

# AIRSTAR<sup>®</sup>

**DENTAL AIR SYSTEM**  
with Membrane Dryer



## PRE-INSTALLATION GUIDE

Doctor:	_____
Address:	_____
Phone#:	_____
Dealer:	_____
Dealer Address:	_____

**All installations must conform to local codes!**

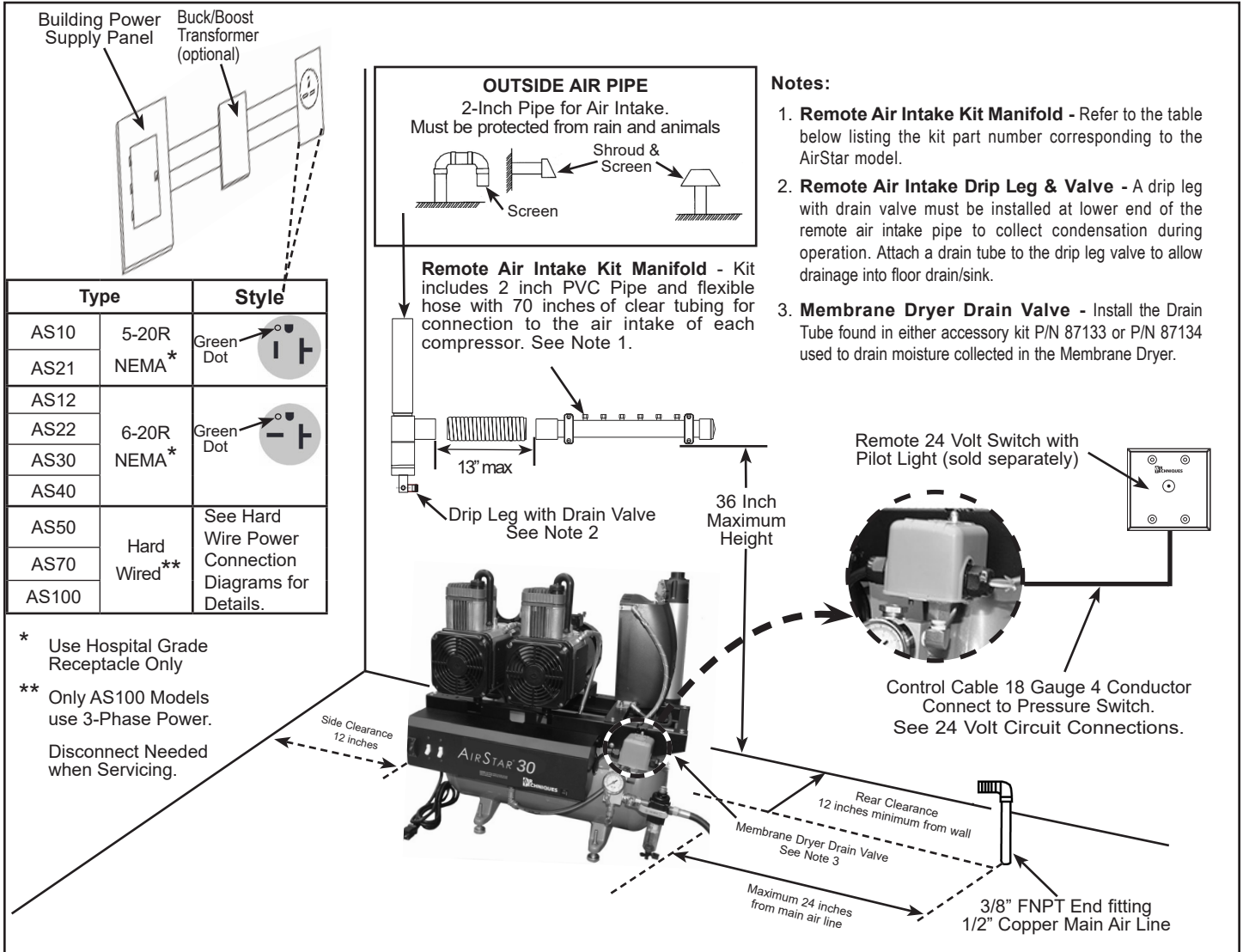
This AirStar Model is being installed:

(AS CHECKED)

- AS10     AS12     AS21     AS22  
 AS30     AS40     AS50     AS70     AS100



# Equipment Room Layout



## 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<sup>3</sup> 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



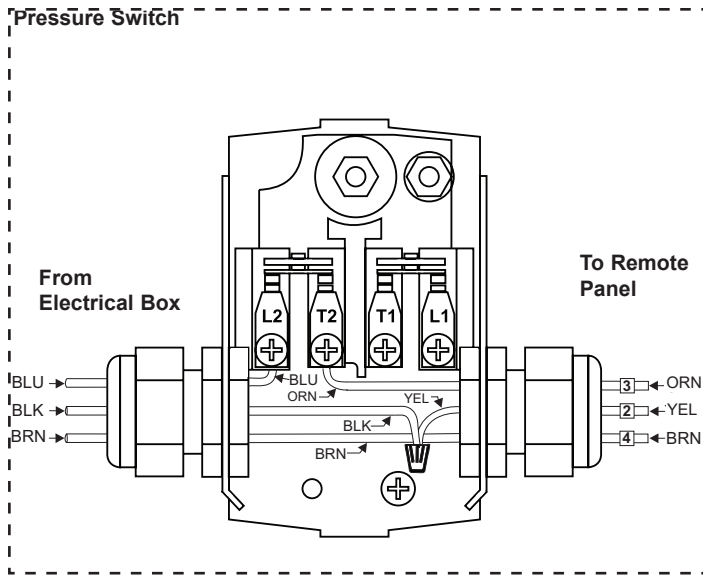
MEDICAL ELECTRICAL EQUIPMENT

WITH RESPECT TO ELECTRICAL SHOCK, FIRE, MECHANICAL  
AND OTHER SPECIFIED HAZARDS ONLY  
IN ACCORDANCE WITH UL-60601-1, CAN/CSA C22.2 NO.601.1 66CA



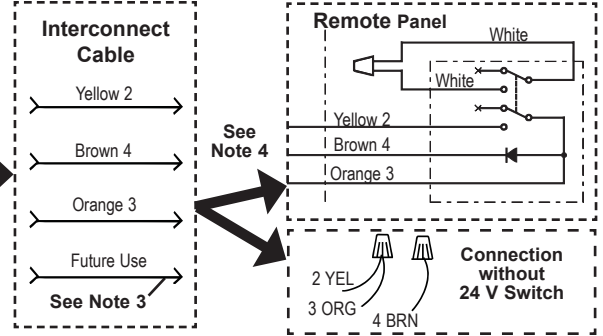
Air Techniques, Inc.  
1295 Walt Whitman Road  
Melville, New York, USA 11747- 3062

# Electrical Connections

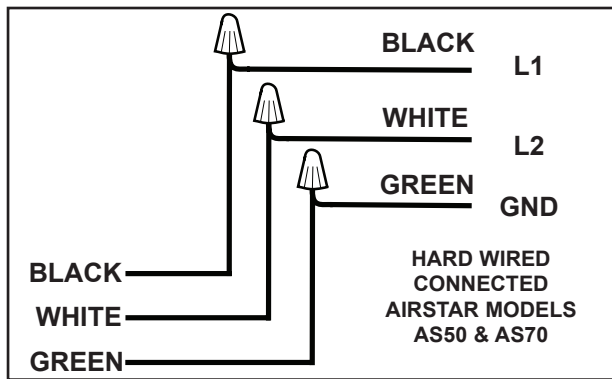


**Notes:**

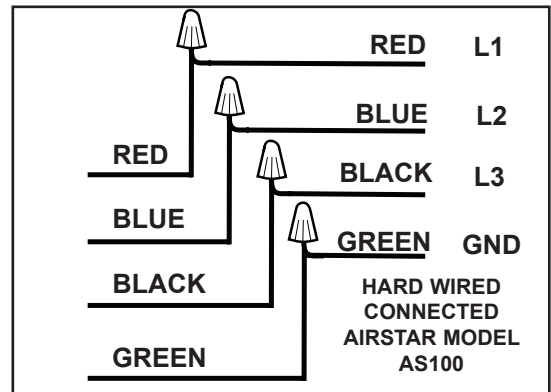
1. Use 18 Gauge, 4 conductor, interconnect cable between the AirStar unit and Remote Switch Panel. When any 24V circuit exceeds 150 feet, use #16 AWG.
2. As shown, 3 conductors of the 24V circuit cable from each compressor connect via the user-supplied interconnect cable.
3. The fourth conductor of interconnect cable to be used for future equipment options/enhancements.
4. Leave with factory connection, without a 24 V Switch, or connect the associated interconnect cable directly to remote switch. Please note that one switch is used for each compressor.



## 24 Volt Circuit Connections



AS50 and AS70 Power Connections



AS100 3-Phase Power Connections

### Hard Wire Power Connection Diagrams

## Site Requirements

	AS10	AS12	AS21	AS22	AS30	AS40	AS50	AS70	AS100
<b>Note:</b> Install a buck or boost transformer if actual facility service is above or below the supply voltage fluctuation of $\pm 10\%$ 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	220-3 $\Phi$
Full Load Amps in. Circuit	8	4	15	8	8	12	16	24	20
Panel Breaker Rating (Amps)	20	10	30	20	20	20	30	40	30
Minimum Wire Size (AWG)	12	16	10	12	12	12	10	8	10
Watts per Hour	330	330	640	640	660	970	1280	1920	2050
BTU per Hour	1,126	1,126	2,184	2,184	2,252	3,310	4,368	6,552	6,995
<b>Note:</b> The 120 volt, 2.0 KVa and 220 volt 3-phase, 4.6 KVa transformers are not available from Air Techniques.									
Buck/Boost Transformer Air Techniques Part No. and Size	2.0 KVa N/A	67002 3.9 KVa	2.0 KVa N/A	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 99C level 3 requirements

# Product Specifications - Dimensions

AirStar Model Requirement	AS10	AS12	AS21	AS22	AS30	AS40	AS50	AS70	AS100	
<b>Horsepower/Kilowatts</b>	0.75/0.56	0.75/0.56	1.5/1.1	1.5/1.1	1.5/1.1	2.25/1.68	3.0/2.2	4.5/3.4	4.8/3.6	
<b>Voltage Rating</b>	120	220	120	220	220	220	220	220	220-3Φ	
<b>Frequency (Hz)</b>	60	60	60	60	60	60	60	60	60	
<b>Maximum Number of Simultaneous Air Users</b>	2	2	3	3	4	5	7	10	14	
<b>CFM (Cubic Ft./Min) @ 80 psi</b>	2.5	2.5	5.0	5.0	5.0	7.5	10.0	15.0	20.0	
<b>Pump-up Time 0-115 PSI</b>	2 min, 55 secs	2 min, 55 secs	3 min, 10 secs	3 min, 10 secs	3 min, 10 secs	1 min, 40 secs	2 min, 50 secs	2 min, 40 secs	2 min, 30 secs	
<b>Recovery Time 85-115 PSI (seconds)</b>	48	48	47	47	47	34	42	40	30	
<b>Tank Size (cu. ft.) (US Gal.)</b>	0.8 6	0.8 6	1.6 12	1.6 12	1.6 12	1.6 12	2.7 20	4.0 30	4.0 30	
<b>Shipping Weight (Approximate lbs)</b>										
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	
<b>Dimensions (inches)</b>										
No Sound Cover	H 28.50 W 25.00 D 19.75	H 28.50 W 25.00 D 19.75	H 30.50 W 29.00 D 20.00	H 30.50 W 29.00 D 20.00	H 30.50 W 29.00 D 20.00	H 30.50 W 32.50 D 20.00	H 30.50 W 32.50 D 20.00	H 33.50 W 35.50 D 20.50	H 35.00 W 47.75 D 21.75	H 34.50 W 46.00 D 24.50
With Sound Cover	H 30.00 W 25.00 D 22.50	H 30.00 W 25.00 D 22.50	H 32.00 W 31.00 D 22.25	H 32.00 W 31.00 D 22.25	H 32.00 W 31.00 D 22.25	H 32.25 W 33.25 D 22.50	H 32.25 W 33.25 D 22.50	H 33.50 W 36.50 D 22.75	H 36.00 W 51.00 D 29.50	H N/A W N/A D N/A

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