

Series CMB / Series F
Exhaust Fans

CAR-MON

Where continuous ventilation is imperative, Car-Mon fans perform.

In a critical safety application, a fan must provide absolute performance through years of continuous use. These fans, often inaccessibly placed, must do so with minimum maintenance. When a fan breaks down, workers' health can be seriously threatened and production curtailed.

This is why we build fans the way we do. Every measure possible is taken to assure definite, high-level performance. Heavy gauge, welded steel construction is used for the frame, motor base and housing. Our wheels produce the highest efficiency in their operating range - not only through engineering design, but by attention to detail in manufacturing: accurate blade alignment, preparation of metal surfaces to prevent spatter accumulation, smooth welds, and dynamic balancing in two planes with weights welded on outside the airstream. Fans are coated inside and out with an acid resistant epoxy grade powder coating for exceptional resistance to corrosives. Each fan undergoes extensive quality control procedures, from initial components inspection to the final run tests. Every fan is individually built and tested.

The result is an exhaust fan you can rely on for the most dependable service possible.

Belt Drive Centrifugal Fan Sample Specification

Supplying all the fans on a job is not important to us, but supplying the important ones is.

Carbon monoxide exhaust fan shall be the standard product of a United States exhaust system manufacturer and be licensed to bear the AMCA seal for air performance.

The fan(s) shall be single inlet, single width, Arrangement 10 and shall have a backward inclined fan wheel with single thickness flat blades. The fan blades shall be continuously welded to both the shroud and the backplate. The fan blades shall be free of weld spatter. The hub shall be bolted to the fan wheel with Grade 5 bolts. The fan wheel shall be statically and dynamically balanced before assembly. Any required balance weights shall be welded to the outside of the shroud or backplate; no weights are to be installed in the blade airstream.

The bearings shall be of the pillow block type with cast steel frame and shall be bolted to the structural angle bearing supports. The fan shaft shall be fabricated of ground and polished cold drawn steel with machined centers and key slots for both the fan wheel and the drive sheave. It shall be given a rust inhibitive asphaltic coating after assembly. The V-belt drive shall be adjustable. The variable pitch sheave shall be factory set at the appropriate position to provide the specified capacity in the approximate midpoint of the adjustment range. All fans shall be provided with a belt guard enclosing both sheaves and V-belts. The belt guard shall have a tachometer hole. The drive shall have two V-belts and be rated for no less than 150% of motor load.

The scroll and side sheets of the fan housing shall be fabricated of cold rolled steel of 12-gauge minimum thickness. The scroll and side sheets shall be joined through continuous welding. Spot welded or standing seam construction is not acceptable. The fan housing shall have a minimum of 8 attachment studs welded to each side sheet, one to which the inlet cone and inlet support shall bolt, and the other for joining the housing to the fan base. Any bolts, self tapping screws or fasteners that protrude into the housing interior are not acceptable.

The fan base and the inlet support shall be fabricated of cold rolled steel of 12-gauge minimum thickness. The bearing supports within the base shall be fabricated of cold rolled steel angles having a minimum 3/16" thickness and they shall be welded to the sides of the base. All seams in the individual components shall be continuous welded. The motor base shall be fabricated of cold rolled steel of 10-gauge minimum thickness. Its position shall be adjustable through the use of bolts that travel in slots in the sides of the fan base. A non-hardening, high elasticity caulking shall be applied during assembly between the mating surfaces of the fan housing and the fan base, of the inlet cone and the fan housing, and, the inlet support and the inlet cone. All surfaces of the centrifugal fan shall be painted completely with an acid resistant, air-dry phenolic synthetic resinous coating.

Testing:

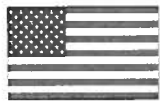
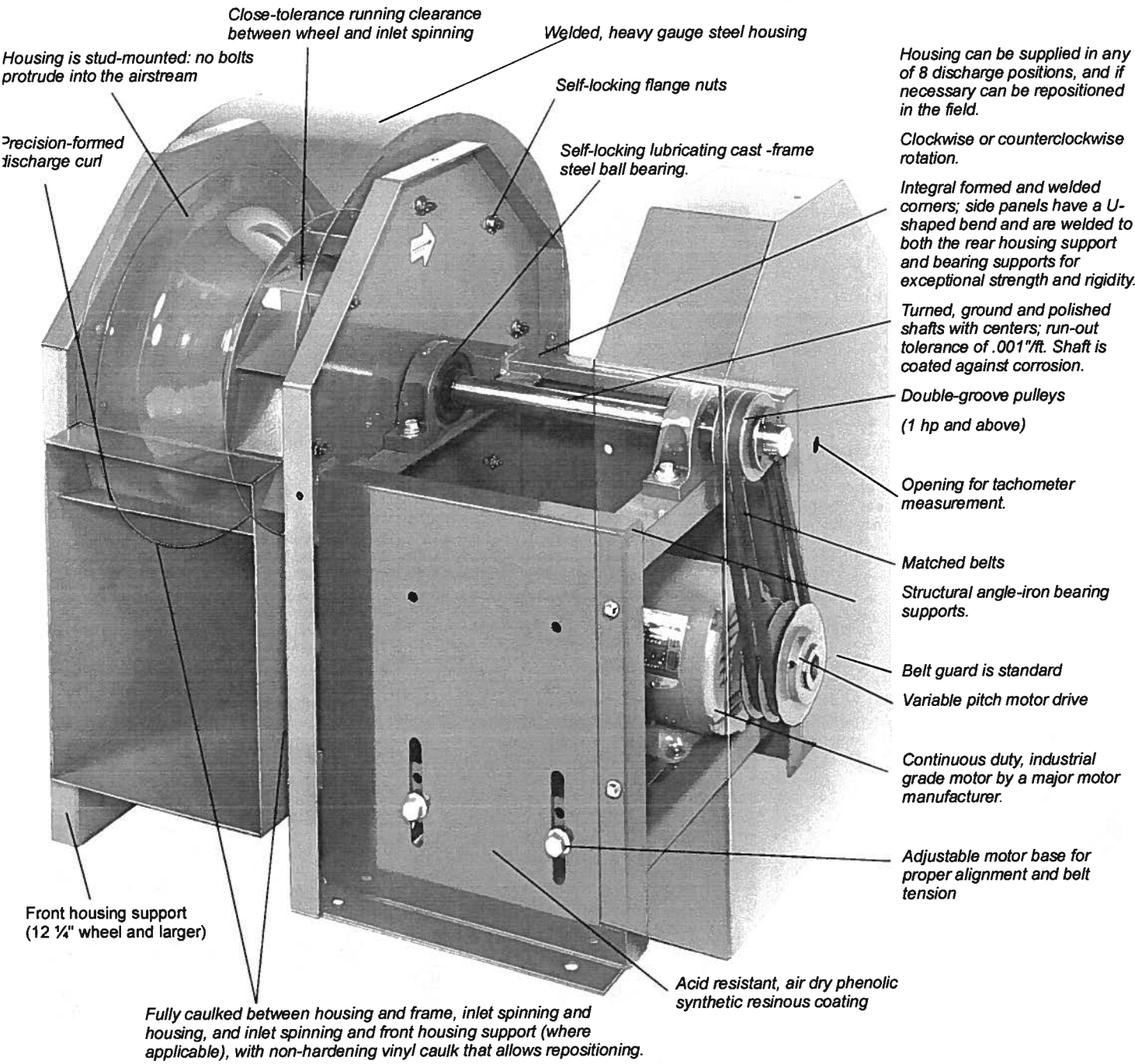
The assembled fan shall be test run before shipment with "total frequency" vibration measured at each bearing in both the vertical and horizontal planes. Any fan having an average reading of over 3 mils deflection is not acceptable. **Balance report to be provided with installation and maintenance instructions.**

Optional Fan Platform

Furnish wall mount or ceiling suspension fan platform of heavy duty, all welded construction. The platform shall use 1½" x 1½" x 3/16" angle iron. The 3" x 4.1 lb base channel of the vibration rails shall be an integral part of the platform assembly. The wall mount platform shall have 8 mounting holes and the suspension platform is to have 4 holes for locating suspension rods.

The fan(s) and accessories are to be manufactured by Car-Mon Products, Inc. of Elgin, Illinois.

For fan requirements refer to fan schedule.

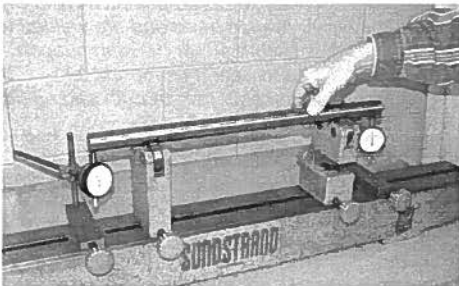


Car-Mon products are American made, using American components.

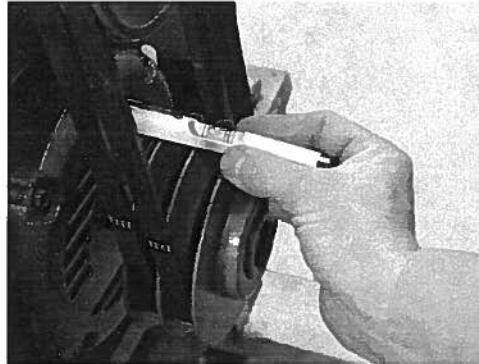
Car-Mon builds fans with an extra measure of durability and an uncompromising emphasis on quality.



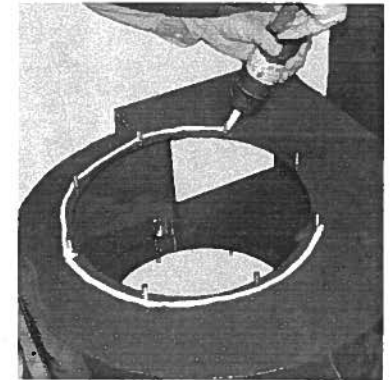
Each fan is individually registered with a fan report. All tests, as well as the type of drives, belts, motor, and special components are carefully recorded. This report becomes a permanent part of the record of each fan shipped.



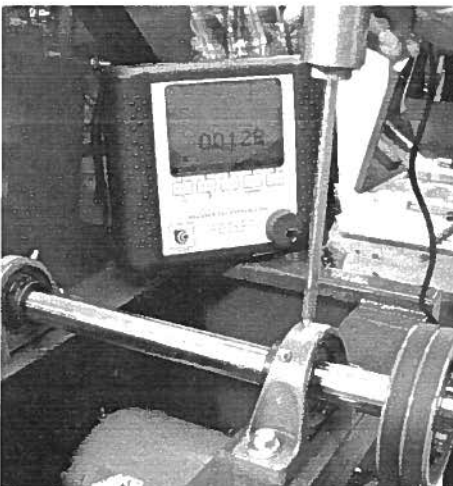
We inspect each shaft for straightness and proper diameter, maintaining tolerances of .001/ft on runout, checked at both ends, and .001" on the diameter. The hub bore is tested to the same .001" tolerance. Uniformity and standardization is strictly upheld.



In setting the fan and motor drives care is taken that they not only align vertically but are also parallel, assuring even tracking of the belts. On fans with double-groove pulleys, matched belts are used to guarantee uniform size and operating characteristics.



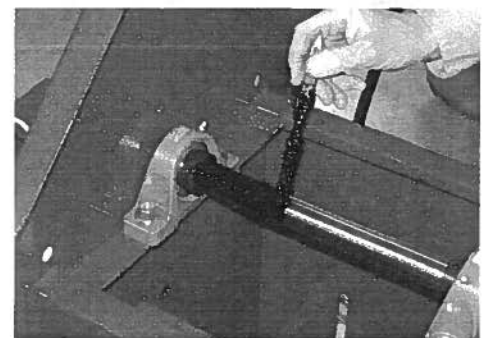
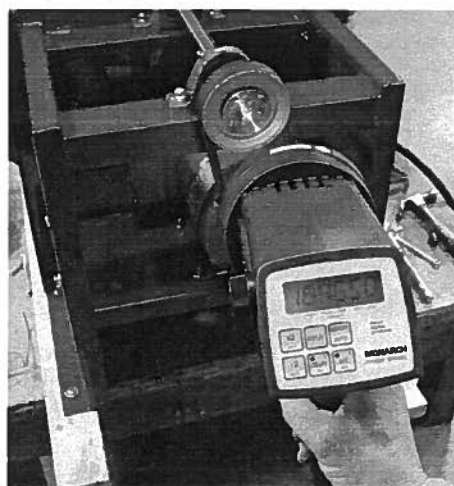
To make the housing airtight, fans are caulked between housing and fan frame, between inlet spinning and housing, and on fans with front housing supports, between the inlet spinning and the housing support. A non-hardening high elasticity vinyl caulk is used, making it possible to remount or reposition the housing in the field and still maintain an airtight seal.



Vibration and RPM readings are taken on every Car-Mon fan.* Vibration is electronically measured at each bearing in both the horizontal and vertical planes. Any fan having an average reading of over 3 mils deflection is rejected. RPM is measured directly from the shaft's machined center to assure that the correct drive settings have been made.

CAR-MON DOES NOT TRIM BALANCE. Trim balancing is not an appropriate procedure for fans ventilating dirty air: balance weights on fan blades create turbulence that causes uneven loading of soot on the wheel, throwing the fan out of balance again in a matter of months. Any Car-Mon fan rejected in the final run tests is torn down, the faulty part replaced and the fan rebuilt to meet specifications.

*The electronic probe used for the vibration analysis is equipped with a filter that sorts out secondary vibrations and reads only the primary frequency. When our fans are tested this filter is disengaged, so all vibration is measured.

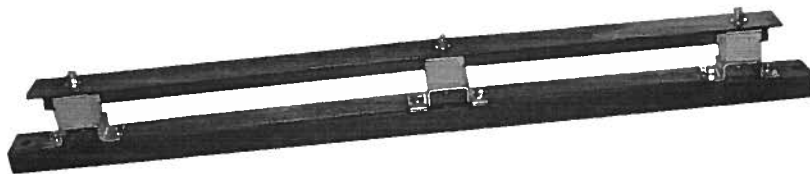


After a fan passes all tests, the shaft is given an asphaltic coating to protect against corrosion. Should the shaft ever need to be removed, the coating cleans off easily with naphtha or mineral spirits, revealing a smooth, rust-free shaft that slides out easily.

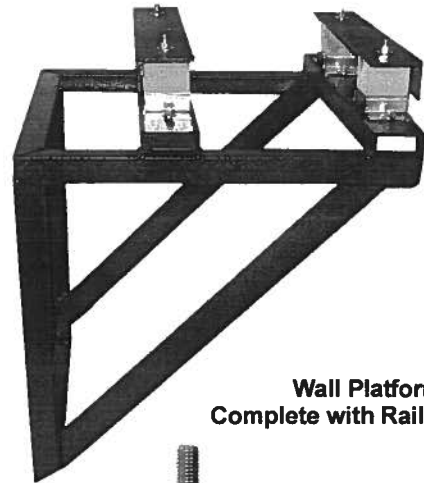
Vibration Pads, Rails and Platforms

Car-Mon's exclusive vibration isolation pads are constructed of 12-gauge plated steel and a coated fiberglass isolation medium, with a rated capacity of 80 lbs. per pad. They can be supplied separately or on a vibration rail set of structural steel. Complete platforms for wall or ceiling mounting of fans and vibration rails are also available.

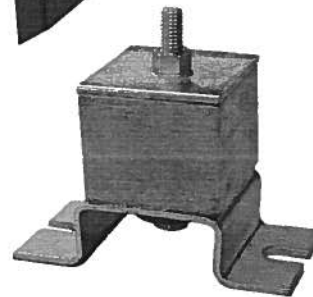
Other style isolators are available for fans exceeding the rated capacity of these pads.



Vibration Rail



Wall Platform
Complete with Rails & Pads



Vibration Pad

Optional Equipment

Optional Equipment

Vibration Pads* Vibration Rails* Mounting Platforms* Weather Covers* Backdraft Dampers*
 Housing Drain Connections Access Panels Inlet and Discharge Screens Inlet and Discharge Flanges
 Inlet and Discharge Transition Ducts Canvas Connections Disconnect Switches Aluminum Wheels
 High Temperature Grease Bearings Shaft Coolers and Guards Explosion-Resistant Motors
 Explosion-Resistant Disconnect Switches

*See specification below

Optional Equipment Specification

A. Furnish vibration isolation pads of quantity and type to suit the fan(s). The pads will have 12 gauge frame and load plate and coated fiberglass medium.

B. Furnish vibration isolation rails of size and type to match the fan(s). The rails will be fabricated of structural steel angle supported by vibration pads mounted on channel.

C. The fan platform shall be of heavy duty, all welded construction. Both wall mount and ceiling suspension platforms shall use 1½" x 1½" x ¼" angle iron. The 3" x 4.1 lb. base channel of the vibration rails shall be an integral part of platform assembly. The wall mount platform shall have 8 mounting holes and the suspension platform is to have 4 holes for locating suspension rods.

D. Furnish a hinged weather cover fabricated of 16 gauge cold rolled steel, painted inside and out with air dry phenolic synthetic resinous coating. The cover is to completely enclose the motor compartment and afford complete protection from the elements for the motor, fan shaft, bearings and V-belt drive.

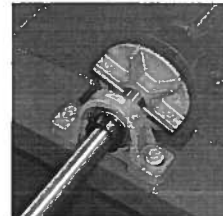
E. Furnish an automatic self-closing backdraft damper of all-aluminum construction. The blades are to be linked together so as to provide simultaneous movement. Each blade will have nylon bearings and a felt blade edge seal.

The fan(s) and accessories are to be manufactured by Car-Mon Products, Inc., of Elgin, Illinois

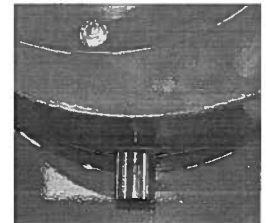
For fan requirements refer to fan schedule.



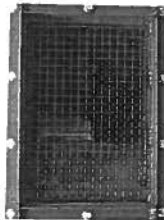
Backdraft Damper



Shaft Cooler



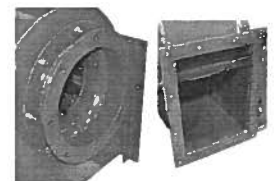
Housing Drain
Connection



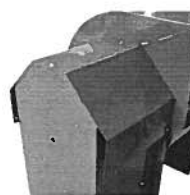
Inlet or Outlet
Screen



Access Panel



Inlet or Outlet Flanges



Weather Cover



Explosion Resistant
Starters, Disconnects,
and Motors

8/10 105

Wheel Diameter: **10.625"**
 Outlet Area: **.730 sq. Ft.**
 Maximum RPM: **3700**
 Tip Speed in FPM: **2.78 x RPM**

Series **CMB 8**: .75 hp
 Series **CMB 10**: 1 hp

Other horsepowers available through 1.5 hp

CFM	Outlet Velocity	1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		1" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
365	500	943	0.026	1078	0.039	1201	0.053	1314	0.067	1418	0.083	1606	0.114
438	600	1018	0.034	1146	0.047	1259	0.062	1365	0.078	1464	0.095	1647	0.131
511	700	1100	0.043	1219	0.058	1328	0.073	1427	0.090	1520	0.108	1695	0.147
584	800	1189	0.054	1299	0.071	1402	0.088	1497	0.105	1586	0.124	1751	0.165
657	900	1284	0.068	1384	0.086	1480	0.105	1571	0.124	1657	0.144	1815	0.185
730	1000	1383	0.084	1475	0.104	1564	0.124	1650	0.145	1732	0.167	1885	0.210
803	1100	1482	0.104	1570	0.125	1653	0.146	1733	0.169	1811	0.192	1959	0.238
876	1200	1584	0.126	1669	0.149	1745	0.172	1821	0.196	1895	0.221	2035	0.272
949	1300	1688	0.152	1768	0.176	1842	0.201	1912	0.227	1981	0.253	2116	0.307
1022	1400	1794	0.183	1868	0.208	1941	0.234	2007	0.261	2072	0.289	2200	0.346
1095	1500	1902	0.218	1972	0.243	2041	0.271	2106	0.299	2166	0.329	2287	0.389
1168	1600	2008	0.258	2076	0.283	2140	0.313	2205	0.342	2264	0.373	2378	0.436
1241	1700	2118	0.302	2182	0.329	2243	0.359	2304	0.391	2363	0.422	2471	0.488
1314	1800	2230	0.352	2290	0.381	2347	0.410	2404	0.444	2462	0.477	2568	0.545
1387	1900			2396	0.437	2452	0.467	2507	0.501	2562	0.537	2667	0.607
1460	2000			2504	0.499	2559	0.531	2611	0.565	2663	0.602	2765	0.676
1606	2200			2726	0.643	2773	0.678	2823	0.713	2870	0.749	2964	0.832
1752	2400					2991	0.851	3037	0.890	3081	0.927	3168	1.01
1898	2600					3215	1.05	3252	1.09	3297	1.13	3376	1.22
2044	2800							3474	1.33	3510	1.37	3589	1.46

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Wheel Diameter: **12.25"**
 Outlet Area: **.850 sq. Ft.**
 Maximum RPM: **3600**
 Tip Speed in FPM: **3.21 x RPM**

Series **CMB 14** 1.5 hp

Other horsepowers available through 5 hp

CFM	Outlet Velocity	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
680	800	921	0.054	1088	0.097	1223	0.129						
765	900	995	0.065	1154	0.119	1253	0.151	1376	0.184				
850	1000	1067	0.086	1228	0.151	1339	0.173	1430	0.205	1525	0.259		
935	1100	1142	0.108	1305	0.173	1403	0.205	1497	0.248	1579	0.291	1678	0.335
1020	1200	1231	0.129	1381	0.194	1471	0.238	1567	0.281	1638	0.324	1742	0.378
1105	1300	1319	0.162	1452	0.216	1536	0.259	1631	0.324	1697	0.367	1817	0.432
1190	1400	1434	0.194	1525	0.259	1608	0.281	1697	0.356	1767	0.410	1897	0.486
1275	1500	1492	0.226	1595	0.292	1689	0.345	1773	0.421	1842	0.464	1959	0.540
1360	1600	1559	0.248	1682	0.335	1768	0.389	1837	0.453	1918	0.518	2017	0.625
1445	1700	1622	0.291	1755	0.378	1847	0.443	1924	0.518	1998	0.572	2084	0.646
1530	1800	1701	0.335	1846	0.432	1963	0.497	2014	0.574	2062	0.625	2153	0.721
1615	1900	1787	0.378	1949	0.486	2050	0.562	2096	0.636	2149	0.699	2220	0.784
1700	2000			2037	0.551	2144	0.625	2196	0.710	2238	0.774	2291	0.858
1870	2200			2118	0.689	2293	0.763	2349	0.869	2392	0.933	2434	1.039
2040	2400			2195	0.859	2445	0.954	2496	1.018	2538	1.092	2580	1.206
2210	2600			2440	1.060	2607	1.144	2661	1.206	2700	1.300	2744	1.425
2380	2800					2770	1.362	2839	1.487	2862	1.539	2913	1.945
2550	3000					2833	1.622	3014	1.747	3041	1.830	3043	1.977
2720	3200					2996	1.893	3191	2.049	3214	2.091	3273	2.264
2890	3400					3156	2.142	3368	2.325	3388	2.427	3447	2.621

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Wheel Diameter: **13.5"**
 Outlet Area: **1.050 sq. Ft.**
 Maximum RPM: **3260**
 Tip Speed in FPM: **3.53 x RPM**

Series **CMB 20**: 2 hp

Other horsepowers available through 5 hp

CFM	Outlet Velocity	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
840	800	756	0.056	919	0.093	1055	0.135						
945	900	815	0.069	951	0.109	1097	0.155	1209	0.203				
1050	1000	876	0.084	996	0.128	1132	0.176	1249	0.228	1350	0.281		
1155	1100	938	0.101	1051	0.150	1164	0.199	1290	0.256	1388	0.313	1480	0.371
1260	1200	1002	0.122	1109	0.175	1207	0.227	1320	0.284	1432	0.347	1519	0.409
1365	1300	1066	0.146	1169	0.202	1260	0.259	1356	0.317	1464	0.382	1564	0.451
1470	1400	1132	0.173	1230	0.233	1317	0.294	1401	0.355	1496	0.420	1596	0.492
1575	1500	1198	0.204	1293	0.266	1377	0.333	1454	0.398	1535	0.464	1627	0.536
1680	1600	1265	0.238	1355	0.304	1436	0.375	1511	0.445	1584	0.514	1663	0.586
1785	1700	1332	0.276	1419	0.346	1498	0.420	1570	0.496	1639	0.569	1709	0.643
1890	1800	1401	0.318	1483	0.393	1560	0.470	1630	0.550	1696	0.629	1760	0.706
1995	1900	1471	0.365	1548	0.444	1622	0.524	1690	0.608	1755	0.692	1817	0.775
2100	2000			1614	0.501	1685	0.583	1753	0.671	1815	0.760	1875	0.847
2310	2200			1747	0.629	1814	0.719	1877	0.811	1937	0.909	1993	1.00
2520	2400			1881	0.776	1944	0.877	2004	0.976	2062	1.07	2116	1.18
2730	2600					2077	1.06	2132	1.16	2187	1.27	2241	1.38
2940	2800					2209	1.26	2263	1.38	2316	1.49	2365	1.61
3150	3000					2345	1.50	2397	1.62	2444	1.75	2494	1.87
3360	3200					2485	1.76	2529	1.90	2577	2.03	2622	2.16
3570	3400					2625	2.06	2664	2.20	2710	2.35	2753	2.49

Performances shown are for installation type D (Ducted inlet, Ducted outlet). Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

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150

Wheel Diameter: **15"**
 Outlet Area: **1.290 sq. Ft.**
 Maximum RPM: **2920**
 Tip Speed in FPM: **3.93 x RPM**

Series **CMB 25**: 3 hp

Other horsepowers available through 7.5 hp

CFM	Outlet Velocity	¼" SP RPM BHP	½" SP RPM BHP	¾" SP RPM BHP	1" SP RPM BHP	1¼" SP RPM BHP	1½" SP RPM BHP
1048	800	696 0.07	843 0.12				
1179	900	742 0.08	888 0.14	997 0.19			
1310	1000	798 0.10	935 0.17	1041 0.22	1136 0.29		
1440	1100	856 0.13	973 0.19	1087 0.26	1178 0.32	1264 0.39	
1572	1200	915 0.15	1009 0.22	1134 0.29	1223 0.36	1304 0.44	1383 0.51
1702	1300	976 0.18	1064 0.25	1174 0.33	1269 0.41	1348 0.49	1421 0.57
1834	1400	1038 0.22	1121 0.29	1210 0.37	1316 0.46	1394 0.54	1466 0.63
1964	1500	1101 0.26	1178 0.33	1252 0.41	1355 0.51	1441 0.60	1512 0.69
2096	1600	1164 0.30	1236 0.33	1308 0.46	1391 0.56	1488 0.67	1558 0.76
2226	1700	1228 0.35	1295 0.44	1364 0.52	1428 0.61	1524 0.73	1605 0.84
2358	1800		1357 0.49	1422 0.59	1483 0.68	1560 0.79	1647 0.91
2488	1900		1419 0.56	1479 0.66	1540 0.75	1596 0.85	1683 0.98
2620	2000		1481 0.63	1538 0.73	1596 0.83	1652 0.94	1719 1.06
2881	2200		1607 0.80	1659 0.90	1712 1.02	1764 1.13	1814 1.24
3144	2400		1734 0.99	1783 1.11	1829 1.23	1879 1.35	1927 1.47
3405	2600			1909 1.34	1952 1.47	1996 1.60	2042 1.73
3668	2800			2035 1.61	2077 1.75	2117 1.88	2158 2.03
3929	3000			2163 1.91	2202 2.06	2441 2.21	2278 2.36
4192	3200				2329 2.41	2365 2.57	2401 2.73
4453	3400				2456 2.81	2491 2.97	2525 3.14

30

182

Wheel Diameter: **18.25"**
 Outlet Area: **1.920 sq. Ft.**
 Maximum RPM: **2400**
 Tip Speed in FPM: **4.78 x RPM**

Series **CMB 30**: 5 hp

Other horsepowers available through 10 hp

CFM	Outlet Velocity	¼" SP RPM BHP	½" SP RPM BHP	¾" SP RPM BHP	1" SP RPM BHP	1¼" SP RPM BHP	1½" SP RPM BHP
1552	800	542 0.102	658 0.173	762 0.251			
1746	900	582 0.124	685 0.203	784 0.286	876 0.378		
1940	1000	625 0.151	719 0.237	811 0.327	895 0.420	979 0.525	
2134	1100	670 0.183	755 0.275	838 0.373	922 0.473	996 0.575	1073 0.693
2328	1200	715 0.220	792 0.317	872 0.422	949 0.530	1023 0.640	1090 0.753
2522	1300	762 0.262	834 0.366	908 0.477	977 0.593	1049 0.710	1116 0.830
2716	1400	812 0.312	878 0.420	944 0.537	1012 0.660	1077 0.786	1143 0.913
2910	1500	861 0.368	922 0.481	982 0.603	1048 0.733	1109 0.866	1170 1.002
3104	1600	911 0.431	967 0.549	1025 0.678	1084 0.813	1144 0.953	1199 1.096
3298	1700	962 0.501	1013 0.624	1069 0.759	1121 0.899	1180 1.046	1234 1.197
3492	1800	1012 0.580	1059 0.707	1113 0.849	1163 0.995	1216 1.147	1270 1.304
3686	1900	1063 0.667	1108 0.801	1158 0.946	1207 1.099	1253 1.256	1306 1.420
3880	2000		1158 0.903	1203 1.053	1251 1.212	1295 1.375	1343 1.544
4268	2200		1257 1.136	1295 1.293	1340 1.465	1382 1.642	1423 1.821
4656	2400		1358 1.411	1393 1.581	1431 1.758	1471 1.948	1510 2.141
5044	2600		1459 1.731	1493 1.913	1525 2.099	1561 2.298	1598 2.504
5432	2800		1561 2.100	1593 2.295	1623 2.493	1653 2.695	1689 2.915
5820	3000			1694 2.730	1722 2.941	1750 3.154	1780 3.376
6208	3200			1795 3.221	1823 3.445	1849 3.671	1875 3.899
6596	3400			1897 3.772	1923 4.009	1949 4.248	1973 4.489

32

200

Wheel Diameter: **20"**
 Outlet Area: **2.300 sq. Ft.**
 Maximum RPM: **2200**
 Tip Speed in FPM: **5.24 x RPM**

Series **CMB 32**: 5 hp

Other horsepowers available through 10 hp

CFM	Outlet Velocity	¼" SP RPM BHP	½" SP RPM BHP	¾" SP RPM BHP	1" SP RPM BHP	1¼" SP RPM BHP	1½" SP RPM BHP
2070	900	535 0.138	644 0.231	726 0.320			
2300	1000	574 0.169	675 0.270	756 0.369	826 0.468		
2530	1100	615 0.204	700 0.307	788 0.424	857 0.532	919 0.640	
2760	1200	658 0.244	731 0.353	819 0.482	887 0.600	949 0.719	1005 0.837
2900	1300	702 0.292	767 0.407	845 0.537	919 0.675	979 0.802	1035 0.931
3220	1400	747 0.346	806 0.468	872 0.599	950 0.754	1011 0.893	1065 1.03
3450	1500	792 0.406	847 0.535	905 0.672	976 0.826	1042 0.989	1097 1.13
3680	1600	837 0.473	889 0.610	942 0.754	1003 0.907	1072 1.08	1128 1.25
3910	1700	882 0.549	932 0.693	981 0.845	1034 1.00	1096 1.17	1159 1.36
4140	1800		976 0.786	1022 0.944	1070 1.10	1124 1.28	1186 1.47
4370	1900		1021 0.889	1064 1.05	1108 1.22	1156 1.39	1211 1.58
4600	2000		1065 1.00	1106 1.16	1148 1.34	1191 1.53	1240 1.72
5060	2200		1155 1.25	1194 1.43	1231 1.62	1269 1.82	1308 2.02
5520	2400		1245 1.54	1282 1.75	1316 1.95	1351 2.16	1386 2.38
5980	2600			1372 2.11	1405 2.33	1436 2.55	1468 2.78
6440	2800			1462 2.52	1493 2.76	1523 2.99	1552 3.23
6900	3000			1553 2.98	1583 3.24	1612 3.50	1639 3.75
7360	3200				1673 3.78	1701 4.06	1727 4.33
7820	3400				1764 4.39	1791 4.68	1816 4.98

Performances shown are for installation type D (Ducted inlet, Ducted outlet). Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

PERFORMANCE TABLES

1 1/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		CFM	Outlet Velocity
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
																				1048	800
																				1179	900
																				1310	1000
																				1440	1100
																				1572	1200
																				1702	1300
1496	0.65																			1834	1400
1534	0.71	1602	0.80																	1964	1500
1578	0.78	1641	0.87	1769 1.06																2096	1600
1624	0.85	1686	0.95	1803 1.15																2226	1700
1670	0.93	1731	1.03	1845	1.24	1957 1.45															
																				2358	1800
																				2488	1900
1717	1.02	1777	1.13	1890	1.34	1993	1.56	2102	1.79											2620	2000
1763	1.11	1824	1.22	1935	1.45	2038	1.67	2136	1.91	2239	2.16									2881	2200
1799	1.19	1871	1.33	1981	1.56	2083	1.80	2178	2.04	2273	2.29	2370	2.55	2462	2.81	2550	3.08	2700 3.72		2767	4.11
1871	1.37	1945	1.52	2075	1.81	2174	2.06	2268	2.32	2356	2.59	2439	2.86	2529	3.14	2616	3.43			2881	2200
1973	1.60	2018	1.73	2153	2.05	2268	2.36	2359	2.64	2446	2.92	2528	3.21	2607	3.50	2684	3.80			2767	4.11
																				3405	2600
																				3668	2800
2086	1.87	2128	2.00	2226	2.30	2348	2.65	2453	2.98	2538	3.29	2619	3.59	2697	3.90	2771	4.21	2843 4.53		3145	2600
2201	2.17	2242	2.31	2320	2.61	2420	2.95	2533	3.33	2632	3.66	2712	4.01	2788	4.34	2862	4.67			3668	2800
2317	2.51	2356	2.66	2432	2.97	2504	3.29	2606	3.67	2711	4.08	2806	4.47	2881	4.82					3929	3000
2436	2.89	2473	3.05	2546	3.38	2615	3.71	2682	4.05	2783	4.47	2882	4.90							4192	3200
2558	3.31	2591	3.48	2661	3.83	2729	4.18	2793	4.53	2856	4.89									4453	3400

1 1/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		CFM	Outlet Velocity
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
																				1552	800
																				1746	900
																				1940	1000
																				2134	1100
																				2328	1200
																				2522	1300
																				2716	1400
																				2910	1500
																				3104	1600
																				3298	1700
																				3492	1800
																				3686	1900
																				3880	2000
																				4268	2200
																				4656	2400
																				5044	2600
																				5432	2800
																				5820	3000
																				6208	3200
																				6596	3400

1 1/4" SP		2" SP		2 1/2" SP		3" SP		3 1/2" SP		4" SP		4 1/2" SP		5" SP		5 1/2" SP		6" SP		CFM	Outlet Velocity
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
																				2070	900
																				2300	1000
																				2530	1100
																				2760	1200
																				2900	1300
																				3220	1400
																				3450	1500
																				3680	1600
																				3910	1700
																				4140	1800
																				4370	1900
																				4600	2000
																				5060	2200
																				5520	2400
																				5980	2600
																				6440	2800
																				6900	3000
																				7360	3200
																				7820	3400

35

222

Wheel Diameter: **22.25"**
 Outlet Area: **2.840 sq. Ft.**
 Maximum RPM: **1980**
 Tip Speed in FPM: **5.83 x RPM**
 Series **CMB 35**: 7.5 hp

Other horsepowers available through 15 hp

CFM	Outlet Velocity	1/4" SP		1/2" SP		3/4" SP		1" SP		1 1/4" SP		1 1/2" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2565	900	481	0.171	579	0.287	653	0.396						
2850	1000	516	0.209	606	0.335	680	0.458	743	0.579				
3135	1100	553	0.252	629	0.381	708	0.525	770	0.659	826	0.793		
3420	1200	592	0.303	657	0.437	736	0.598	798	0.744	853	0.890	903	1.03
3705	1300	631	0.361	689	0.504	760	0.666	826	0.837	880	0.994	930	1.15
3990	1400	671	0.428	725	0.580	784	0.742	854	0.934	908	1.10	957	1.27
4275	1500	712	0.503	761	0.663	814	0.832	877	1.02	937	1.22	986	1.40
4560	1600	752	0.586	799	0.756	847	0.934	901	1.12	964	1.34	1014	1.54
4845	1700	793	0.680	838	0.859	882	1.04	930	1.24	985	1.45	1042	1.69
5130	1800			877	0.975	919	1.17	961	1.37	1010	1.58	1066	1.83
5415	1900			918	1.10	956	1.30	996	1.51	1039	1.73	1088	1.96
5700	2000			957	1.24	994	1.44	1032	1.67	1071	1.89	1115	2.13
6270	2200			1038	1.55	1073	1.78	1106	2.01	1141	2.26	1176	2.51
6840	2400			1119	1.91	1153	2.17	1183	2.42	1214	2.68	1246	2.95
7410	2600					1233	2.61	1263	2.89	1290	3.16	1319	3.45
7980	2800					1314	3.12	1342	3.42	1369	3.71	1395	4.01
8550	3000					1396	3.70	1423	4.02	1449	4.34	1473	4.65
9120	3200							1504	4.69	1529	5.03	1553	5.37
9690	3400							1585	5.44	1610	5.80	1633	6.17

40

270

Wheel Diameter: **27"**
 Outlet Area: **4.190 sq. Ft.**
 Maximum RPM: **1400**
 Tip Speed in FPM: **7.07 x RPM**
 Series **CMB 40**: 7.5 hp

Series **CMB 40**: 7.5 hp

Other horsepowers available through 15 hp

CFM	Outlet Velocity	1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3780	900	397	0.254	431	0.327	464	0.404	498	0.485	531	0.570
4200	1000	426	0.310	458	0.392	488	0.473	518	0.559	548	0.649
4620	1100	454	0.377	486	0.465	514	0.554	541	0.645	569	0.739
5040	1200	485	0.456	515	0.547	541	0.646	566	0.743	591	0.842
5460	1300	518	0.542	543	0.643	570	0.748	593	0.853	616	0.959
5880	1400	549	0.644	571	0.752	598	0.860	622	0.976	643	1.089
6300	1500	582	0.763	605	0.875	626	0.988	650	1.108	672	1.232
6720	1600	616	0.898	636	1.008	655	1.133	679	1.255	700	1.386
7140	1700	650	1.045	668	1.159	687	1.293	707	1.321	729	1.553
7560	1800	684	1.211	701	1.333	720	1.465	735	1.604	757	1.741
7980	1900			734	1.525	751	1.656	768	1.806	785	1.948
8400	2000			768	1.740	783	1.866	801	2.019	814	2.175
9240	2200			836	2.213	849	2.364	864	2.508	880	2.679
10080	2400					917	2.944	930	3.108	943	3.265
10920	2600							997	3.807	1099	3.972
11760	2800							1065	4.585	1076	4.797
12600	3000									1144	5.696
13440	3200										
14280	3400										

50

300

Wheel Diameter: **30"**
 Outlet Area: **5.170 sq. Ft.**
 Maximum RPM: **1250**
 Tip Speed in FPM: **7.85 x RPM**
 Series **CMB 50**: 10 hp

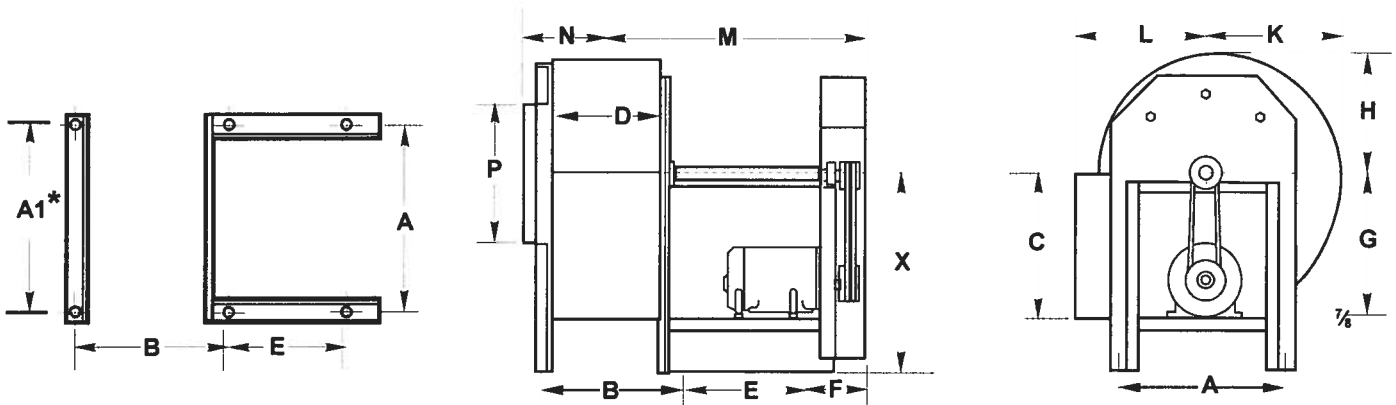
Series **CMB 50**: 10 hp

Other horsepowers available through 15 hp

CFM	Outlet Velocity	1/4" SP		3/8" SP		1/2" SP		3/4" SP		1" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4635	900	358	0.312	388	0.401	418	0.495	448	0.594	479	0.699
5150	1000	384	0.380	412	0.480	439	0.581	466	0.686	493	0.796
5665	1100	409	0.462	438	0.571	463	0.680	487	0.791	512	0.907
6180	1200	437	0.559	463	0.671	487	0.792	510	0.911	533	1.033
6695	1300	466	0.665	489	0.788	513	0.917	534	1.047	555	1.175
7210	1400	494	0.789	515	0.922	539	1.054	560	1.196	579	1.335
7725	1500	524	0.936	545	1.073	564	1.212	586	1.359	605	1.510
8240	1600	554	1.101	573	1.236	590	1.389	611	1.539	631	1.700
8755	1700	585	1.282	601	1.421	619	1.586	636	1.742	656	1.904
9270	1800	615	1.485	631	1.634	648	1.796	662	1.967	681	2.135
9785	1900			660	1.870	676	2.030	692	2.215	707	2.389
10300	2000			691	2.134	705	2.288	721	2.476	733	2.667
11330	2200			752	2.713	765	2.899	777	3.075	792	3.285
12360	2400					825	3.610	837	3.811	849	4.004
13390	2600							898	4.668	908	4.871
14420	2800							959	5.622	969	5.881
15450	3000									1030	6.984
16480	3200										
17510	3400										

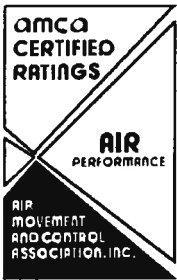
Performances shown are for installation type D (Ducted inlet, Ducted outlet). Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

Dimensions



* Dimension A1 for size 40 and 50 size fans is 29 7/8"

Series CMB				A	B	C	D	E	F	G	H	K	L	M	N	P	X
Model	Wheel Dia.	Std. HP	Wt.														
8	10 $\frac{1}{2}$	$\frac{3}{4}$	120	12 $\frac{1}{4}$		11 $\frac{1}{4}$	9	10 $\frac{3}{4}$	2 $\frac{1}{2}$	10 $\frac{5}{8}$	8	9 $\frac{1}{4}$	8 $\frac{1}{2}$	18 $\frac{7}{8}$	5 $\frac{7}{8}$	9	14
10	10 $\frac{5}{8}$	1	130	12 $\frac{1}{4}$		11 $\frac{1}{4}$	9	10 $\frac{3}{4}$	2 $\frac{1}{2}$	10 $\frac{5}{8}$	8	9 $\frac{1}{4}$	8 $\frac{1}{2}$	18 $\frac{7}{8}$	5 $\frac{7}{8}$	9	14
14	12 $\frac{1}{4}$	1 $\frac{1}{2}$	200	18	12 $\frac{1}{2}$	13	9 $\frac{1}{2}$	11	6 $\frac{1}{4}$	13	10 $\frac{1}{2}$	12 $\frac{1}{8}$	11 $\frac{1}{2}$	24	7	12 $\frac{1}{4}$	18
20	13 $\frac{1}{4}$	2	215	18	13 $\frac{3}{8}$	14 $\frac{3}{8}$	10 $\frac{1}{8}$	11	6 $\frac{1}{4}$	14 $\frac{1}{4}$	11 $\frac{1}{2}$	13 $\frac{3}{8}$	11 $\frac{5}{8}$	24 $\frac{1}{2}$	7 $\frac{1}{2}$	14 $\frac{1}{8}$	18
25	15	3	235	18	14 $\frac{5}{8}$	15 $\frac{5}{8}$	12	11	6 $\frac{1}{4}$	15	12	14 $\frac{7}{8}$	12 $\frac{3}{4}$	25	8 $\frac{1}{8}$	15 $\frac{3}{4}$	18
30	18 $\frac{1}{4}$	5	365	22 $\frac{1}{4}$	17 $\frac{3}{4}$	19 $\frac{3}{8}$	14 $\frac{5}{8}$	11	6 $\frac{1}{4}$	19 $\frac{1}{4}$	15 $\frac{1}{2}$	18	15 $\frac{5}{8}$	26 $\frac{3}{8}$	9 $\frac{1}{2}$	18 $\frac{1}{2}$	23
32	20	5	450	22 $\frac{1}{4}$	19 $\frac{1}{8}$	21 $\frac{1}{8}$	16	11	6 $\frac{1}{4}$	21 $\frac{1}{8}$	17	19 $\frac{1}{4}$	16 $\frac{3}{8}$	27	11 $\frac{1}{4}$	21	23
35	22 $\frac{1}{4}$	7 $\frac{1}{2}$	500	28 $\frac{1}{4}$	21 $\frac{1}{8}$	23 $\frac{1}{2}$	17 $\frac{3}{4}$	18	7 $\frac{1}{4}$	23 $\frac{1}{2}$	19	22	18 $\frac{1}{2}$	36 $\frac{3}{8}$	12 $\frac{1}{8}$	24	31
40	27	7 $\frac{1}{2}$	775	28 $\frac{1}{4}$	25 $\frac{1}{8}$	28	21 $\frac{1}{2}$	18 $\frac{1}{2}$	7 $\frac{1}{4}$	28 $\frac{1}{2}$	22	26 $\frac{3}{8}$	22	38 $\frac{1}{4}$	14	29	33 $\frac{3}{8}$
50	30	10	985	28 $\frac{1}{4}$	28 $\frac{1}{4}$	31 $\frac{1}{4}$	23 $\frac{3}{4}$	18 $\frac{1}{2}$	7 $\frac{1}{4}$	31 $\frac{1}{8}$	25 $\frac{1}{2}$	29 $\frac{3}{8}$	24 $\frac{1}{8}$	40	14 $\frac{1}{4}$	32 $\frac{3}{8}$	33 $\frac{3}{8}$



AMCA Licensed

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