



BULLETIN No. 6002

TYPE CS-4 ROOF VENTILATOR

SHELDONS ENGINEERING LIMITED GALT, ONTARIO, CANADA

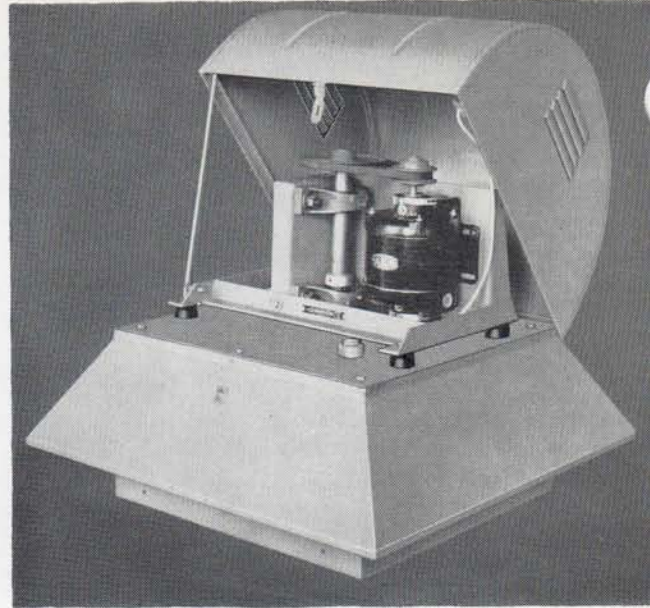
TYPE CS-4 ROOF VENTILATORS

PERFORMANCE

The CS-4 Roof Ventilator has the non-overloading horsepower curve characteristic of fans with backwardly inclined blades. This type of fan has an excellent pressure characteristic and can be rated to pressures higher than those usually published for this service. One of the outstanding performance features is the low noise level over the entire rating range.

DESIGN FEATURES

- Louvre dampers, for separate curb mounting, or as an integral part of the unit, Fig. No. 1.
- Vibration isolators between motor and bearing mounts and the main body of the ventilator.
- Hinged weatherproof hood.
- Motor isolated from exhaust air stream.
- Adjustable V-Belt drives or direct drives.
- Streamlined inlet and wheel shroud.
- Special metals and coatings available.



INSTALLATION FEATURES

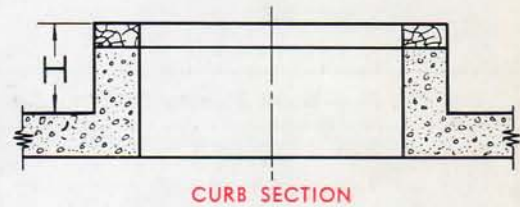
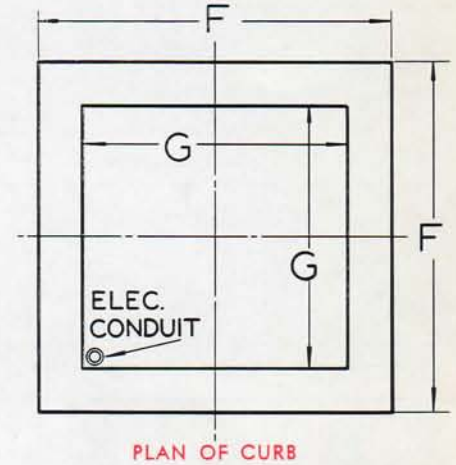
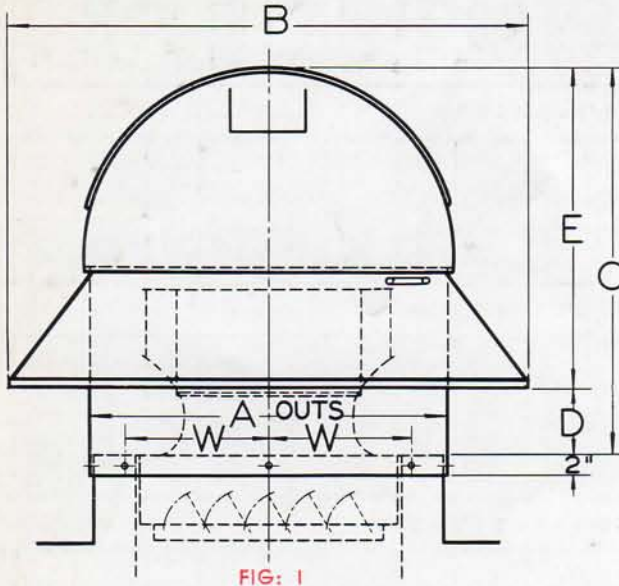
- Easily mounted on roof curb.
- Pleasing low silhouette.
- Completely self-contained.
- Disconnect switch mounted adjacent to motor.
- No outside wiring external to unit.
- Easy access.
- No interference with other equipment.

PERFORMANCE TABLES

RPM	Free Deliv.		1/8" SP		1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4" SP		1 1/2" SP	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
SIZE No. 8 — Direct Drive																						
Motors 1/20 and 1/6 HP																						
1150	695	.04	650	.04	490	.05	360	.04														
1750	1050	.12	995	.13	934	.14	863	.15	790	.16	715	.16	630	.16	535	.15						
SIZE No. 9 — Direct Drive																						
Motors 1/10 and 1/3 HP																						
1150	955	.06	857	.07	736	.08	606	.08	423	.07												
1750	1450	.21	1395	.22	1320	.24	1245	.24	1160	.27	1035	.27	1005	.27	910	.27	815	.26				
SIZE No. 10 — Wheel Diameter 12 1/4"																						
Motors 1/8 - 1/6 - 1/4 - 1/3 - 1/2 HP																						
906	1035	.05	875	.06	695	.06	490	.05														
1070	1210	.08	1070	.09	925	.10	765	.10	590	.09												
1222	1380	.12	1260	.13	1130	.14	1005	.15	865	.15	715	.14										
1376	1550	.17	1440	.18	1335	.19	1225	.21	1110	.22	985	.21	850	.20	690	.19						
1530	1730	.23	1620	.24	1535	.25	1430	.25	1335	.28	1230	.30	1115	.30	1000	.29	865	.27				
1684	1900	.31	1805	.32	1720	.33	1530	.33	1540	.36	1445	.38	1350	.39	1300	.41	1140	.38	895	.35		
1838	2075	.40	1985	.41	1910	.42	1830	.44	1745	.46	1655	.48	1575	.50	1485	.51	1405	.51	1210	.50	985	.47
SIZE No. 20 — Wheel Diameter 13 1/2"																						
Motors 1/6 - 1/4 - 1/3 - 1/2 - 3/4 HP																						
842	1252	.06	1060	.06	843	.07	594	.07														
984	1464	.10	1294	.10	1124	.12	930	.12	716	.11												
1125	1675	.14	1530	.15	1372	.16	1220	.18	1048	.18	868	.17										
1266	1880	.21	1750	.21	1620	.23	1485	.25	1350	.26	1192	.25	1031	.24	838	.23						
1407	2095	.28	1965	.28	1862	.29	1732	.31	1620	.34	1490	.36	1350	.35	1210	.34	1049	.33				
1548	2300	.38	2190	.38	2085	.39	1980	.40	1870	.43	1750	.45	1635	.46	1578	.49	1382	.46	1085	.42		
1689	2520	.49	2410	.50	2315	.51	2220	.53	2115	.55	2010	.57	1910	.59	1800	.60	1700	.61	1470	.59	1195	.56
1830	2725	.61	2630	.63	2540	.64	2450	.65	2350	.67	2265	.70	2160	.72	2070	.75	1980	.76	1765	.78	1395	.68
SIZE No. 30 — Wheel Diameter 15"																						
Motors 1/6 - 1/4 - 1/3 - 1/2 - 3/4 HP																						
746	1530	.07	1290	.08	1030	.09	725	.09														
871	1790	.12	1580	.13	1370	.14	1140	.15	890	.13												
996	2040	.18	1870	.19	1680	.19	1490	.22	1280	.22	1060	.20										
1121	2300	.25	2140	.27	1980	.27	1815	.30	1650	.32	1460	.31	1260	.30	1025	.27						
1245	2560	.34	2400	.35	2280	.35	2125	.38	1980	.42	1820	.44	1650	.43	1480	.41	1280	.40				
1371	2810	.46	2680	.47	2550	.47	2420	.48	2280	.53	2140	.55	2000	.56	1930	.59	1690	.56	1330	.51		
1496	3080	.59	2950	.60	2830	.62	2710	.64	2580	.67	2450	.70	2340	.72	2200	.73	2080	.74	1800	.72	1460	.68

RPM	Free Deliv.		1/8" SP		1/4" SP		3/8" SP		1/2" SP		5/8" SP		3/4" SP		7/8" SP		1" SP		1 1/4" SP		1 1/2" SP	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
SIZE No. 40 — Wheel Diameter 16 1/2" Motors 1/6 - 1/4 - 1/3 - 1/2 - 3/4 - 1 HP																						
680	1880	.08	1580	.09	1260	.09	880	.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
794	2200	.14	1930	.15	1690	.17	1390	.18	1060	.16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
907	2510	.21	2300	.22	2080	.23	1830	.26	1570	.26	1300	.24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1021	2820	.29	2620	.31	2425	.33	2220	.36	2020	.38	1780	.37	1545	.35	1250	.33	.....	.....	.....	.....	.....	.....
1134	3140	.40	2940	.41	2800	.42	2600	.45	2430	.50	2240	.52	2020	.51	1815	.49	1570	.47	.....	.....	.....	.....
1247	3460	.54	3280	.55	3130	.56	2965	.58	2800	.63	2530	.65	2460	.67	2065	.67	2065	.67	1630	.61	.....	.....
1360	3760	.70	3620	.72	3470	.74	3320	.76	3160	.80	3000	.83	2870	.86	2700	.87	2560	.88	2200	.85	1790	.98
1473	4080	.89	3940	.90	3800	.92	3680	.94	3520	.97	3400	1.12	3240	1.14	3100	1.19	2970	1.10	2650	1.12	2085	.98
SIZE No. 50 — Wheel Diameter 18 1/4" Motors 1/6 - 1/4 - 1/3 - 1/2 - 3/4 - 1 HP																						
614	2320	.10	1960	.11	1560	.13	1100	.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
717	2710	.17	2395	.18	2080	.20	1720	.21	1325	.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
820	3100	.25	2830	.26	2540	.28	2260	.31	1940	.31	1605	.29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
922	3480	.35	3240	.37	3000	.39	2750	.43	2500	.45	2210	.44	1910	.42	1550	.39	.....	.....	.....	.....	.....	.....
1025	3880	.48	3640	.49	3450	.50	3210	.54	3000	.59	2760	.62	2500	.61	2240	.59	1940	.56	.....	.....	.....	.....
1128	4260	.65	4055	.66	3865	.67	3665	.69	3460	.75	3245	.78	3030	.80	2920	.84	2550	.79	2010	.73	.....	.....
1231	4660	.84	4460	.86	4290	.88	4110	.91	3920	.95	3720	.99	3540	1.02	3335	1.04	3155	1.05	2720	1.02	2210	.96
SIZE No. 60 — Wheel Diameter 20" Motors 1/4 - 1/3 - 1/2 - 3/4 - 1 - 1-1/2 HP																						
560	2785	.12	2355	.13	1875	.15	1320	.14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
655	3250	.20	2875	.22	2500	.24	2065	.25	1590	.23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
749	3720	.30	3400	.31	3055	.33	2715	.37	2325	.37	1930	.35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
843	4180	.42	3890	.44	3600	.47	3300	.52	3000	.54	2555	.53	2295	.50	1860	.47	.....	.....	.....	.....	.....	.....
938	4655	.58	4365	.59	4145	.60	3865	.65	3600	.71	3315	.74	3000	.73	2685	.71	2330	.67	.....	.....	.....	.....
1032	5120	.78	4865	.79	4650	.80	4400	.83	4150	.90	3900	.93	3640	.96	3505	1.01	3075	.95	2405	.87	.....	.....
1126	5600	1.01	5360	1.03	5150	1.05	4940	1.09	4705	1.14	4460	1.19	4250	1.22	4000	1.25	3790	1.26	3265	1.22	2655	1.15
1220	6055	1.27	5850	1.30	5645	1.32	5450	1.35	5240	1.38	5050	1.45	4800	1.49	4605	1.55	4400	1.56	3920	1.61	3100	1.41
SIZE No. 70 — Wheel Diameter 22 1/4" Motors 1/4 - 1/3 - 1/2 - 3/4 - 1 - 1-1/2 - 2 HP																						
504	3430	.15	2900	.16	2300	.19	1630	.18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
588	4000	.25	3540	.26	3070	.30	2540	.31	1960	.28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
672	4580	.37	4180	.38	3750	.41	3340	.46	2860	.46	2370	.43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
757	5140	.52	4780	.54	4440	.58	4060	.63	3700	.67	3260	.65	2820	.62	2290	.58	.....	.....	.....	.....	.....	.....
841	5750	.71	5370	.72	5100	.74	4750	.80	4440	.87	4080	.91	3700	.90	3310	.87	2360	.83	.....	.....	.....	.....
925	6300	.96	6000	.97	5710	.99	5420	1.02	5120	1.11	4800	1.15	4470	1.18	4320	1.24	3780	1.17	2970	1.08	.....	.....
1010	6880	1.24	6660	1.27	6320	1.30	6060	1.34	5800	1.41	5500	1.46	5240	1.51	4920	1.54	4650	1.55	4020	1.51	3260	1.42
1094	7460	1.57	7200	1.60	6950	1.63	6700	1.66	6440	1.70	6200	1.78	5900	1.83	5660	1.90	5410	1.93	4850	1.98	3820	1.72
SIZE No. 80 — Wheel Diameter 24 1/2" Motors 1/3 - 1/2 - 3/4 - 1 - 1-1/2 - 2 HP																						
458	4180	.18	3520	.20	2800	.23	1975	.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
535	4880	.31	4310	.32	3740	.36	3100	.38	2385	.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
611	5580	.45	5100	.47	4570	.50	4060	.56	3495	.56	2880	.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
688	6260	.63	5840	.67	5400	.70	4950	.78	4500	.81	3980	.79	3440	.76	2790	.70	.....	.....	.....	.....	.....	.....
765	6990	.86	6550	.88	6200	.90	5760	.97	5400	1.06	4950	1.12	4500	1.10	4030	1.06	3500	1.01	.....	.....	.....	.....
842	7660	1.17	7300	1.19	6950	1.20	6600	1.24	6205	1.35	5850	1.40	5450	1.44	5250	1.51	4600	1.42	3620	1.31	.....	.....
919	8400	1.51	8050	1.55	7700	1.56	7400	1.64	7050	1.70	6700	1.78	6350	1.84	6000	1.87	5680	1.90	4900	1.83	3980	1.73
995	9100	1.91	8760	1.94	8450	1.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SIZE No. 90 — Wheel Diameter 27" Motors 1/2 - 3/4 - 1 - 1-1/2 - 2 - 3 HP																						
421	5010	.25	4320	.28	3480	.29	2010	.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
492	5830	.43	5530	.49	4900	.52	4140	.52	3130	.48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
563	6650	.59	6290	.67	5690	.68	5100	.70	4390	.69	3330	.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
633	7540	.83	7140	.89	6640	.92	6220	.95	5590	.98	4970	.98	4110	.94	.....	.....	.....	.....	.....	.....	.....	.....
703	8350	1.12	7980	1.19	7550	1.27	7160	1.33	6700	1.36	6160	1.35	5560	1.33	4880	1.29	3990	1.23	.....	.....	.....	.....
774	9140	1.51	8940	1.63	8530	1.69	8150	1.74	7730	1.76	7290	1.78	6810	1.80	6290	1.78	5690	1.77	3790	1.57	.....	.....
845	10040	1.90	9640	2.04	9370	2.09	9070	2.16	8660	2.18	8250	2.19	7710	2.22	7400	2.29	6940	2.28	5710	2.18	.....	.....
915	10800	2.44	10600	2.68	10300	2.78	10000	2.85	9690	2.90	9360	2.92	9010	2.95	8650	2.99	8240	3.05	7380	2.99	6110	2.89
SIZE No. 100 — Wheel Diameter 30" Motors 1/2 - 3/4 - 1 - 1-1/2 - 2 - 3 HP																						
373	6250	.29	5400	.33	4350	.34	2520	.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
436	7300	.52	6850	.61	6080	.62	5140	.61	3880	.59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
498	8350	.71	7750	.79	7060	.81	6320	.84	5450	.83	4100	.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
561	9380	1.00	8850	1.08	8220	1.12	7700	1.16	6950	1.21	6150	1.19	5100	1.14	.....	.....	.....	.....	.....	.....	.....	.....
622	10400	1.36	9900	1.45	9350	1.53	8900	1.59	8300	1.62	7630	1.63	6900	1.62	6060	1.51	4940	1.50	.....	.....	.....	.....
686	11500	1.83	11100	1.96	10580	2.08	10100	2.11	9600	2.13	9050	2.16	8450	2.22	7800	2.16	7020	2.14	4680	1.88	.....	.....
748	12600	2.30	12000	2.45	11600	2.54	11300	2.60	10750	2.62	10200	2.66	9550	2.68	9160	2.74	8600	2.74	7080	2.64	.....	.....
765	12875	2.49	12370	2.67	11970	2.76	11570	2.82	11090	2.85	10585	2.89	10000	2.92	9580	2.98	9040	2.99	7620	2.90	.....	.....
SIZE No. 110 — Wheel Diameter 33" Motors 3/4 - 1 - 1-1/2 - 2 - 3 - 5 HP																						
340	7550	.36	6500	.40	5250	.41	3040	.37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
397	8870	.63	8300	.73	7350	.74	6200	.74	4700	.71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
453	10100	.85	9420	.96	8520	.99	7600	1.02	6550	1.01	4970	.94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
511	11330	1.21	10700	1.31	9950	1.35	9300	1.40	8350	1.46	7450	1.43	6150	1.38	.....	.....	.....	.....	.....	.....	.....	.....
566	12550	1.65	11950	1.75	11300	1.85	10700	1.91	10000	1.96	9200	1.97	8300	1.96	7300	1.92	5970	1.82	.....	.....	.....	.....
625	13800	2.22	13400	2.46	12750	2.52	12200	2.54	11550	2.58	10900	2.62	10200	2.68	9400	2.61	8500	2.58	.....	.....	.....	.....
680	15100	2.78	14450	3.00	14000	3.08	13500	3.14	13000	3.18	12350	3.20	11550	3.24	11100	3.29	10400	3.31	8550	3.21	.....	.....
736	16300	3.61	15900																			

OVERALL DIMENSIONS



DIMENSION TABLE

Fan Size	A	B	C	D	E	F	G	H	W	X
8	20 1/2	27 1/2	26 1/8	8 1/2	17 5/8	24	16	6	10	8 1/4
9	21	28	27 1/4	9	18 1/4	24	16	6	10	8 1/4
10	22	30	23 1/4	2 1/2	20 3/4	21 1/2	13 1/2	8	8	8 1/4
20	23 1/2	31 1/2	24 5/8	3 5/8	21 1/4	23	15	8	9	8 1/4
30	25	35	26 1/8	3 7/8	22 1/8	24 1/2	16 1/2	8	10	8 1/8
40	26 1/2	36 1/2	27 3/4	4 1/2	23 1/4	26	18	8	11	8 5/8
50	28	40	29 1/2	4 1/8	24 1/8	27 1/2	19 1/2	8	11 1/2	8 5/8
60	30	43 1/2	32 3/4	4 3/4	28	29 1/2	21 1/2	8	12	12 1/8
70	32 1/2	47	34 3/4	5 1/8	28 1/8	32	24	8	13	12 1/8
80	33 1/2	50	36 7/8	6 5/8	30 1/2	33	25	8	14	12 1/8
90	37	55	40	7 1/8	32 1/8	36 1/2	28 1/2	8	15 1/2	12 3/8
100	41	61	44 1/8	8 1/8	36	40 1/2	32 1/2	8	17 1/2	12 3/8
110	45	67	50	9	41	44 1/2	36 1/2	8	20	12 3/8
120	49	74	52 1/4	10	42 1/2	48 1/2	40 1/2	8	22	12 3/8



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