AirStar®

DENTAL AIR SYSTEM
with Membrane Dryer



PRE-INSTALLATION GUIDE

Doctor: _____

Address: _____

Phone#: _____

Dealer: _____

Dealer Address: _____

All Installations must conform to local codes!

This AirStar Model is being installed:

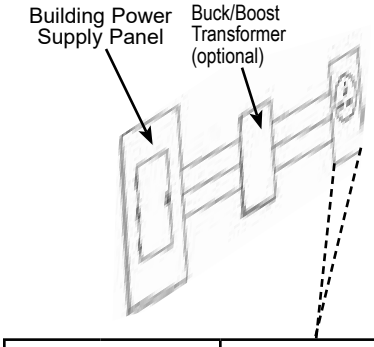
(AS CHECKED)

❑ AS10 ❑ AS12 ❑ AS21 ❑ AS22

❑ AS30 ❑ AS40 ❑ AS50 ❑ AS70 ❑ AS100

AIR TECHNIQUES equipped for life®

Equipment Room Layout

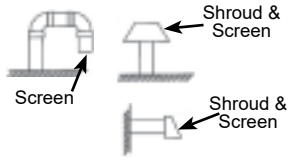


Type		Style
AS10	5-20R NEMA*	Green Dot
AS21		
AS12	6-20R NEMA*	Green Dot
AS22		
AS30		
AS40		
AS50	Hard Wired**	See Figure 3 for Connection Details.
AS70		
AS100		

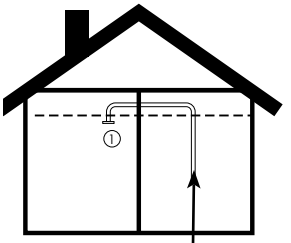
* Use Hospital Grade Receptacle Only
** Only AS100 Models use 3-Phase Power. Disconnect Needed when Servicing.

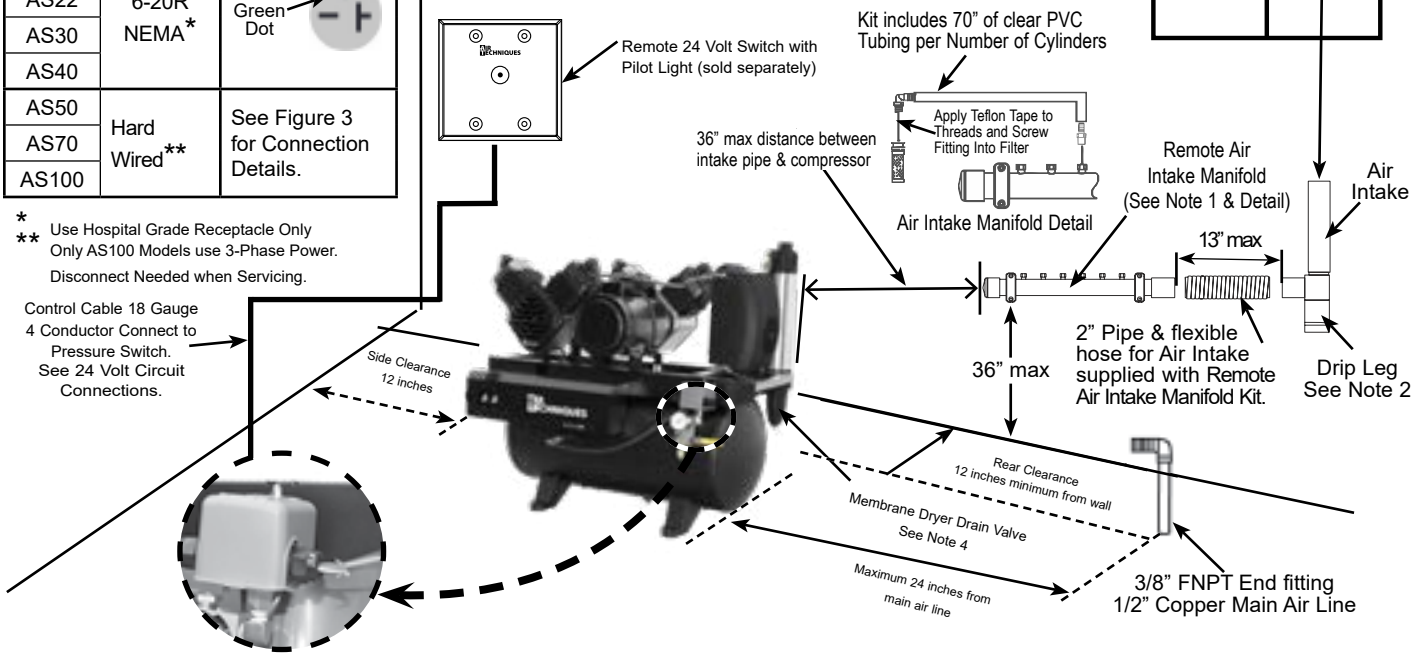
Notes:

1. **Remote Air Intake Kit Manifold -** Refer to the table below listing the kit part number corresponding to the AirStar model.
2. **Remote Air Intake Drip Leg & Valve -** A drip leg with drain valve must be installed at lower end of the remote air intake pipe to collect condensation during operation. Attach a drain tube to the drip leg valve to allow drainage into floor drain/sink.
3. **Air Pipe -** Pipe can draw air from Inside only. Drawing air from cooler and drier environments is beneficial to system performance. If drawing from Inside, the pipe end should still be protected from ingress of water and animals as appropriate. Remote air intake should not be located in any space where dental procedures occur, dental vacuums are installed, dental laboratory procedures are performed and all restrooms.Be aware that noise can emit from the pipe during compressor operation; place end accordingly.
4. **Membrane Dryer Drain Valve -** Install the Drain Tube found in either accessory kit P/N 87133 or P/N 87134 used to drain moisture collected in the Membrane Dryer.



AIR PIPE
2-Inch Pipe for Air Intake. Must be protected from rain and animals See note 3.





Remote Air Intake Kits:									
Model	AS10	AS12	AS21	AS22	AS30	AS40	AS50	AS70	AS100
Part No.	85491	85491	85492	85492	85492	87361	85493	85494	85511

Air System Plumbing Connection

- $^{3}/_{8}$" FNPT Shut-off valve and a 6 ft. pressure hose (supplied)
- Air distribution piping for all models - $^{1}/_{2}$", type "L" or type "K" copper
- If pipe volume is too great, more than 235 in^3 or more than 100 ft. of $^{1}/_{2}$" diameter pipe, a pressure regulator should be installed between the main tank and the distribution piping and set to 80 psi.

Service Clearance

- Allow 12" on all sides for all units

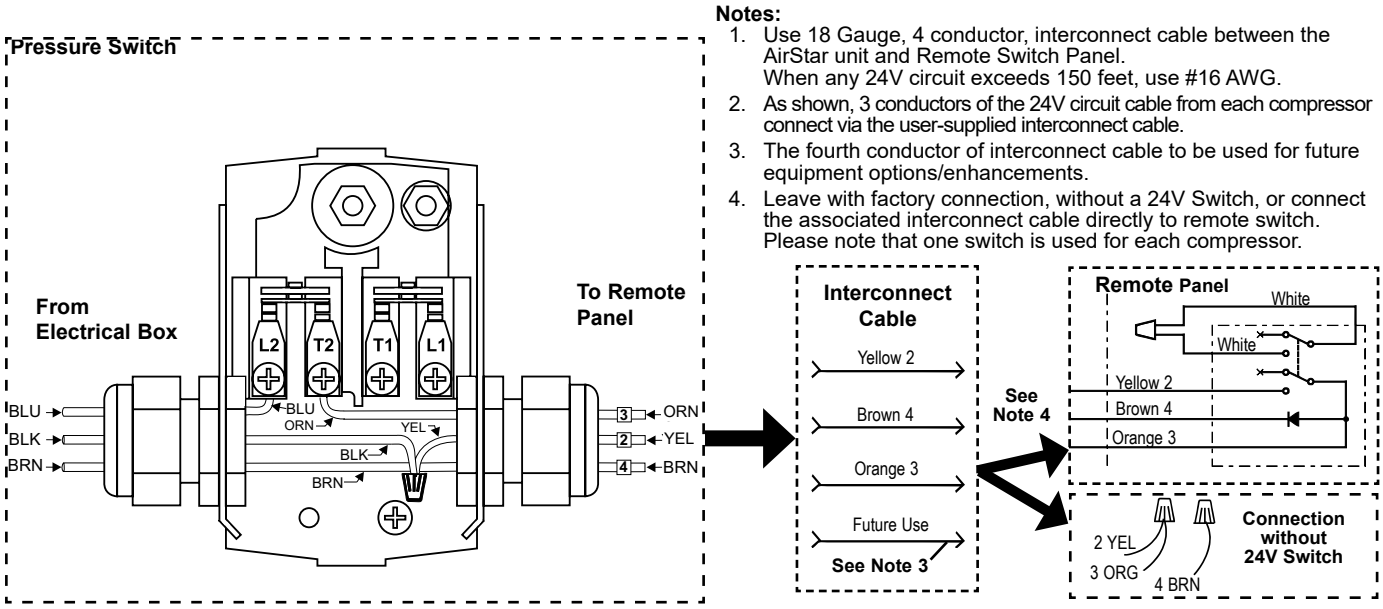
Ambient Temperature

- Must not exceed 105°F
- Must be above 41° F

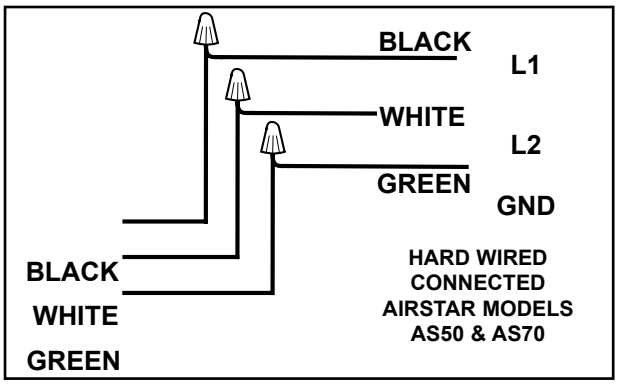
MEDICAL ELECTRICAL EQUIPMENT
WITH RESPECT TO ELECTRICAL SHOCK, FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE WITH UL60601-1, CAN/CSA C22.2 NO.601.1 66CA

Air Techniques, Inc.
1295 Walt Whitman Road
Melville, New York, USA 11747- 3062

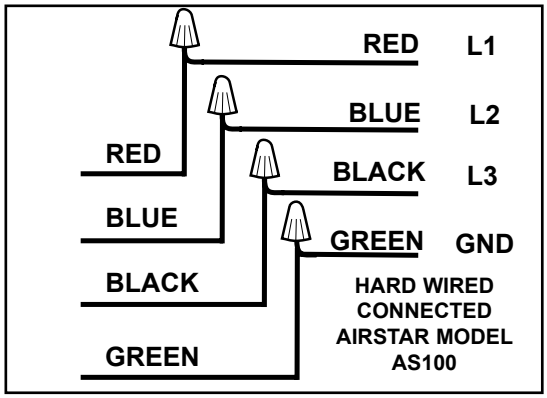
Electrical Connections



24V Circuit Connections



AS50 and AS70 Electrical Connections



AS100 3-Phase Electrical Connections

AirStar Electrical Connection

Site Requirements

	AS10	AS12	AS21	AS22	AS30	AS40	AS50	AS70	AS100
Note 1: Install a buck or boost transformer if actual facility service is above or below the supply voltage fluctuation of ±10% of nominal voltage ratings listed, install a buck/boost transformer with the corresponding part number as shown below.									
Nominal Supply Voltage (VAC, see note)	120	220	120	220	220	220	220	220	3~220
Maximum Current (Amps)	8	4	15	8	8	12	15	22	20
Minimum Circuit Size (Amps)	20	10	20	20	20	20	20	40	30
Minimum Wire Size (AWG)	12	16	12	12	12	12	12	8	10
Maximum Watts	864	792	1,620	1,584	1,584	2,376	3,168	4,752	3,960
BTU/hr @ 50%	1,473	1,350	2,201	2,701	2,701	4,051	5,401	8,201	6,752
BTU/hr @ 75%	2,210	2,026	4,143	4,051	4,051	6,077	8,102	12,153	N/A
Note 2: The 220 volt 3-phase, 4.6 KVa transformer is not available from Air Techniques.									
Buck/Boost Transformer Air Techniques Part No. and Size	67006 2.5 KVa	67002 3.9 KVa	67006 2.5 KVa	67002 3.9 KVa	67002 3.9 KVa	67002 3.9 KVa	67002 3.9 KVa	67000-1 7.8 KVa	4.6 KVa N/A

All AirStar compressors comply with NFPA 99, 2018, 2021, 2024, Chapter 15, Dental Air, Dental Air Equipment, Dental Air Fitting and Piping.

Product Specifications - Dimensions

Description \ Model		AS10	AS12	AS21	AS22	AS30	AS40	AS50	AS70	AS100
Input Voltage Phase		1	1	1	1	1	1	1	1	3
System Power										
HP		0.75	0.75	1.5	1.5	1.5	2.25	3.0	4.5	4.8
(kW)		(0.56)	(0.56)	(1.1)	(1.1)	(1.1)	(1.68)	(2.2)	(3.4)	(3.6)
Nominal Supply Voltage VAC		120	220	120	220	220	220	220	220	220
Frequency Hz		60	60	60	60	60	60	60	60	60
Maximum Current Amps		8	4	15	8	8	12	15	22	20
Maximum Simultaneous Air Users		2	2	3	3	4	6	8	12	15
System Output Flow Rate at 80 PSI CFM		2.5	2.5	5.0	5.0	5.0	7.5	10.0	15.0	20.0
Maximum Pump-up Time 0-115 PSI (M:SS)		2:55	2:55	3:10	3:10	3:10	1:40	2:50	2:40	2:30
Maximum Recovery Time 85-115 PSI (M:SS)		0:48	0:48	0:47	0:47	0:47	0:34	0:42	0:40	0:30
Tank Size										
US Gal.		6	6	12	12	12	12	20	30	30
(ft^3)		(0.8)	(0.8)	(1.6)	(1.6)	(1.6)	(1.6)	(2.7)	(4.0)	(4.0)
Shipping Weight lbs. (Approximate)										
No Sound Cover		170	170	200	200	240	255	290	430	450
With Sound Cover		215	215	240	240	285	300	335	N/A	N/A
Dimensions in. (See note.)	H	28.50	28.50	30.50	30.50	30.50	30.50	33.50	35.00	34.50
	W	25.00	25.00	29.00	29.00	29.00	32.50	35.50	47.75	46.00
No Sound Cover	D	19.75	19.75	20.00	20.00	20.00	20.00	20.50	21.75	24.50
	H	30.00	30.00	32.00	32.00	32.00	32.25	33.50	36.00	N/A
With Sound Cover	W	25.00	25.00	31.00	31.00	31.00	33.25	36.50	51.00	N/A
	D	22.50	22.50	22.25	22.25	22.25	22.50	22.75	29.50	N/A

Note: Height measured without leveling feet for all units with or without sound cover.

www.airtechniques.com

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