



# MODEL ARE/ARS



*Advancing Ventilation*

# MODELS ARE & ARS

## DOMED AXIAL POWER ROOF VENTILATORS (EXHAUST/SUPPLY)



### MODEL FEATURES

- Exhaust air up to 2,827 CFM in static pressure applications up to 3/4" w.g.
- Low profile attractive spun aluminum exterior
- Direct drive units have low sound levels and quiet operation
- AMCA Air & Sound Licensed
- UL 705 Listed

### CONSTRUCTION OPTIONS

MODEL NAME	DESCRIPTION
ARE	Dome Axial Power Roof Exhaust Fan
ARS	Dome Axial Power Roof Supply Fan

### MODEL OVERVIEW

The AR series offers powerful axial intake (ARS) or exhaust (ARE) performance in a roof mount design that is compact, lightweight and easy to install. Available in 4 sizes with a CFM range from 167 to over 2,827 CFM to 3/4" static pressure.

The direct drive design has no belts or fan bearings to maintain or adjust and consequently requires very little maintenance. The AR series is an excellent choice for factories, shops, restaurants, bathrooms, offices, schools and other similar applications where light to moderate static pressures are present. Equipped with explosion-proof motors, the AR series can be used in more severe applications. (Caution should be used to safely match the motor capabilities with the specific hazardous environment).

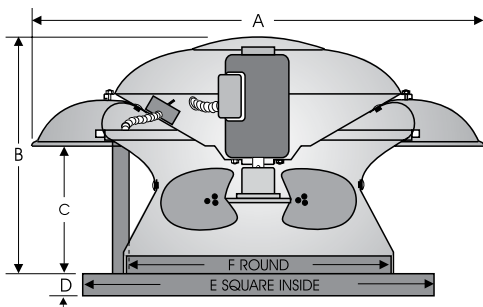
The low contour designs and all aluminum housing provides a modern, clean appearance in addition to excellent performance and durability.

Models ARE are available in our Quickship program. Sizes 10-20 are available for next day or 10-day shipping from stock.



5 year fan housing warranty, 1 year motor warranty

### DIMENSIONS



Size	Dimensions (Inches)						Avg. Ship weight (lbs.)
	A	B	C	D	E	F	
100A	21	13	7	2	20	13-3/4	25
120A-121A	28	16	8	3	24	15-3/4	42
160A-161A	32	18	8-1/2	3	28	19-3/4	55
201A	36	20	9-3/4	3	32	23-3/4	75

All specifications are subject to change without notice unless approved in submittal by S&P USA.

# CONSTRUCTION/SPECIFICATION CHECKLIST

## Housing

- Heavy-gauge all aluminum housing.
- Exclusive U-Spring suspension compensates for both radial and lateral movement and provides 44% better vibration isolation than rubber isolators.
- External wiring chase for easy connection.
- High point of discharge with low silhouette design.
- Quick access to motor compartment for easy maintenance.

## Propellers

- Attaches directly to fan shaft for maximum efficiency.
- Precision pitched. Heavy-gauge aluminum blades with steel hub. Blades are designed for specific exhaust or supply requirements.

## Motors

- Standard motors are single speed, speed controllable and drip-proof.
- All motors are rated for continuous duty.
- Disconnect is standard on ODP motors (except two speed and explosion proof).
- Motors are shipped assembled with factory test run assurance.

## Certifications

- UL-705 listing available as an option with standard motors.
- AMCA Air & Sound Licensed.

---

## OPTIONS/ACCESSORIES

**Solid State Speed Control:** S&P's solid state control is matched to allow smooth RPM variation and adjustment of airflow for system balancing. CFM is reduced in direct proportion to motor speed reduction. Speed controllers available for 115/1 or 230/1 operation. Fan performance can be controlled from the ventilated area.



**Roof Curb:** Prefabricated heavy-gauge galvanized steel, welded construction, 12" high (other heights are also available) with 1-1/2" wood nailer. Assures perfect fit of fan to roof opening. Options include burglar bars, single or double pitch construction and hinged curbs for easy duct access.



**Motor Operated Damper:** Motor operated aluminum damper for positive closure against backdraft.

**Automatic Damper:** Automatic aluminum damper for ease in installation and effective backdraft protection.



**Curb Hinge Arrangement:** The curb hinge arrangement provides easy access to the fan, backdraft damper, and duct for servicing and cleaning.

**Insect Screen:** Helps prevent insects, snow, airborne mist or water droplets from entering.

**Special Coatings:** For protective and decorative purposes. Available coatings include: Synthetic Resin, Epoxy, and Heresite (air-dried phenolic). Contact your representative or the factory for more information on available coatings and colors.

# PERFORMANCE

## Model ARE (Exhaust)

CFM / BHP @ Static Pressure / Sones															Catalog Number	HP	RPM									
0			1/10			1/8			1/4			3/8						1/2			5/8			3/4		
439	0.05	2.8	290	0.05	4.1	258	0.05	4.6	167	0.05	4.7	-	-	-	-	-	-	-	-	-	-	-	-	ARE 100A S	1/15	1190
533	0.08	4.4	429	0.08	4.6	381	0.08	5.1	264	0.09	6.5	198	0.09	6.6	-	-	-	-	-	-	-	-	-	ARE 100A S	1/15	1445
627	0.13	6.1	540	0.14	6.3	520	0.14	6.3	373	0.14	8.7	297	0.15	8.6	242	0.15	8.5	178	0.16	8.8	-	-	-	ARE 100A *	1/15	1700
857	0.03	3.1	591	0.04	3.7	483	0.04	4.0	207	0.046	6.1	-	-	-	-	-	-	-	-	-	-	-	ARE 121A S	1/4	815	
1041	0.05	4.6	876	0.06	5.0	808	0.07	5.2	452	0.07	6.6	241	0.08	8.5	-	-	-	-	-	-	-	-	ARE 121A S	1/4	990	
1220	0.08	6.1	1082	0.10	6.4	1046	0.10	6.5	696	0.10	7.6	484	0.12	9.0	303	0.13	10.7	-	-	-	-	-	ARE 121A *	1/4	1160	
1261	0.07	5.9	1135	0.07	6.4	1103	0.08	6.5	780	0.08	7.5	521	0.09	9.1	-	-	-	-	-	-	-	-	ARE 120A S	1/4	1185	
1533	0.12	8.2	1426	0.13	8.7	1402	0.13	8.8	1247	0.14	9.4	934	0.14	10.3	703	0.15	11.8	543	0.16	13.4	-	-	ARE 120A S	1/4	1440	
1804	0.20	10.8	1710	0.21	11.3	1689	0.21	11.4	1583	0.22	12	1416	0.22	12.4	1154	0.22	13.3	912	0.24	14.6	763	0.25	16.0	ARE 120A *	1/4	1695
1245	0.04	3.9	953	0.05	4.6	817	0.05	5.4	455	0.06	5.5	-	-	-	-	-	-	-	-	-	-	-	ARE 161A S	1/4	800	
1517	0.07	5.7	1290	0.08	5.6	1230	0.09	6.1	802	0.10	7.7	548	0.10	7.8	-	-	-	-	-	-	-	-	ARE 161A S	1/4	975	
1782	0.11	7.6	1590	0.13	6.9	1542	0.13	7.2	1189	0.14	9.9	882	0.16	10.0	671	0.17	10.0	-	-	-	-	-	ARE 161A *	1/4	1145	
1826	0.12	8.6	1662	0.14	8.0	1618	0.14	8.0	1323	0.16	8.5	984	0.17	9.2	765	0.18	8.8	-	-	-	-	-	ARE 160A S	1/3	1160	
2220	0.16	8.8	2069	0.18	8.2	2030	0.18	8.1	1820	0.20	8.8	1487	0.21	11.4	1191	0.22	15.9	994	0.23	22.9	816	0.24	33.1	ARE 160A S	1/3	1410
2606	0.26	11.3	2479	0.28	10.8	2446	0.28	10.7	2274	0.31	10.6	2090	0.33	12.2	1788	0.34	14.5	1509	0.35	18.3	1309	0.37	23.8	ARE 160A *	1/3	1655
1990	0.08	6.3	1651	0.09	5.8	1555	0.09	6.2	986	0.10	7.0	584	0.11	7.5	-	-	-	-	-	-	-	-	ARE 201A S	1/4	725	
2415	0.15	8.8	2142	0.16	8.2	2070	0.16	8.0	1617	0.16	9.7	1177	0.18	9.7	845	0.19	10.1	-	-	-	-	-	ARE 201A S	1/4	880	
2827	0.24	11.3	2587	0.25	10.8	2532	0.25	10.7	2218	0.26	11.2	1768	0.26	12.8	1412	0.28	12.6	1122	0.29	13.0	844	0.30	13.7	ARE 201A *	1/4	1030

Performance certified for installation type A – free inlet, free outlet.  
 The sound ratings shown are loudness values in fan sones @ 5' (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: installation Type A: free inlet hemispherical sone levels.  
 \* Base Unit – Speed (RPM) shown is nominal. AMCA Seal does not apply to units with speed control.

\* - As run speed.  
 S - Requires speed control.

## Model ARS (Supply)

CFM / BHP @ Static Pressure / Sones															Catalog Number	HP	RPM									
0			1/10			1/8			1/4			3/8						1/2			5/8			3/4		
466	0.05	4.3	297	0.05	4.8	245	0.06	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARS 100A S	1/15	1175	
565	0.09	6.2	432	0.09	6.5	397	0.10	6.7	192	0.11	7.9	-	-	-	-	-	-	-	-	-	-	-	ARS 100A S	1/15	1425	
664	0.14	8.3	559	0.15	8.3	525	0.15	8.5	355	0.16	9.7	162	0.18	11.0	-	-	-	-	-	-	-	-	ARS 100A *	1/15	1675	
683	0.02	4.5	383	0.03	4.3	317	0.03	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARS 121A S	1/4	820	
828	0.04	6.4	602	0.05	6.3	507	0.05	6.2	163	0.07	6.3	-	-	-	-	-	-	-	-	-	-	-	ARS 121A S	1/4	995	
974	0.07	8.4	808	0.08	8.2	749	0.08	8.3	462	0.09	8.2	-	-	-	-	-	-	-	-	-	-	-	ARS 121A *	1/4	1170	
1021	0.05	9.0	859	0.06	9.4	807	0.06	9.5	552	0.07	8.9	-	-	-	-	-	-	-	-	-	-	-	ARS 120A S	1/4	1214	
1239	0.09	12.4	1114	0.10	12.8	1078	0.10	12.8	855	0.11	12.6	662	0.13	12.1	445	0.15	12.3	-	-	-	-	-	ARS 120A S	1/4	1474	
1458	0.15	16.4	1355	0.16	16.7	1326	0.16	16.8	1161	0.18	17.2	961	0.19	16.4	801	0.21	15.7	646	0.24	15.6	-	-	ARS 120A *	1/4	1734	
1229	0.05	7.3	945	0.06	6.8	858	0.06	7.2	442	0.07	7.3	-	-	-	-	-	-	-	-	-	-	-	ARS 161A S	1/4	785	
1488	0.09	10.0	1287	0.10	9.2	1230	0.10	9.2	853	0.11	10.0	494	0.13	10.1	-	-	-	-	-	-	-	-	ARS 161A S	1/4	950	
1754	0.15	13.3	1585	0.16	12.6	1540	0.16	12.5	1238	0.16	13.5	961	0.18	13.4	661	0.20	13.8	-	-	-	-	-	ARS 161A *	1/4	1120	
1411	0.06	10.1	1151	0.07	9.5	1079	0.07	9.7	751	0.09	10.7	303	0.10	13.0	-	-	-	-	-	-	-	-	ARS 160A S	1/3	1090	
1799	0.12	15.7	1654	0.14	14.6	1583	0.14	14.4	1280	0.15	14.8	1019	0.17	15.6	749	0.19	17.1	304	0.215	20.3	-	-	ARS 160A S	1/3	1390	
2187	0.21	22	2087	0.23	21	2052	0.24	20	1766	0.25	19.7	1547	0.27	20	1326	0.30	21	1123	0.32	22	889	0.35	23	ARS 160A *	1/3	1690
1850	0.07	9.1	1400	0.08	8.4	1273	0.08	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ARS 201A S	1/4	750	
2245	0.13	12.6	1888	0.14	12.0	1789	0.14	11.8	1254	0.16	11.0	-	-	-	-	-	-	-	-	-	-	-	ARS 201A S	1/4	910	
2627	0.21	16.3	2342	0.22	15.8	2253	0.22	15.6	1815	0.24	14.8	1325	0.26	14.7	-	-	-	-	-	-	-	-	ARS 201A *	1/4	1065	

\* - As run speed.  
 S - Requires speed control.

Performance certified for installation type A – free inlet, free outlet.  
 The sound ratings shown are loudness values in fan sones @ 5' (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: installation Type A: free inlet hemispherical sone levels.  
 \* Base Unit – Speed (RPM) shown is nominal. AMCA Seal does not apply to units with speed control.



Standard 705



S&P USA Ventilation Systems, LLC., Div. of Soler & Palau Ventilation Group, certifies that the Models ARE and ARS shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.