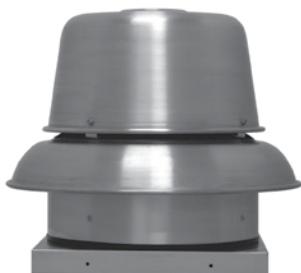


# MODEL RED

## DIRECT DRIVE CENTRIFUGAL ROOF EXHAUSTER



### MODEL FEATURES

- Exhaust air up to 3,000 CFM in high static pressure applications up to 1" w.g.
- Attractive spun aluminum exterior
- Direct drive units have low sound levels and quiet operation
- Non-overloading backward inclined wheel for efficiency at higher static pressures
- AMCA Air and Sound Licensed
- cULus 705 Listed

### MODEL OVERVIEW

Model RED direct drive fans are designed to exhaust air up to 3,000 CFM in high static pressure applications to 1". The spun aluminum exterior provides an attractive appearance. The non-overloading backward inclined wheel with its higher static pressure capability makes this unit suitable for either ducted or nonducted applications. Its roof mounting permits location near the area to be ventilated, allowing short duct runs and more efficient operation.

The RED is generally used to exhaust air from all types of commercial and institutional buildings such as hospitals and health care facilities, schools, recreational buildings, machinery and equipment rooms, offices, retail stores and similar applications.

### CONSTRUCTION FEATURES AND OPTIONS

**Solid State Speed Control**  
(Optional)

**Stainless Steel Exterior Fasteners**

**Aluminum Birdscreen**  
Standard.

**Centrifugal Wheel**  
Non-overloading, backward inclined tapered blades for maximum efficiency.

**Factory Run & Tested**  
Assures dependable operation.

**AMCA Seal**  
Assures rating of Sound and Air performance.

**Motor**  
Open drip-proof construction standard, ships assembled.

**Safety Disconnect**  
Standard

**Motor Isolators**  
Reduce vibration and sound.

**Conduit Chase**  
Provided for ease of electrical connection from below roof.

**Deep Spun Single Piece Inlet**  
For optimum air and sound performance.

**UL Label**  
For electrical reliability.

**Industry best 5 year fan housing warranty, 1 year motor warranty**

All specifications are subject to change without notice unless approved in submittal by Soler & Palau.



## **CONSTRUCTION/SPECIFICATION CHECKLIST**

### **Housing**

- Curb cap has integral deep spun inlet for efficient performance and prepunched mounting holes for ease of installation.
- Fan plate isolates motor compartment from contaminated exhaust air.
- Spun aluminum hood and skirt for weather protection and attractive appearance.
- Heavy-gauge motor support for rigidity and strength.
- Neoprene isolators for reduction of vibration and sound.
- Quick access to motor compartment for ease of maintenance.
- Conduit passage for easy electrical connection from below roof.
- Birdscreen and included on standard models.

### **Wheel**

- Backward inclined for efficiency at higher static pressure.
- Non-overloading for safe operation in ducted systems.
- Tapered blades for efficiency and quiet operation.
- Wheels constructed of noncorrosive aluminum.
- Statically and dynamically balanced for smooth operation.

### **Speed Controllable Motors**

- Brands are nationally recognized and locally serviced.
- Motors are single speed, speed controllable and drip-proof.
- All motors are rated for continuous duty.
- Disconnect is standard.
- Motors ship mounted as standard.

### **AMCA Seal**

- Assures rating of Air and Sound performance.

### **UL Label**

- UL 705 Listing assures electrical reliability.
- UL 705 must be specified when required.



**MODEL RED**

**DIRECT DRIVE CENTRIFUGAL ROOF EXHAUSTER**



## OPTIONS/ACCESSORIES

**Solid State Speed Control:** S&P's solid state control is matched to the motor and blower wheel to allow continuous reduction in performance allowing adjustments of airflow for system balancing. CFM is reduced in direct proportion to motor speed reduction. Speed control is available for 115 or 230 volt single phase. Exhauster performance can be controlled from the ventilated area.



**Roof Curb:** Prefabricated heavy-gauge galvanized clip lock, 14" high with 1-1/2" wood nailer. Assures perfect fit of exhauster to roof curb. Options include burglar bars, single and double pitch construction, and additional curb heights. Welded & custom curbs available.

**Sound Curb:** Option of thermal acoustical lining or a complete maximum sound attenuating baffle system. Provision for mounting damper is available. Contact factory for information regarding effect on exhauster air performance and sound level.

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



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

**Companion Gravity Units:** Model RCX-II comes in a wide range of sizes and air capacities to provide relief or intake air to the system. Curbs and dampers are available to fit all sizes. Spun aluminum hoods provide a pleasing appearance, complementing the Model DB exhauster.



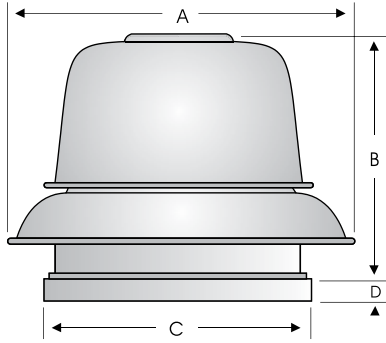
**Curb Hinge Arrangement:** The curb hinge arrangement provides easy access to the exhaust fan, backdraft damper, and duct for servicing and cleaning.

**Special Coatings:** Powered roof exhausters often require special coatings for protective and decorative purposes. Available coatings include: Epoxy, Synthetic Resin, and Heresite (air-dried phenolic). Contact your Soler & Palau representative or the factory for more information on available coatings and colors.



## PERFORMANCE/DIMENSIONS

### Model RED6



Damper		Roof Opening	Curb O.D.	A	B	C	D	Average Ship Wt. Lbs.
I.D.	O.D.							
11	11	11-3/4	14-3/4	21-3/4	12	16-1/2	1-3/4	50

Fan RPM performances may vary from actual current motor offerings for any given model. See price publications or software for current motor RPM offerings

CFM/BHP @ Static Pressure/Sones										HP	RPM (Nom.)	Tip Speed
0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	Catalog Number			
46	27	-	-	-	-	-	-	-	RED6 CS+	1/10	1050	2237
.02/3.4	.02/2.8	-	-	-	-	-	-	-				
59	45	29	-	-	-	-	-	-	RED6 CS+	1/10	1350	2876
.03/6.2	.03/5.3	.03/5.3	-	-	-	-	-	-				
75	63	51	39	26	-	-	-	-	RED6 C*	1/10	1700	3621
.04/11.1	.04/9.8	.04/9.3	.04/9.4	.04/9.4	-	-	-	-				
85	54	-	-	-	-	-	-	-	RED6 CLS+	1/10	950	2024
.02/2.8	.02/2.2	-	-	-	-	-	-	-				
108	85	53	-	-	-	-	-	-	RED6 CLS+	1/10	1200	2556
.03/4.7	.03/3.9	.03/3.9	-	-	-	-	-	-				
130	112	90	61	-	-	-	-	-	RED6 CLS+	1/10	1450	3089
.04/7.5	.04/6.4	.04/6.3	.04/6.3	-	-	-	-	-				
153	137	120	100	76	-	-	-	-	RED6 CL*	1/10	1700	3621
.05/11.1	.06/9.8	.06/9.3	.05/9.4	.05/9.4	-	-	-	-				
224	133	-	-	-	-	-	-	-	RED6 S+	1/10	950	2024
.02/2.5	.02/2.4	-	-	-	-	-	-	-				
236	152	-	-	-	-	-	-	-	RED6 S+	1/10	1000	2130
.02/2.8	.02/2.8	-	-	-	-	-	-	-				
248	171	-	-	-	-	-	-	-	RED6 S+	1/10	1050	2237
.02/3.2	.02/3.1	-	-	-	-	-	-	-				
260	187	-	-	-	-	-	-	-	RED6 S+	1/10	1100	2343
.02/3.5	.02/3.5	-	-	-	-	-	-	-				
272	204	-	-	-	-	-	-	-	RED6 S+	1/10	1150	2450
.03/3.9	.03/3.8	-	-	-	-	-	-	-				
284	219	118	-	-	-	-	-	-	RED6 S+	1/10	1200	2556
.03/4.2	.03/4.2	.02/4.3	-	-	-	-	-	-				
295	234	146	-	-	-	-	-	-	RED6 S+	1/10	1250	2663
.03/4.6	.03/4.6	.03/4.7	-	-	-	-	-	-				
307	249	170	-	-	-	-	-	-	RED6 S+	1/10	1300	2769
.03/5.0	.03/5.0	.03/5.1	-	-	-	-	-	-				
319	264	191	-	-	-	-	-	-	RED6 S+	1/10	1350	2876
.03/5.4	.03/5.4	.03/5.5	-	-	-	-	-	-				
331	278	210	-	-	-	-	-	-	RED6 S+	1/10	1400	2982
.04/6.2	.04/5.8	.04/5.9	-	-	-	-	-	-				
343	293	229	131	-	-	-	-	-	RED6 S+	1/10	1450	3089
.04/6.2	.04/6.2	.04/6.3	.04/6.4	-	-	-	-	-				
354	307	246	162	-	-	-	-	-	RED6 S+	1/10	1500	3195
.04/6.6	.04/6.6	.04/6.7	.04/6.9	-	-	-	-	-				
366	320	263	188	-	-	-	-	-	RED6 S+	1/10	1550	3302
.05/7.0	.05/7.0	.05/7.2	.04/7.3	-	-	-	-	-				
378	334	279	211	-	-	-	-	-	RED6 S+	1/10	1600	3408
.05/7.4	.05/7.5	.05/7.6	.05/7.8	-	-	-	-	-				
390	347	295	232	134	-	-	-	-	RED6*	1/10	1650	3515
.05/7.9	.05/8.0	.05/8.1	.05/8.2	.05/8.4	-	-	-	-				

(1) Model RED 6 C series has choke plate.  
Model RED 6 S requires speed control for listed rpm.  
Performance certified is for installation type A-free inlet, free outlet.  
Performance ratings include the effects of birdscreen in the airstream.  
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 fan sone levels.  
\* Base Unit-AMCA Seal for Sound Rating does not apply to units with speed control.  
+ RPM range capable with solid state speed control.  
Speed (RPM) shown is nominal. Performance is based on actual speed of test.



S&P, Div. of Soler & Palau Ventilation Group, certifies that the Models RED 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.

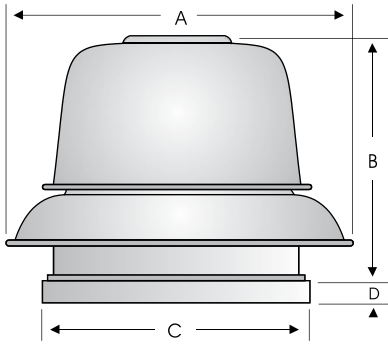




**MODEL RED**  
DIRECT DRIVE CENTRIFUGAL ROOF EXHAUSTER



**Models RED8 and RED10**



Size	Damper		Roof Opening	Curb O.D.	A	B	C	D	Average Ship Wt. Lbs.
	I.D.	O.D.							
RED812/810	11	11	11-3/4	14-3/4	21-3/4	13-1/2	16-1/2	1-3/4	50
RED8167	11	11	11-3/4	14-3/4	21-3/4	15-3/4	16-1/2	1-3/4	50
RED10	11	11	11-3/4	14-3/4	21-3/4	17-1/4	16-1/2	1-3/4	50

Fan RPM performances may vary from actual current motor offerings for any given model. See price publications or software for current motor RPM offerings

	CFM/BHP @ Static Pressure/Sones										HP	RPM (Nom.)	Tip Speed	
	0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	Catalog Number				
<b>RED8</b>	409 .02/2.5	238 .02/1.8	-	-	-	-	-	-	-	-	RED812 S+	1/25	750	1995
	464 .03/3.3	325 .03/2.7	-	-	-	-	-	-	-	-	RED812 S+	1/25	850	2261
	518 .03/4.1	399 .03/3.6	216 .03/3.1	-	-	-	-	-	-	-	RED812 S+	1/25	950	2527
	573 .04/4.9	468 .04/4.5	326 .04/4.1	-	-	-	-	-	-	-	RED812 *	1/25	1050	2793
	627 .05/5.9	535 .05/5.5	417 .05/5.1	249 .05/4.7	-	-	-	-	-	-	RED810 S+	1/10	1150	3059
	682 .06/6.8	599 .07/6.4	496 .07/6.0	362 .06/5.7	183 .05/5.6	-	-	-	-	-	RED810 S+	1/10	1250	3325
	736 .08/7.8	661 .08/7.4	569 .08/7.0	460 .08/6.7	314 .07/6.5	-	-	-	-	-	RED810 S+	1/10	1350	3591
	791 .09/8.9	721 .10/8.4	638 .10/8.0	545 .10/7.7	425 .09/7.5	276 .08/7.4	-	-	-	-	RED810 S+	1/10	1450	3857
	818 .10/9.4	751 .10/8.9	672 .11/8.5	584 .11/8.3	476 .10/8.0	340 .09/7.8	170 .08/7.7	-	-	-	RED810 S+	1/10	1500	3990
	845 .11/10.0	781 .11/9.5	705 .12/9.1	622 .12/8.8	523 .11/8.6	398 .11/8.3	251 .09/8.2	-	-	-	RED810 S+	1/10	1550	4123
<b>RED10</b>	954 .16/12.1	897 .16/11.6	836 .16/11.1	764 .16/10.8	688 .16/10.6	600 .16/10.3	494 .15/10.1	371 .14/10.0	233 .12/9.9	-	RED825 *	1/4	1750	4655
	808 .06/4.9	640 .06/4.2	403 .05/4.0	-	-	-	-	-	-	-	RED1025 S+	1/4	900	2889
	897 .07/5.9	750 .07/5.2	559 .07/5.0	299 .06/4.7	-	-	-	-	-	-	RED1025 S+	1/4	1000	3210
	987 .09/6.8	856 .09/6.3	696 .09/5.8	489 .08/5.6	-	-	-	-	-	-	RED1025 S+	1/4	1100	3531
	1077 .12/7.9	958 .12/7.4	821 .12/7.0	648 .11/6.8	438 .10/6.7	-	-	-	-	-	RED1025 S+	1/4	1200	3852
	1167 .15/9.0	1058 .15/8.5	936 .15/8.1	790 .14/7.9	615 .13/7.7	405 .11/7.5	-	-	-	-	RED1025 S+	1/4	1300	4173
	1256 .18/10.2	1156 .18/9.7	1046 .18/9.3	920 .18/9.1	769 .17/8.9	597 .16/8.7	390 .14/8.5	-	-	-	RED1025 S+	1/4	1400	4494
	1346 .22/11.5	1253 .22/11.0	1152 .22/10.6	1042 .22/10.3	910 .21/10.1	762 .20/9.9	594 .18/9.8	393 .16/9.6	-	-	RED1025 S+	1/4	1500	4815
	1391 .25/12.1	1301 .25/11.7	1204 .25/11.3	1099 .24/10.9	977 .23/10.7	838 .22/10.5	682 .21/10.4	504 .19/10.2	279 .16/10.1	-	RED1025 S+	1/4	1550	4976
	1436 .27/12.8	1348 .27/12.4	1256 .27/12.0	1155 .26/11.7	1041 .26/11.4	910 .25/11.2	766 .24/11.0	604 .22/10.8	412 .16/10.7	-	RED1025 *	1/4	1600	5136
1481 .29/13.5	1396 .29/13.0	1307 .29/12.6	1211 .29/12.3	1104 .28/12.1	981 .27/12.0	845 .26/11.8	695 .25/11.6	524 .23/11.4	-	RED1033 S+	1/3	1650	5297	
1526 .32/14.2	1443 .32/13.8	1358 .32/13.3	1265 .32/12.9	1165 .13/12.7	1048 .30/12.6	921 .29/12.4	781 .28/12.3	625 .26/12.1	-	RED1033 *	1/3	1700	5457	

(1) Models with S in the number require speed control. Performance certified is for installation type A-free inlet, free outlet. Performance ratings include the effects of birdscreen in the airstream. 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 fan sone levels. \* Base Unit-AMCA Seal for Sound Rating does not apply to units with speed control. + RPM range capable with solid state speed control. Speed (RPM) shown is nominal. Performance is based on actual speed of test.



S&P, Div. of Soler & Palau Ventilation Group, certifies that the Models RED 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.

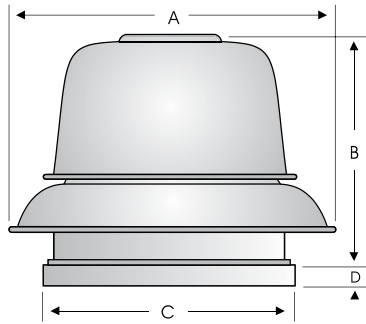




**MODEL RED**  
DIRECT DRIVE CENTRIFUGAL ROOF EXHAUSTER



**Models RED12 and RED15**



Damper		Roof Opening	Curb O.D.	A	B	C	D	Average Ship Wt. Lbs.
I.D.	O.D.							
18	18	19-1/4	22-1/4	33-1/8	23-1/2	24	2	124

Fan RPM performances may vary from actual current motor offerings for any given model. See price publications or software for current motor RPM offerings

	CFM/BHP @ Static Pressure/Sones										HP	RPM (Nom.)	Tip Speed
	0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	Catalog Number			
<b>RED12</b>	1209 .07/6.5	959 .08/5.8	708 .08/5.4	456 .08/5.3	-	-	-	-	-	RED1216 S+	1/4	900	3393
	1277 .08/7.1	1042 .09/6.4	797 .09/6.0	570 .09/5.8	-	-	-	-	-	RED1216 S+	1/4	950	3582
	1344 .10/7.6	1123 .10/6.9	884 .10/6.6	674 .10/6.3	423 .10/6.2	-	-	-	-	RED1216 S+	1/4	1000	3770
	1411 .11/8.2	1202 .11/7.6	970 .12/7.1	771 .12/7.0	553 .12/6.9	-	-	-	-	RED1216 S+	1/4	1050	3959
	1478 .13/8.9	1280 .13/8.2	1057 .13/7.8	863 .14/7.5	665 .14/7.4	419 13/7.2	-	-	-	RED1216 S+	1/4	1100	4147
	1545 .14/9.6	1356 .15/8.9	1144 .15/8.4	952 .15/8.2	769 .15/8.0	558 .15/7.8	-	-	-	RED1216*	1/4	1150	4336
	1613 .16/10.2	1432 .16/9.6	1231 .16/9.1	1040 .17/8.8	866 .17/8.6	678 .17/8.4	442 .16/8.2	-	-	RED1250 S+	1/2	1200	4524
	1680 .18/11.0	1506 .18/10.2	1317 .18/9.7	1126 .19/9.5	960 .19/9.3	786 .20/9.1	587 .19/8.9	-	-	RED1250 S+	1/2	1250	4713
	1747 .20/11.7	1580 .20/11.0	1401 .21/10.3	1212 .21/10.1	1050 .22/9.9	888 .22/9.8	710 .22/9.5	491 .20/9.1	-	RED1250 S+	1/2	1300	4901
	1814 .22/12.5	1653 .23/11.8	1484 .23/11.1	1299 .23/10.8	1139 .24/10.6	984 .42/10.4	821 .24/10.3	633 .23/10.0	376 .21/9.8	RED1250 S+	1/2	1350	5090
	1881 .25/13.2	1726 .25/12.5	1565 .26/11.8	1387 .26/11.7	1226 .26/11.4	1077 .27/11.2	924 .27/11.0	757 .27/10.7	556 .25/10.5	RED1250 S+	1/2	1400	5278
	1949 .28/14.0	1798 .28/13.3	1645 .28/12.6	1474 .28/12.3	1312 .29/12.1	1168 .30/12.0	1023 .30/11.8	869 .30/11.6	695 .29/11.4	RED1250 S+	1/2	1450	5467
	2016 .30/14.8	1870 .31/14.1	1723 .31/13.4	1560 .31/13.0	1398 .32/12.8	1257 .32/12.6	1118 .33/12.5	974 .33/12.4	817 .33/12.2	RED1250 S+	1/2	1500	5655
	2083 .33/15.6	1942 .34/14.9	1801 .34/14.3	1645 .34/13.8	1484 .35/13.6	1344 .35/13.4	1210 .36/13.3	1073 .36/13.1	929 .36/12.9	RED1250 S+	1/2	1550	5844
	2150 .37/16.4	2013 .37/15.7	1878 .37/15.5	1729 .38/14.6	1572 .38/14.4	1430 .39/14.2	1300 .39/14.0	1170 .40/13.8	1034 .40/13.7	RED1250 S+	1/2	1600	6032
2217 .40/17.3	2084 .40/16.6	1954 .41/15.9	1812 .41/15.3	1660 .41/15.2	1516 .42/15.0	1389 .43/14.8	1263 .43/14.6	1134 .44/14.5	RED1250 S+	1/2	1650	6221	
2284 .44/18.2	2155 .44/17.5	2029 .45/16.8	1893 .45/16.2	1747 .45/16.0	1602 .46/15.8	1476 .46/15.6	1354 .47/15.4	1231 .48/15.3	RED1250 S+	1/2	1700	6409	
2352 .48/18.9	2226 .48/18.3	2104 .48/17.6	1973 .49/17.0	1832 .49/16.7	1689 .49/16.5	1562 .50/16.3	1443 .51/16.2	1324 .52/16.0	RED1250*	1/2	1750	6598	
1958 .13/6.9	1599 .14/6.3	1212 .13/6.1	759 .12/6.0	-	-	-	-	-	RED1550 S+	1/2	750	3270	
2089 .16/7.7	1756 .16/7.0	1395 .16/6.8	989 .15/6.8	512 .13/6.7	-	-	-	-	RED1550 S+	1/2	800	3488	
2219 .19/8.4	1907 .19/7.9	1567 .19/7.6	1203 .19/7.6	795 .17/7.5	-	-	-	-	RED1550 S+	1/2	850	3706	
2350 .22/9.3	2055 .23/8.8	1736 .23/8.4	1411 .22/8.3	1035 .21/8.3	608 .18/8.3	-	-	-	RED1550 S+	1/2	900	3924	
2481 .26/10.2	2202 .26/9.7	1902 .27/9.3	1602 .26/9.2	1256 .26/9.1	887 .24/9.1	-	-	-	RED1550 S+	1/2	950	4142	
2611 .30/11.1	2347 .31/10.6	2066 .31/10.2	1779 .31/10.0	1468 .30/10.0	1130 .29/9.9	752 .26/9.9	-	-	RED1550 S+	1/2	1000	4360	
2742 .35/12.1	2493 .35/11.5	2228 .36/11.2	1950 .36/10.9	1672 .35/10.9	1352 .34/10.8	1019 .32/10.8	621 .27/10.7	-	RED1550 S+	1/2	1050	4578	
2872 .40/13.2	2636 .40/12.6	2386 .41/12.1	2119 .41/11.8	1860 .40/11.8	1564 .40/11.8	1258 .38/11.7	923 .35/11.7	494 .29/11.7	RED1550 S+	1/2	1100	4796	
3003 .46/14.2	2779 .46/13.7	2540 .46/13.2	2285 .46/12.9	2038 .46/12.8	1774 .46/12.7	1480 .44/12.7	1180 .42/12.7	840 .38/12.6	RED1550 *	1/2	1150	5014	

(1) Models with S in the number require speed control.  
Performance certified is for installation type A-free inlet, free outlet.  
Performance ratings include the effects of birdscreen in the airstream.  
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 fan sone levels.  
\* Base Unit-AMCA Seal for Sound Rating does not apply to units with speed control.  
+ RPM range capable with solid state speed control.  
Speed (RPM) shown is nominal. Performance is based on actual speed of test.



S&P, Div. of Soler & Palau Ventilation Group, certifies that the Models RED 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.

