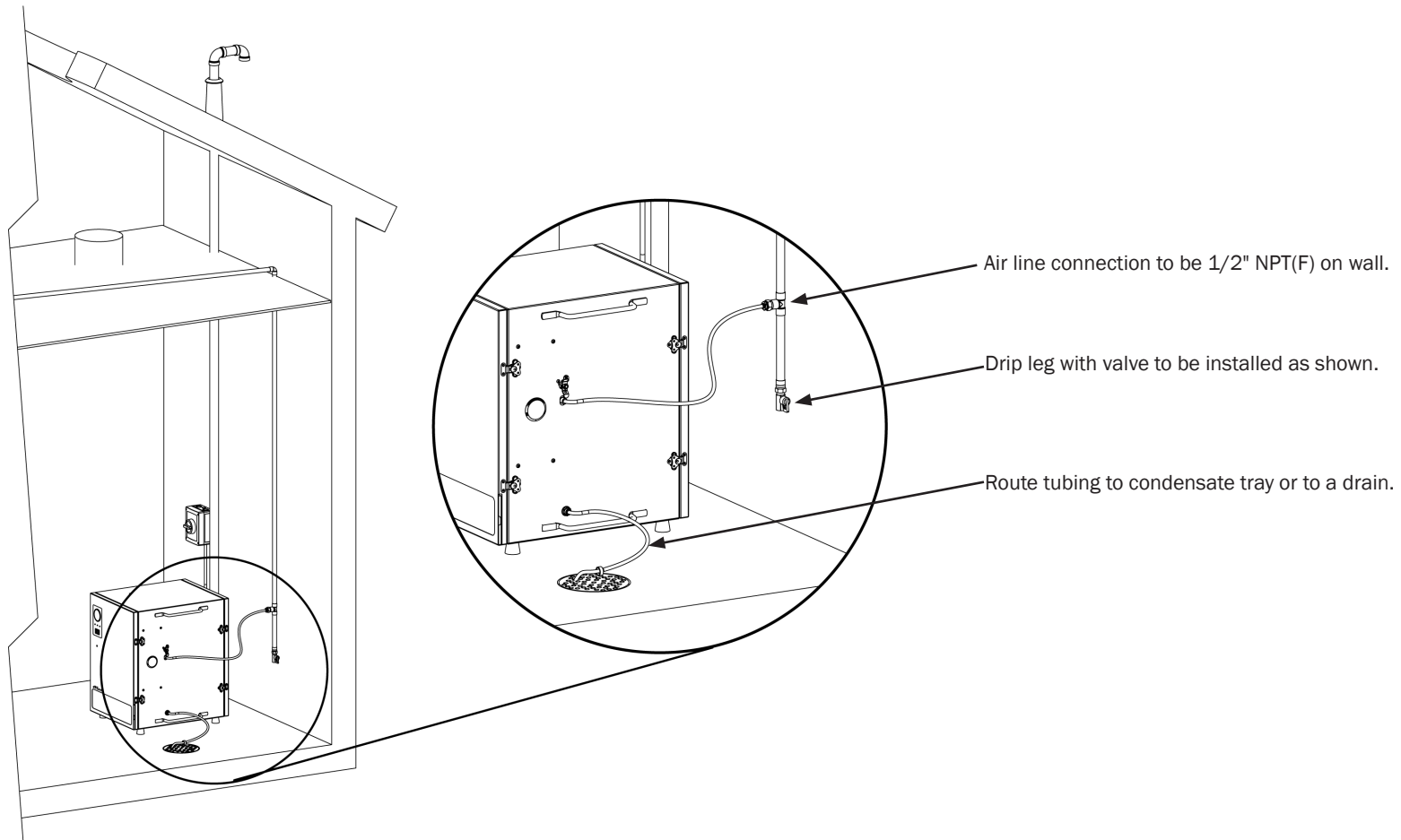
## Connections to Compressor

### Compressed Air Connection

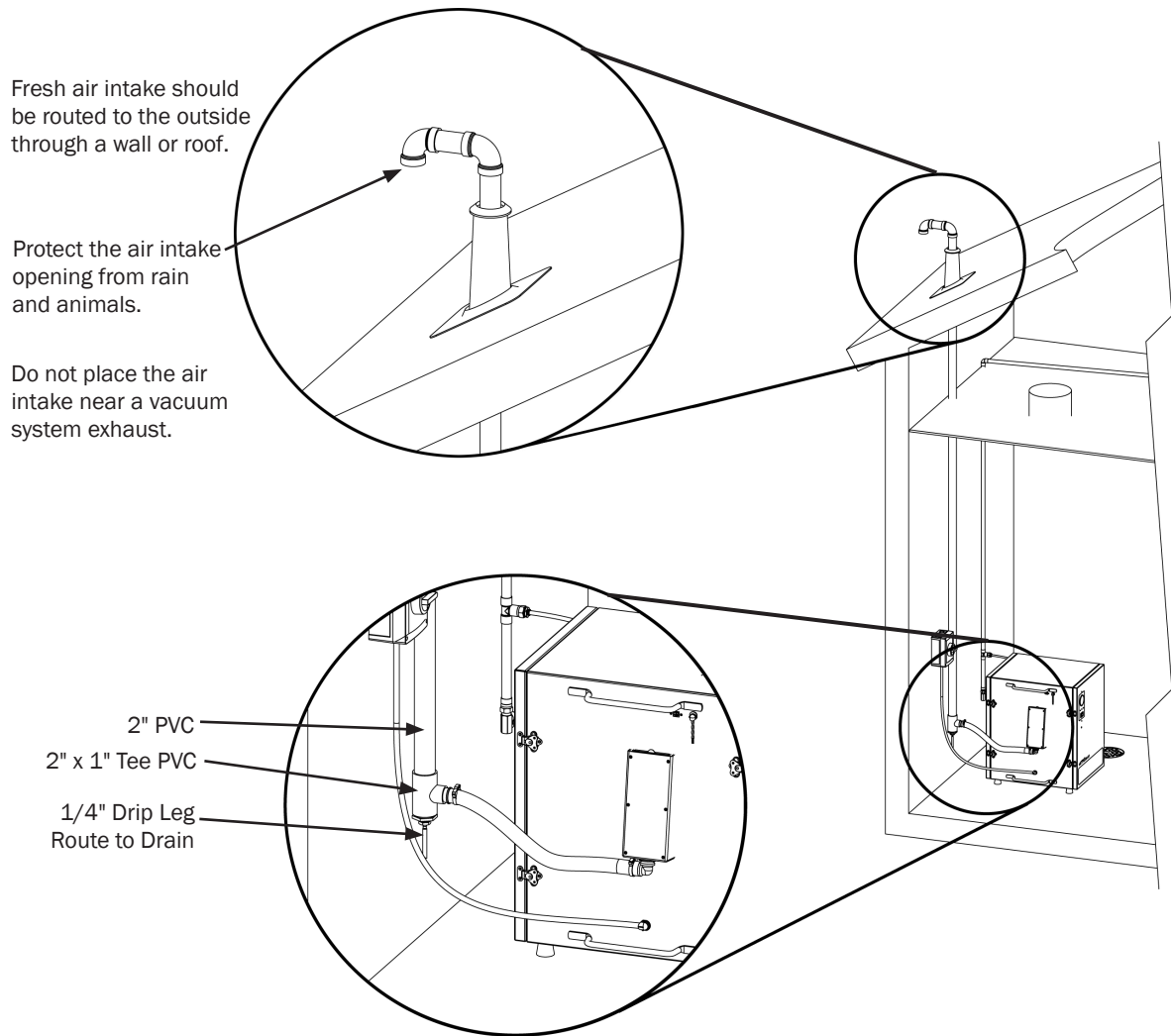
- Terminate piping system near compressor with 1/2" NPT(F) fitting. Compressor ships with fitting and 6' of hose.

### Condensate Exhaust

- Route to drain or condensate tray. A piece of 3/8" tubing is provided.



## Fresh Air Intake



## Fresh Air Pipe Size Requirements

Number of Compressors	Minimum Pipe Size
1 - 2	2"
3	3"
4	4"

For installations greater than four compressors or piping longer than 100', contact A-dec Customer Service.

## Fresh Air Intake NFPA Requirements

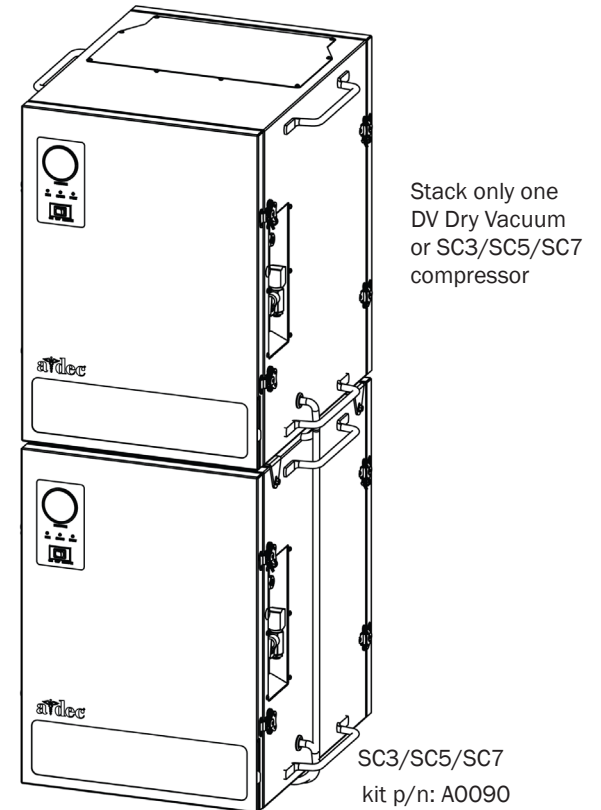
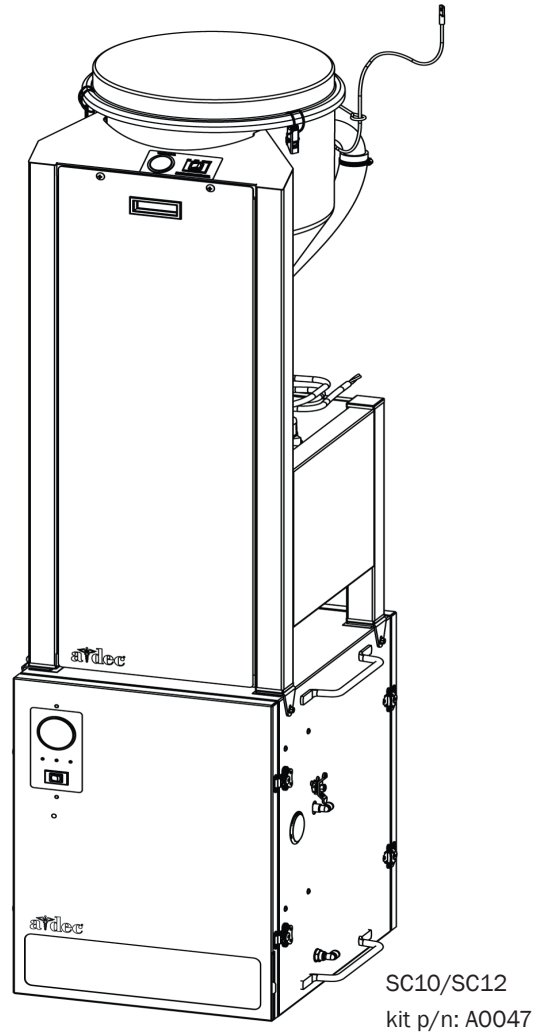
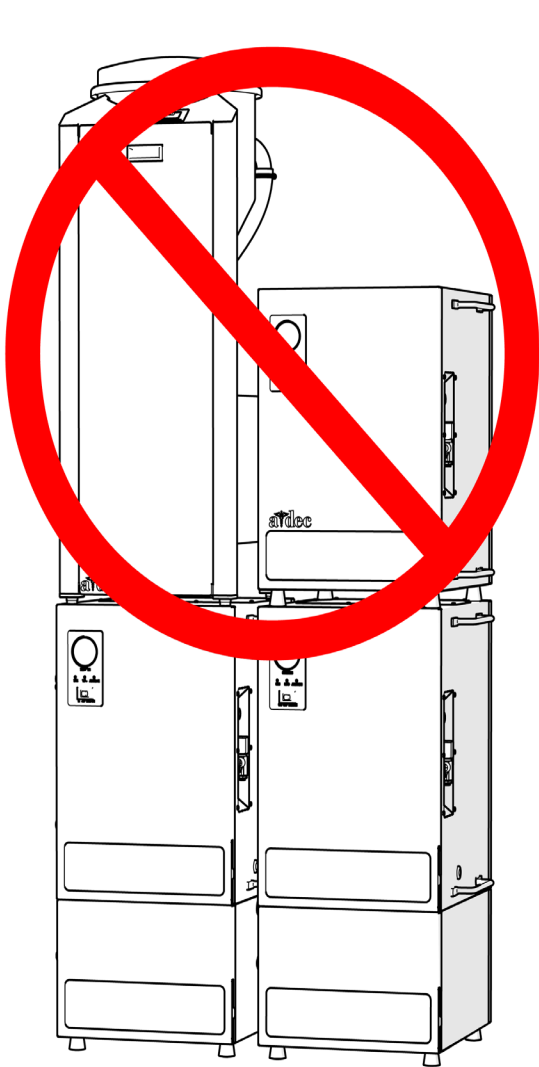
The source for the compressor air intake must meet the following NFPA requirements:

- If the intake is located inside the building, it must be located within a space where no chemical-based materials are stored or used.
- If the intake is located inside the building, it must be located in a space that is not used for patient medical treatment.
- If the intake is located inside the building, it must not be taken from a room or space in which there is an open or semi-open discharge from a Category 3 vacuum system.
- If the intake is located outside the building, it must be drawn from locations where no contamination from vacuum exhaust discharges or particulate matter is anticipated.

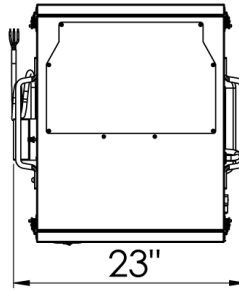
## Views and Dimensions

### Vacuum Stacked on Compressor

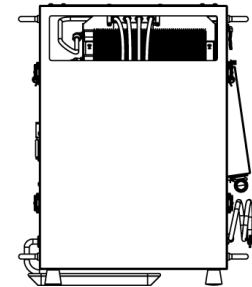
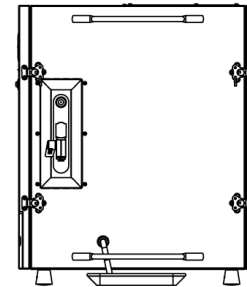
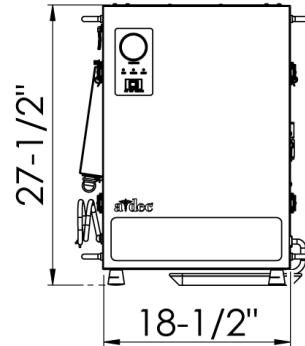
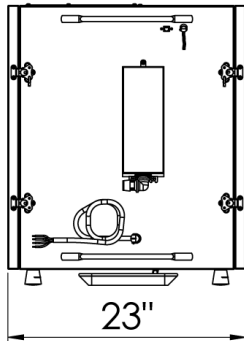
 **WARNING** Do not stack on SC10/SC12 compressors. Stack only on SC3/SC5/SC7 compressors. Only one DV dry vacuum or SC3/SC5/SC7 compressor may be stacked on a SC3/SC5/SC7 compressor.



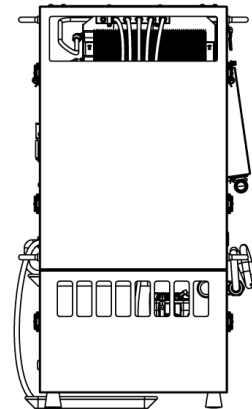
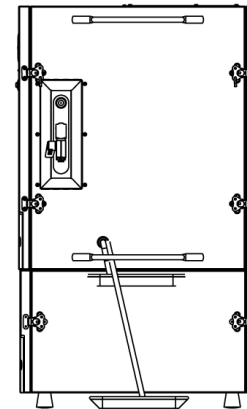
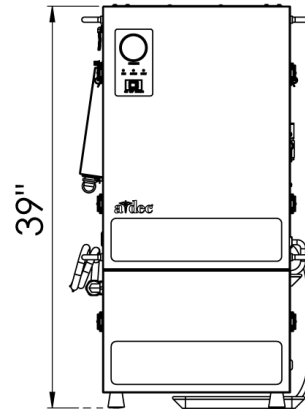
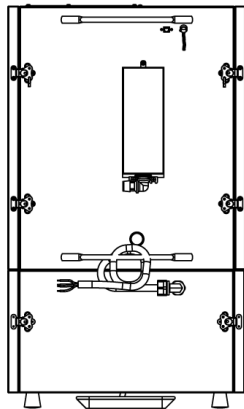
### A-dec SC Air Compressor Elevation Views



SC3 / SC5 / SC7

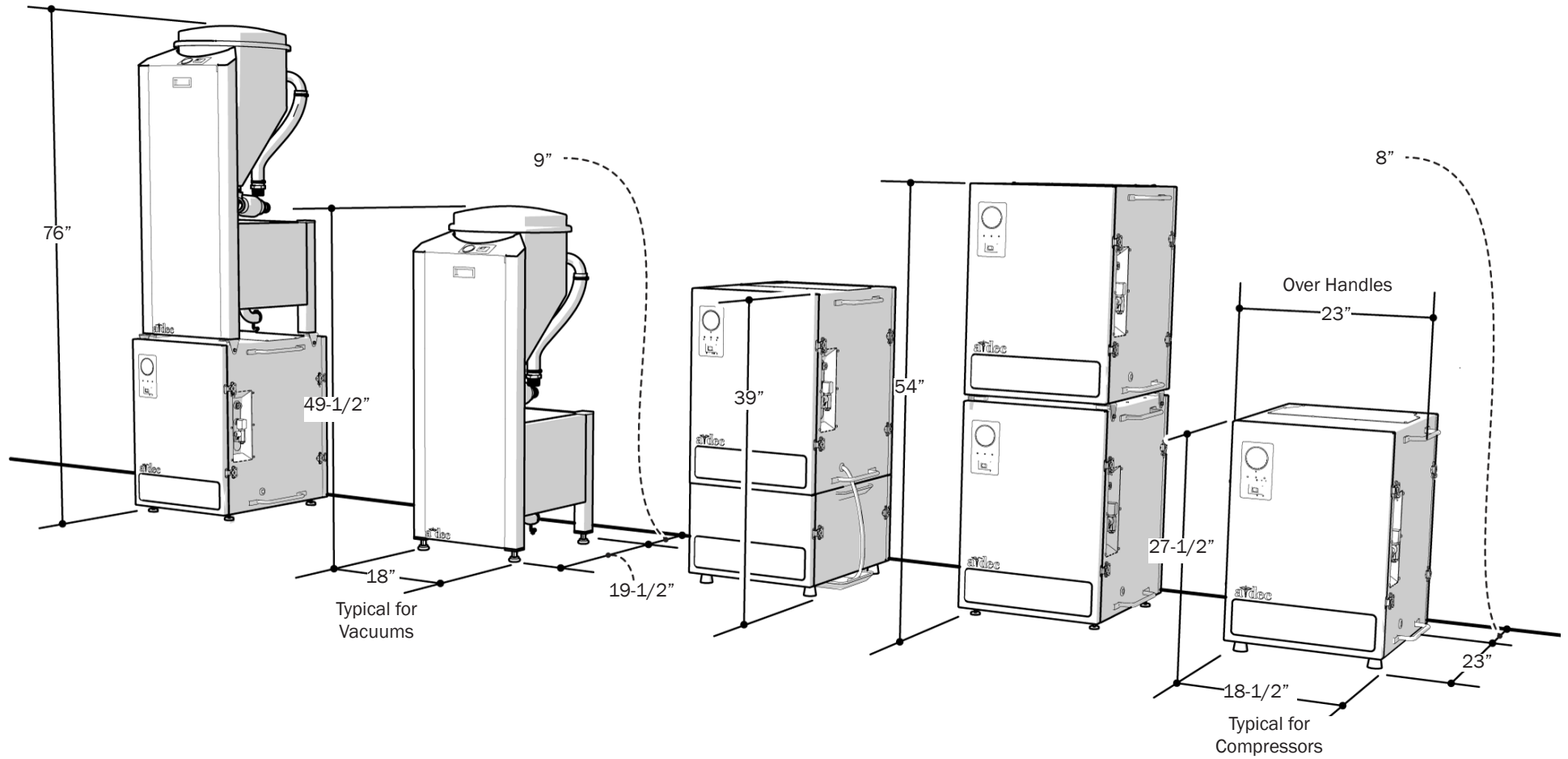


SC10 / SC12



## Sample Mechanical Room Layout

The following illustration shows the dimensions and spacing required when laying out a mechanical room, using A-dec SC Air Compressors and A-dec DV Dry Vacuums, for different equipment configurations.





 **A-dec Headquarters**

2601 Crestview Drive  
Newberg, Oregon 97132  
United States  
Tel: 1.800.547.1883 Within USA/CAN  
Tel: +1.503.538.7478 Outside USA/CAN  
[www.a-dec.com](http://www.a-dec.com)

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