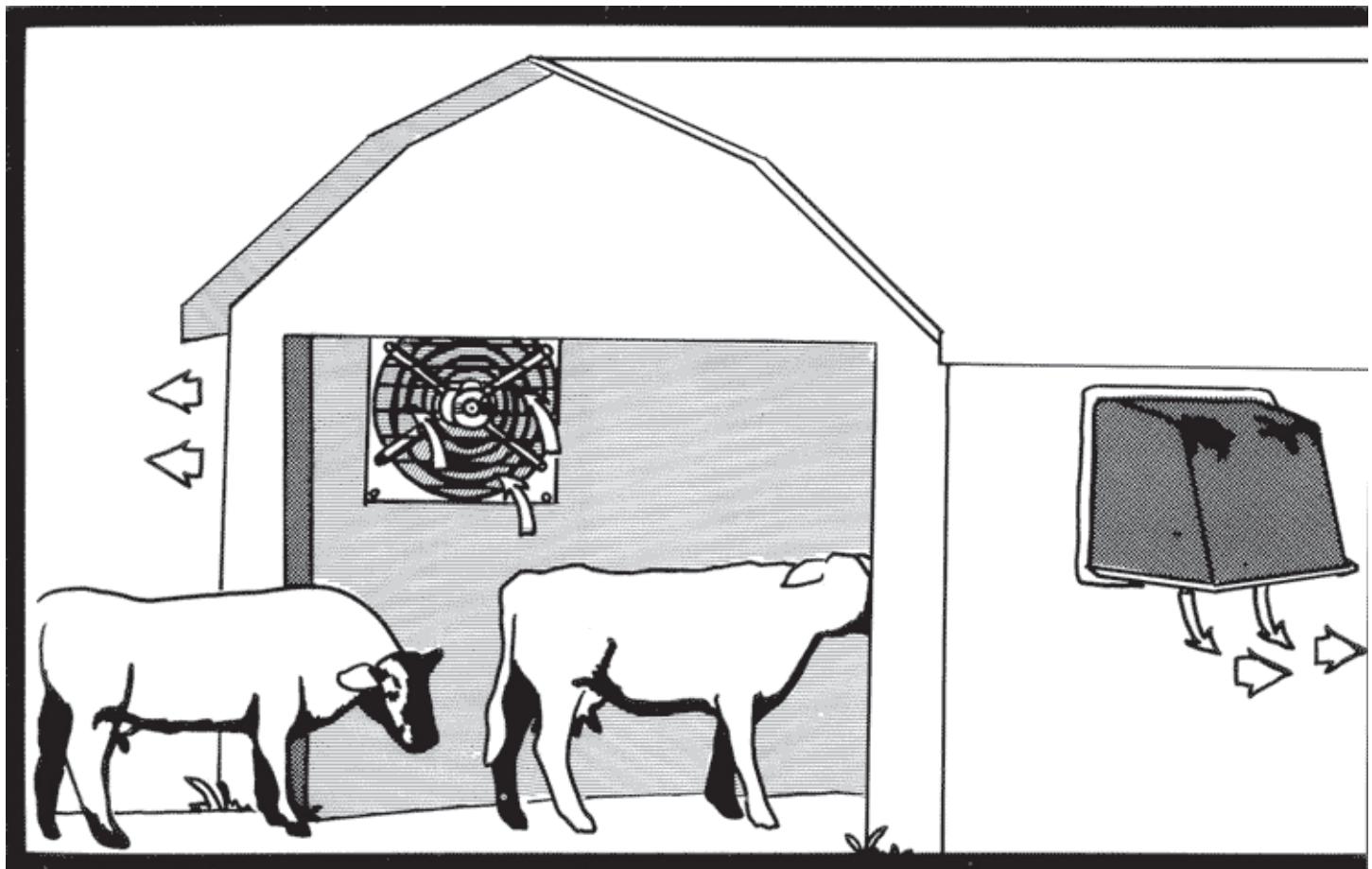


Summary Report

490



Summary of Ventilation Fan Reports

A Co-operative Program Between



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Performance results, appearing in alphabetical order, are given for the following ventilation fans.

- Chore-Time Models 14RLX, 18 RLX, 24 RLX
- Cyclone Model 60-AG-0000
- Danor Euro-Style Models EPD14-VX, EPD18-VX, EPD25-VX
- Danor Pleasantaire Models SD12-EVX, SD18-FVX, SD24-FVx
- Del-Air Models F6, F8, F12, F16, F20
- EMI Model WLA 4/50
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- Ziehl-Abegg Models 451-6, 501-6, 562-6, 631-6, 451-4

VENTILATION FANS

All ventilation fans are classified as propeller type axial flow fans. Axial flow fans have their axis of rotation parallel to the direction of air flow. Propeller type fans are typically capable of high volumes of air at low pressures and are powered by fractional horsepower motors. Ventilation fans can be used to either exhaust air from a building or to pressurize a ventilation system. Their construction consists of two or more large blades attached to a small hub mounted in an orifice plate or venturi ring. The blades are either directly mounted on the motor or on a belt driven shaft. The propeller and housings are made from a wide variety of materials and finishes, including aluminum, enameled steel, galvanized metal, PVC, polyethylene, fibreglass and reinforced plastics. Materials of construction are an important consideration when selecting a fan because it determines the life of the fan and the ease with which it can be maintained. Ventilation fans are used in a wide variety of farm applications and consequently are compact, adaptable and easy to install.

FAN TEST RESULTS

The following fan performance data has been extracted from PAMI fan evaluation reports. Complete reports with detailed results are available upon request. The fans were tested in accordance with test procedures developed by the Machinery Institute. The intent of each report was to determine the performance of the fan in terms of air flow rate, static pressure, power consumption and total efficiency. Each fan was evaluated for ease of operation, maintenance, operator safety and suitability of the operator's manual. A complete description and detailed specifications are also given in the complete reports.

The purpose of this booklet is to condense all the fan performance data, so that direct comparisons can be made among the various makes and models of fans tested. This, in turn, will aid in the selection process of the right fan for the right job.

All fan performance results are given at standard air conditions. Standard air is air with density of 0.075 lb/ft³ (1.2 kg/m³) which occurs at 68°F (20°C), 50% relative humidity and a barometric pressure of 29.92 in Hg (101.325 kPa).

For each fan in this booklet, a summary of results table is given. Following are explanations of the information in each column. The "setting" column refers to the condition the fan was operated under. For example, the fan could have been operated direct with no speed control, with a two speed control (i.e. hi/lo), with a multiple speed control, or with a variable speed control (i.e. maximum/mid-range/minimum). The setting column also indicates if the fan was tested with louvres or shutters. If the louvres were an integral part of the fan, all tests were performed with them in place. If the louvres or shutters were separate or an optional feature, separate tests were performed with and without louvres.

"Static pressure" refers to the force that the fan can exert on the building or ventilation system. It is commonly measured as the pressure difference between the pressure inside the building and the pressure on the outside of the building. Static pressure may be positive or negative depending on the type of ventilation system used. Given in this column are typical levels of static pressure found in ventilation systems. For values of static pressure other than what is listed, a straight line interpolation between points will give a good approximation. Static pressure is commonly expressed in inches of water gauge (in wg) or Pascals (Pa). Ventilation fans are often rated on their output at a static pressure of 0.125 in wg (31.1 Pa).

"Air flow rate" is the volume of air a fan can deliver over a specific time period. It is commonly expressed in cubic feet per minute (cfm) or litres per second (L/s).

"Power consumption" is the amount of power used by the fan motor. This, in turn, can be used to estimate the cost of operation of the fan. It is commonly expressed in kilowatts (kW). To calculate the cost of fan operation, multiply the power consumption (kW) by the number of hours of fan operation times the cost per kilowatt hour.

"Total efficiency" is the ratio of air power output over the motor power input. This term gives the true mechanical efficiency of the fan as a percentage.

The "CFM/W" column is an efficiency term commonly used in the ventilation fan industry. The term is easily calculated and gives a good indication of differences in efficiency among fans.

The "fan speed" column indicates the motor speed in revolutions per minute (rpm) for the various settings and levels of operation.

Given in APPENDIX I is a blank comparison chart that can be used for comparing similar sized fans or combinations of fans. This may serve as an aid in fan selection.

CHORE-TIME MODEL 14RLX VENTILATION FAN

MANUFACTURER:

Chore-Time Equipment, Inc.
P.O. Box 518
Milford, Indiana 46542

DISTRIBUTOR:

Leebe Agri Feeders Ltd.
Box 277
Leduc, Alberta
T9E 2Y1

FAN DESCRIPTION:

14 in (356 mm) single or variable speed, direct drive, 0.125 hp (93 W), 230 V electric motor, equipped with inlet and outlet guard grills, shutter and fan hood.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1480	(699)	0.118	16	12.5	1689
	0.05	(12.5)	1330	(627)	0.121	18	11.0	1686
	0.10	(24.9)	1230	(581)	0.122	20	10.1	1685
	0.125	(31.1)	1190	(563)	0.122	22	9.8	1685
	0.25	(62.3)	642	(303)	0.125	16	5.1	1680
Variable Maximum	0.0	(0.0)	1430	(674)	0.114	14	12.5	1627
	0.05	(12.5)	1260	(594)	0.115	16	11.0	1618
	0.10	(24.9)	1190	(560)	0.116	20	10.3	1617
	0.125	(31.1)	1140	(537)	0.116	21	9.8	1617
	0.25	(62.3)	556	(262)	0.123	14	4.5	1601
Variable Mid Range	0.0	(0.0)	1220	(576)	0.104	10	11.7	1445
	0.05	(12.5)	1100	(519)	0.107	13	10.3	1417
	0.10	(24.9)	967	(456)	0.109	15	8.9	1411
	0.125	(31.1)	828	(391)	0.107	14	7.7	1433
	0.25	(62.3)	238	(112)	0.115	6	2.1	1384
Variable Minimum	0.0	(0.0)	963	(454)	0.096	6	10.0	1155
	0.05	(12.5)	748	(353)	0.098	7	7.6	1129
	0.10	(24.9)	275	(130)	0.10	3	2.8	1070
	0.125	(31.1)	209	(97)	0.10	3	2.1	1073
	0.25	(62.3)	722	(341)	0.121	19	6.0	1685
Single Speed Direct with Hood	0.0	(0.0)	1440	(680)	0.115	15	12.5	1691
	0.05	(12.5)	1360	(640)	0.119	18	11.4	1685
	0.10	(24.9)	1280	(606)	0.120	22	10.7	1685
	0.125	(31.1)	1250	(590)	0.120	24	10.4	1685
	0.25	(62.3)	722	(341)	0.121	19	6.0	1685

*Complete results are available in PAMI Report No. 427.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3080	(1450)	0.243	24	12.7	1730
	0.05	(12.5)	2940	(1390)	0.244	27	12.0	1730
	0.10	(24.9)	2740	(1290)	0.243	31	11.3	1729
	0.125	(31.1)	2670	(1260)	0.243	32	11.0	1729
	0.25	(62.3)	2220	(1050)	0.242	36	9.2	1730
Variable Maximum	0.0	(0.0)	3010	(1420)	0.255	21	11.8	1693
	0.05	(12.5)	2800	(1320)	0.260	24	10.8	1689
	0.10	(24.9)	2680	(1260)	0.258	26	10.4	1691
	0.125	(31.1)	2620	(1240)	0.256	28	10.2	1692
	0.25	(62.3)	2080	(981)	0.255	31	8.2	1693
Variable Mid Range	0.0	(0.0)	2480	(1170)	0.249	13	10.0	1443
	0.05	(12.5)	2240	(1060)	0.253	14	8.9	1421
	0.10	(24.9)	2050	(968)	0.258	16	7.9	1390
	0.125	(31.1)	1940	(915)	0.256	17	7.6	1423
	0.25	(62.3)	642	(303)	0.269	7	2.4	1329
Variable Minimum	0.0	(0.0)	2050	(968)	0.238	7	8.6	1134
	0.05	(12.5)	1530	(720)	0.236	7	6.5	1097
	0.10	(24.9)	725	(342)	0.243	4	3.0	1040
	0.125	(31.1)	503	(237)	0.243	3	2.1	1006
	0.25	(62.3)	2370	(1120)	0.241	38	9.8	1730

*Complete results are available in PAMI Report No. 428.

CHORE-TIME MODEL 24RLX VENTILATION FAN

MANUFACTURER:

Chore-Time Equipment, Inc.
P.O. Box 518
Milford, Indiana 46542

DISTRIBUTOR:

Leebe Agri Feeders Ltd.
Box 277
Leduc, Alberta
T9E 2Y1

FAN DESCRIPTION:

23.7 in (602 mm) single or variable speed, direct drive, 0.33 hp (249 W), 230 V electric motor, equipped with inlet and outlet guard grills, shutter and fan hood.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	5740	(2710)	0.402	35	14.3	1620
	0.05	(12.5)	5410	(2550)	0.412	37	13.1	1613
	0.10	(24.9)	5160	(2430)	0.416	39	12.4	1610
	0.125	(31.1)	5030	(2380)	0.417	40	12.1	1608
	0.25	(62.3)	4180	(1970)	0.420	42	10.0	1605
Variable Maximum	0.0	(0.0)	5470	(2580)	0.414	29	13.2	1540
	0.05	(12.5)	5100	(2410)	0.420	31	12.1	1527
	0.10	(24.9)	4830	(2280)	0.423	33	11.4	1519
	0.125	(31.1)	4690	(2210)	0.424	34	11.1	1516
	0.25	(62.3)	3550	(1670)	0.422	33	8.4	1512
Variable Mid Range	0.0	(0.0)	4520	(2130)	0.351	20	12.9	1250
	0.05	(12.5)	3850	(1820)	0.355	18	10.8	1190
	0.10	(24.9)	3220	(1520)	0.355	18	9.1	1183
	0.125	(31.1)	2940	(1390)	0.351	17	8.4	1188
	0.25	(62.3)	664	(313)	0.352	6	1.9	1166
Variable Minimum	0.0	(0.0)	3050	(1440)	0.297	7	10.3	950
	0.05	(12.5)	2420	(1140)	0.299	8	8.1	963
	0.10	(24.9)	1440	(680)	0.298	6	4.8	980
	0.125	(31.1)	813	(384)	0.301	4	2.7	956
	0.25	(62.3)	5830	(2750)	0.405	37	14.4	1622
Single Speed Direct with Hood	0.0	(0.0)	5530	(2610)	0.412	39	13.4	1618
	0.05	(12.5)	5280	(2490)	0.417	41	12.7	1612
	0.10	(24.9)	5170	(2440)	0.418	42	12.4	1611
	0.125	(31.1)	4380	(2070)	0.421	45	10.4	1611

*Complete results are available in PAMI Report No. 429.

CHORE-TIME MODEL 18RLX VENTILATION FAN

MANUFACTURER:

Chore-Time Equipment, Inc.
P.O. Box 518
Milford, Indiana 46542

DISTRIBUTOR:

Leebe Agri Feeders Ltd.
Box 277
Leduc, Alberta
T9E 2Y1

FAN DESCRIPTION:

18.4 in (467 mm) single or variable speed, direct drive, 0.25 hp (186 W), 230 V electric motor, equipped with inlet and outlet guard grills, shutter and fan hood.

CYCLONE MODEL 60-AG-0000 VENTILATION FAN

MANUFACTURER:

Cyclone International, Inc.
694 East 40 Street
P.O. Box 1017
Holland, Michigan 49423

DISTRIBUTOR:

Walbern Agri-Systems Limited
Box 250
Linden, Alberta
T0M 1J0

FAN DESCRIPTION:

17.75 in (451 mm) two speed or variable speed, direct drive, 0.33 hp (246 W), 230 V electric motor, equipped with inlet guard grill and louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
High Speed	0.0	(0.0)	3770	(1780)	0.451	23	8.4	1104
	0.05	(12.5)	3650	(1720)	0.458	24	8.0	1100
	0.10	(24.9)	3460	(1632)	0.467	26	7.4	1096
	0.125	(31.1)	3400	(1600)	0.470	26	7.2	1095
	0.25	(62.3)	2860	(1351)	0.489	24	5.8	1088
Low Speed	0.0	(0.0)	2370	(1120)	0.310	5	7.6	743
	0.05	(12.5)	1990	(937)	0.309	4	6.4	717
	0.10	(24.9)	1190	(562)	0.311	3	3.8	686
	0.125	(31.1)	951	(449)	0.313	2	3.0	673
	0.25	(62.3)	208	(141)	0.309	1	1.0	646
Variable Maximum	0.0	(0.0)	3740	(1770)	0.442	22	8.5	1090
	0.05	(12.5)	3580	(1690)	0.451	24	7.9	1086
	0.10	(24.9)	3470	(1640)	0.456	25	7.6	1085
	0.125	(31.1)	3380	(1600)	0.460	26	7.3	1083
	0.25	(62.3)	2880	(1360)	0.480	25	6.0	1076
Variable Mid Range	0.0	(0.0)	3214	(1520)	0.418	16	7.7	956
	0.05	(12.5)	3070	(1450)	0.423	17	7.3	949
	0.10	(24.9)	2840	(1340)	0.431	17	6.6	937
	0.125	(31.1)	2750	(1300)	0.434	17	6.3	933
	0.25	(62.3)	1060	(50)	0.467	8	2.3	869
Variable Minimum	0.0	(0.0)	2660	(1260)	0.380	9	7.0	794
	0.05	(12.5)	2220	(1050)	0.382	8	5.8	749
	0.10	(24.9)	1470	(694)	0.385	5	3.8	719
	0.125	(31.1)	1080	(511)	0.387	4	2.8	698

*Complete results are available in PAMI Report No. 378.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1680	(792)	0.154	19	10.9	1729
	0.05	(12.5)	1640	(774)	0.160	23	10.2	1725
	0.10	(24.9)	1580	(746)	0.165	26	9.6	1722
	0.125	(31.1)	1530	(720)	0.168	26	9.1	1720
	0.25	(62.3)	1380	(652)	0.172	33	8.0	1705
Variable Maximum	0.0	(0.0)	1600	(757)	0.150	17	10.7	1654
	0.05	(12.5)	1510	(714)	0.156	19	9.7	1626
	0.10	(24.9)	1420	(670)	0.160	22	8.9	1593
	0.125	(31.1)	1360	(643)	0.163	22	8.3	1566
	0.25	(62.3)	937	(442)	0.177	18	5.3	1480
Variable Mid Range	0.0	(0.0)	1350	(640)	0.150	10	9.0	698
	0.05	(12.5)	1070	(503)	0.160	9	6.7	595
	0.10	(24.9)	814	(384)	0.160	8	5.1	520
	0.125	(31.1)	741	(350)	0.159	8	4.7	517
Variable Minimum	0.0	(0.0)	1010	(475)	0.133	5	7.6	525
	0.05	(12.5)	752	(355)	0.136	5	5.5	450
	0.10	(24.9)	495	(234)	0.136	5	3.6	469
	0.125	(31.1)	230	(109)	0.140	2	1.6	370
Single Speed Direct with Hood	0.0	(0.0)	1460	(688)	0.173	11	8.4	1711
	0.05	(12.5)	1400	(660)	0.174	14	8.0	1708
	0.10	(24.9)	1330	(629)	0.176	17	7.6	1702
	0.125	(31.1)	1300	(615)	0.177	19	7.3	1701
	0.25	(62.3)	915	(432)	0.168	19	5.4	1712

*Complete results are available in PAMI Report No. 452.

DANOR EURO-STYLE MODEL EPD14-VX VENTILATION FAN

MANUFACTURER:

Canarm Limited
2157 Parkedale Avenue
Brockville, Ontario
K6V 5V6

DISTRIBUTORS:

- Peavey Mart, 2420 - 50 Avenue, Red Deer, Alta. T4R 1M3
- Federated Cooperatives Ltd., Box 1050, 401 - 22nd St. E., Saskatoon, Sask. S7K 3M9
- Steinbach Mills, P.O. Box 1089, Steinbach, Man. R0A 2A0
- Peacock Equipment Ltd., 26311 - 30A Ave., Box 190, Aldergrove, B.C. V0X 1A0

FAN DESCRIPTION:

13.75 in (349 mm) variable speed, direct drive, 0.161 hp (120 W), 220 V electric motor, equipped with inlet guard grill and optional louvres.

DANOR EURO-STYLE MODEL EPD18-VX VENTILATION FAN

MANUFACTURER:

Canarm Limited
2157 Parkedale Avenue
Brockville, Ontario
K6V 5V6

DISTRIBUTORS:

- Peavey Mart, 2420 - 50 Avenue, Red Deer, Alta. T4R 1M3
- Federated Cooperatives Ltd., Box 1050, 401 - 22nd St. E., Saskatoon, Sask. S7K 3M9
- Steinbach Mills, P.O. Box 1089, Steinbach, Man. R0A 2A0
- Peacock Equipment Ltd., 26311 - 30A Ave., Box 190, Aldergrove, B.C. V0X 1A0

FAN DESCRIPTION:

17.5 in (445 mm) variable speed, direct drive, 0.335 hp (250 W), 220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3460	(1630)	0.318	32	10.9	1741
	0.05	(12.5)	3400	(1610)	0.331	35	10.3	1738
	0.10	(24.9)	3310	(1560)	0.341	37	9.7	1735
	0.125	(31.1)	3250	(1530)	0.345	38	9.4	1733
	0.25	(62.3)	3010	(1420)	0.363	42	8.3	1726
Variable Maximum	0.0	(0.0)	3360	(1590)	0.315	29	10.4	1697
	0.05	(12.5)	3250	(1530)	0.330	31	9.8	1683
	0.10	(24.9)	3150	(1490)	0.342	33	9.2	1674
	0.125	(31.1)	3100	(1470)	0.345	34	9.0	1673
	0.25	(62.3)	2790	(1320)	0.372	36	7.5	1645
Variable Mid Range	0.0	(0.0)	2590	(1220)	0.324	13	8.0	1311
	0.05	(12.5)	2200	(1040)	0.333	12	6.6	1175
	0.10	(24.9)	1720	(810)	0.344	9	5.0	1022
	0.125	(31.1)	1510	(714)	0.346	9	4.4	977
	0.25	(62.3)	334	(158)	0.347	3	1.0	763
Variable Minimum	0.0	(0.0)	1540	(730)	0.265	3	5.8	805
	0.05	(12.5)	1050	(500)	0.264	3	4.0	685
	0.10	(24.9)	424	(200)	0.263	2	1.6	619
	0.125	(31.1)	225	(106)	0.264	1	0.9	586
	0.25	(62.3)	3260	(1540)	0.345	24	9.4	1736
Single Speed Direct with Louvres	0.0	(0.0)	3180	(1500)	0.351	27	9.0	1730
	0.05	(12.5)	3080	(1450)	0.360	30	8.6	1728
	0.10	(24.9)	3020	(1420)	0.363	30	8.3	1726
	0.125	(31.1)	2680	(1270)	0.381	33	7.0	1719

*Complete results are available in PAMI Report No. 453.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	6420	(3030)	0.464	36	13.8	1165
	0.05	(12.5)	6210	(2930)	0.481	40	12.9	1161
	0.10	(24.9)	6090	(2880)	0.502	42	12.1	1157
	0.125	(31.1)	6040	(2850)	0.512	43	11.8	1155
	0.25	(62.3)	5600	(2640)	0.547	50	10.2	1150
Variable Maximum	0.0	(0.0)	6240	(2950)	0.441	35	14.1	1134
	0.05	(12.5)	6060	(2880)	0.456	38	13.3	1125
	0.10	(24.9)	5950	(2810)	0.473	43	12.6	1119
	0.125	(31.1)	5770	(2720)	0.487	42	11.8	1112
	0.25	(62.3)	4920	(2320)	0.542	41	9.1	1056
Variable Mid Range	0.0	(0.0)	4930	(2330)	0.386	20	12.8	891
	0.05	(12.5)	4310	(2040)	0.392	19	11.0	813
	0.10	(24.9)	3560	(1680)	0.402	17	8.9	728
	0.125	(31.1)	3150	(1490)	0.404	16	7.8	707
	0.25	(62.3)	1170	(553)	0.404	9	2.9	651
Variable Minimum	0.0	(0.0)	3060	(1450)	0.248	7	12.3	551
	0.05	(12.5)	2040	(960)	0.248	7	8.2	462
	0.10	(24.9)	946	(447)	0.248	4	3.8	443
	0.125	(31.1)	561	(265)	0.247	3	2.3	426
	0.25	(62.3)	6290	(2970)	0.483	32	13.0	1162
Single Speed Direct with Louvres	0.0	(0.0)	6110	(2880)	0.504	36	12.1	1158
	0.05	(12.5)	5920	(2790)	0.520	39	11.4	1155
	0.10	(24.9)	5810	(2740)	0.531	39	10.9	1153
	0.125	(31.1)	5290	(2500)	0.575	43	9.2	1145

*Complete results are available in PAMI Report No. 454.

DANOR EURO-STYLE MODEL EPD25-VX VENTILATION FAN

MANUFACTURER:

Canarm Limited
2157 Parkedale Avenue
Brockville, Ontario
K6V 5V6

DISTRIBUTORS:

- Peavey Mart, 2420 - 50 Avenue, Red Deer, Alta. T4R 1M3
- Federated Cooperatives Ltd., Box 1050, 401 - 22nd St. E., Saskatoon, Sask. S7K 3M9
- Steinbach Mills, P.O. Box 1089, Steinbach, Man. R0A 2A0
- Peacock Equipment Ltd., 26311 - 30A Ave., Box 190, Aldergrove, B.C. V0X 1A0

FAN DESCRIPTION:

24.5 in (622 mm) variable speed, direct drive, 0.603 hp (450 W), 220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1440	(681)	0.202	16	7.1	1722
	0.05	(12.5)	1360	(640)	0.206	17	6.6	1719
	0.10	(24.9)	1280	(603)	0.210	18	6.1	1715
	0.125	(31.1)	1230	(580)	0.212	18	5.8	1713
	0.25	(62.3)	900	(423)	0.219	15	4.1	1709
Variable Maximum	0.0	(0.0)	1400	(662)	0.195	15	7.2	1694
	0.05	(12.5)	1330	(626)	0.197	16	6.8	1692
	0.10	(24.9)	1240	(586)	0.201	17	6.2	1686
	0.125	(31.1)	1170	(551)	0.206	17	5.8	1683
	0.25	(62.3)	830	(391)	0.210	14	4.0	1674
Variable Mid Range	0.0	(0.0)	1084	(512)	0.138	10	7.9	1331
	0.05	(12.5)	919	(434)	0.143	10	6.4	1291
	0.10	(24.9)	683	(322)	0.142	8	4.8	1296
	0.125	(31.1)	597	(282)	0.145	8	4.1	1289
	0.25	(62.3)	412	(194)	0.159	8	2.6	1139
Variable Minimum	0.0	(0.0)	583	(275)	0.102	2	5.7	907
	0.05	(12.5)	391	(185)	0.103	3	3.8	875
	0.10	(24.9)	267	(126)	0.104	3	2.6	777
	0.125	(31.1)	205	(97)	0.105	3	2.0	754

*Complete results are available in PAMI Report No. 449.

DANOR PLEASANTAIRE MODEL SD18-FVX VENTILATION FAN

MANUFACTURER:

Canarm Limited
2157 Parkedale Avenue
Brockville, Ontario
K6V 5V6

DISTRIBUTORS:

1. Peavey Mart, 2420 - 50 Avenue, Red Deer, Alta. T4R 1M3
2. Federated Cooperatives Ltd., Box 1050, 401 - 22nd St. E., Saskatoon, Sask. S7K 3M9
3. Steinbach Mills, P.O. Box 1089, Steinbach, Man. R0A 2A0
4. Peacock Equipment Ltd., 26311 - 30A Ave., Box 190, Aldergrove, B.C. V0X 1A0

FAN DESCRIPTION:

17.9 in (456 mm) single or variable speed, direct drive, 0.33 hp (249 W), 230 V electric motor, equipped with louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3520	(1660)	0.376	25	9.4	1139
	0.05	(12.5)	3380	(1600)	0.385	27	8.8	1135
	0.10	(24.9)	3220	(1520)	0.391	28	8.2	1134
	0.125	(31.1)	3140	(1480)	0.393	28	8.0	1132
	0.25	(62.3)	2700	(1270)	0.410	30	6.6	1127
Variable Maximum	0.0	(0.0)	3390	(1600)	0.388	22	8.7	1103
	0.05	(12.5)	3270	(1540)	0.397	24	8.2	1094
	0.10	(24.9)	3080	(1460)	0.402	25	7.7	1089
	0.125	(31.1)	2980	(1410)	0.405	25	7.4	1087
	0.25	(62.3)	2390	(1130)	0.435	23	5.5	1072
Variable Mid Range	0.0	(0.0)	2550	(1220)	0.368	9	6.9	825
	0.05	(12.5)	2040	(962)	0.376	8	5.4	766
	0.10	(24.9)	1570	(739)	0.383	7	4.1	734
	0.125	(31.1)	1370	(649)	0.385	7	3.6	725
	0.25	(62.3)	904	(427)	0.380	7	2.4	717
Variable Minimum	0.0	(0.0)	926	(437)	0.265	1	3.5	435
	0.05	(12.5)	570	(269)	0.262	1	2.2	424
	0.10	(24.9)	282	(133)	0.250	1	1.1	422
	0.125	(31.1)	177	(84)	0.249	1	0.7	424

*Complete results are available in PAMI Report No. 450.

DANOR PLEASANTAIRE MODEL SD24-FVX VENTILATION FAN

MANUFACTURER:

Canarm Limited
2157 Parkedale Avenue
Brockville, Ontario
K6V 5V6

DISTRIBUTORS:

1. Peavey Mart, 2420 - 50 Avenue, Red Deer, Alta. T4R 1M3
2. Federated Cooperatives Ltd., Box 1050, 401 - 22nd St. E., Saskatoon, Sask. S7K 3M9
3. Steinbach Mills, P.O. Box 1089, Steinbach, Man. R0A 2A0
4. Peacock Equipment Ltd., 26311 - 30A Ave., Box 190, Aldergrove, B.C. V0X 1A0

FAN DESCRIPTION:

24 in (610 mm) variable speed, direct drive, 0.33 hp (249 W), 230 V electric motor, equipped with louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	5500	(2600)	0.390	31	14.1	1136
	0.05	(12.5)	5300	(2500)	0.395	35	13.4	1136
	0.10	(24.9)	5100	(2400)	0.401	39	12.7	1132
	0.125	(31.1)	5000	(2360)	0.405	40	12.3	1130
	0.25	(62.3)	4320	(2040)	0.422	44	10.2	1125
Variable Maximum	0.0	(0.0)	5540	(2610)	0.405	30	13.7	1103
	0.05	(12.5)	5080	(2400)	0.409	31	12.4	1092
	0.10	(24.9)	4850	(2290)	0.417	33	11.6	1088
	0.125	(31.1)	4760	(2250)	0.422	34	11.3	1085
	0.25	(62.3)	4000	(1890)	0.445	36	9.0	1072
Variable Mid Range	0.0	(0.0)	4100	(1930)	0.400	12	10.2	873
	0.05	(12.5)	3670	(1730)	0.399	14	9.2	840
	0.10	(24.9)	3020	(1420)	0.406	14	7.4	800
	0.125	(31.1)	2570	(1210)	0.405	12	6.3	798
	0.25	(62.3)	1120	(527)	0.398	9	2.8	778
Variable Minimum	0.0	(0.0)	1810	(856)	0.281	2	6.4	495
	0.05	(12.5)	1080	(509)	0.282	3	3.8	489
	0.10	(24.9)	581	(274)	0.276	3	2.1	499
	0.125	(31.1)	405	(191)	0.276	2	1.5	504

*Complete results are available in PAMI Report No. 451.

DEL-AIR MODEL F6 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Del-Air Systems Limited
P.O. Box 2500
Humboldt, Saskatchewan
S0K 2A0

FAN DESCRIPTION:

6.4 in (162 mm) single speed, direct drive, 0.5 A, 115 V electric motor, equipped with optional intake louvres, outlet butterfly damper and insulated door.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	357	(169)	0.058	12	6.2	3381
	0.05	(12.5)	339	(160)	0.057	15	5.9	3373
	0.10	(24.9)	321	(152)	0.057	15	5.6	3367
	0.125	(31.1)	306	(144)	0.059	15	5.2	3365
	0.25	(62.3)	204	(96)	0.058	12	3.5	3364
Single Speed Direct, Outlet Damper	0.0	(0.0)	298	(141)	0.058	7	5.1	3362
	0.05	(12.5)	277	(131)	0.060	8	4.6	3365
	0.10	(24.9)	213	(101)	0.055	7	3.9	3382
	0.125	(31.1)	199	(94)	0.057	7	3.5	3382
	0.25	(62.3)	145	(68)	0.059	8	2.5	3354
Single Speed Direct, Intake Louvres	0.0	(0.0)	313	(148)	0.057	8	5.5	3378
	0.05	(12.5)	272	(128)	0.056	8	4.9	3376
	0.10	(24.9)	190	(90)	0.056	6	3.4	3396
	0.125	(31.1)	182	(86)	0.055	6	3.3	3391
	0.25	(62.3)	140	(66)	0.057	8	2.5	3362

*Complete results are available in PAMI Report No. 480.

DEL-AIR MODEL F8 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Del-Air Systems Limited
P.O. Box 2500
Humboldt, Saskatchewan
S0K 2A0

FAN DESCRIPTION:

8.0 in (203 mm) single speed, direct drive, 1.2 A, 115 V electric motor, equipped with optional intake louvres, outlet butterfly damper and insulated door.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	679	(320)	0.130	14	5.2	3314
	0.05	(12.5)	662	(312)	0.131	16	5.1	3303
	0.10	(24.9)	639	(302)	0.133	17	4.8	3284
	0.125	(31.1)	634	(299)	0.132	18	4.8	3282
	0.25	(62.3)	582	(275)	0.134	21	4.3	3271
Single Speed Direct, Outlet Damper	0.0	(0.0)	600	(283)	0.134	9	4.5	3287
	0.05	(12.5)	583	(276)	0.136	11	4.3	3282
	0.10	(24.9)	559	(264)	0.135	12	4.1	3279
	0.125	(31.1)	559	(264)	0.136	13	4.1	3278
	0.25	(62.3)	472	(223)	0.134	15	3.5	3287
Single Speed Direct, Intake Louvres	0.0	(0.0)	619	(292)	0.131	10	4.7	3288
	0.05	(12.5)	602	(284)	0.133	12	4.5	3285
	0.10	(24.9)	581	(274)	0.133	14	4.4	3281
	0.125	(31.1)	571	(270)	0.134	14	4.3	3279
	0.25	(62.3)	481	(227)	0.129	16	3.7	3300

*Complete results are available in PAMI Report No. 481.

DEL-AIR MODEL F12 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Del-Air Systems Limited

P.O. Box 2500

Humboldt, Saskatchewan

S0K 2A0

FAN DESCRIPTION:

11.5 in (292 mm) single or variable speed, direct drive, 0.19 hp (140 W) 240 V electric motor, equipped with optional intake louvres, outlet butterfly damper and insulated door.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1150	(543)	0.142	14	8.1	1616
	0.05	(12.5)	1060	(500)	0.139	16	7.6	1612
	0.10	(24.9)	991	(468)	0.140	17	7.1	1605
	0.125	(31.1)	949	(448)	0.142	18	6.7	1599
	0.25	(62.3)	595	(281)	0.136	14	4.4	1636
Variable Speed Maximum	0.0	(0.0)	1130	(533)	0.154	12	7.3	1603
	0.05	(12.5)	1050	(496)	0.152	14	6.9	1587
	0.10	(24.9)	975	(460)	0.152	15	6.4	1581
	0.125	(31.1)	842	(445)	0.155	16	6.1	1577
	0.25	(62.3)	624	(295)	0.155	14	4.0	1615
Variable Speed Mid Range	0.0	(0.0)	991	(468)	0.121	10	8.2	1386
	0.05	(12.5)	905	(427)	0.122	12	7.4	1356
	0.10	(24.9)	785	(371)	0.120	13	6.5	1353
	0.125	(31.1)	749	(354)	0.120	14	6.2	1355
	0.25	(62.3)	397	(187)	0.125	10	3.2	1386
Variable Speed Minimum	0.0	(0.0)	746	(352)	0.088	6	8.5	987
	0.05	(12.5)	571	(270)	0.086	7	6.6	961
	0.10	(24.9)	416	(196)	0.086	7	4.8	1058
	0.125	(31.1)	293	(138)	0.088	5	3.3	995
	0.25	(62.3)						
Single Speed Direct with Damper	0.0	(0.0)	1070	(605)	0.140	11	7.6	1585
	0.05	(12.5)	992	(468)	0.139	13	7.1	1580
	0.10	(24.9)	925	(437)	0.144	15	6.4	1581
	0.125	(31.1)	884	(417)	0.144	15	6.1	1584
	0.25	(62.3)	568	(268)	0.141	13	4.0	1615
Single Speed Direct with Louvres	0.0	(0.0)	972	(459)	0.135	9	7.2	1609
	0.05	(12.5)	886	(418)	0.136	10	6.5	1605
	0.10	(24.9)	808	(381)	0.136	12	5.9	1616
	0.125	(31.1)	753	(355)	0.134	12	5.6	1627
	0.25	(62.3)	521	(246)	0.141	12	3.7	1593

*Complete results are available in PAMI Report No. 482.

DEL-AIR MODEL F16 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Del-Air Systems Limited

P.O. Box 2500

Humboldt, Saskatchewan

S0K 2A0

FAN DESCRIPTION:

15.5 in (394 mm) single or variable speed, direct drive, 0.45 hp (335 VV) 240 V electric motor, equipped with optional intake louvres, outlet butterfly damper and insulated door.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2700	(1270)	0.370	21	7.3	1649
	0.05	(12.5)	2620	(1240)	0.370	23	7.1	1647
	0.10	(24.9)	2530	(1190)	0.374	25	6.8	1644
	0.125	(31.1)	2480	(1170)	0.377	25	6.6	1643
	0.25	(62.3)	2200	(1040)	0.383	28	5.7	1639
Variable Speed Maximum	0.0	(0.0)	2680	(1260)	0.368	20	7.3	1632
	0.05	(12.5)	2600	(1230)	0.367	23	7.1	1634
	0.10	(24.9)	2490	(1180)	0.371	24	6.6	1629
	0.125	(31.1)	2460	(1160)	0.377	25	6.5	1626
	0.25	(62.3)	2140	(1010)	0.375	27	5.7	1624
Variable Speed Mid Range	0.0	(0.0)	2170	(1020)	0.311	13	7.0	1333
	0.05	(12.5)	2020	(953)	0.314	14	6.4	1313
	0.10	(24.9)	1880	(887)	0.312	15	6.0	1294
	0.125	(31.1)	1800	(850)	0.313	16	5.8	1288
	0.25	(62.3)	1220	(576)	0.285	15	4.3	1418
Variable Speed Minimum	0.0	(0.0)	1370	(647)	0.230	4	6.0	855
	0.05	(12.5)	1190	(562)	0.226	6	5.2	844
	0.10	(24.9)	938	(443)	0.221	6	4.2	1025
	0.125	(31.1)	676	(319)	0.224	5	3.0	902
	0.25	(62.3)	2020	(953)	0.367	25	5.5	1643
Single Speed Direct with Damper	0.0	(0.0)	2670	(1260)	0.369	20	7.2	1654
	0.05	(12.5)	2540	(1200)	0.376	21	6.8	1648
	0.10	(24.9)	2440	(1150)	0.381	22	6.4	1645
	0.125	(31.1)	2390	(1130)	0.378	23	6.3	1643
	0.25	(62.3)	2020	(953)	0.367	25	5.5	1643
Single Speed Direct with Louvres	0.0	(0.0)	2420	(1140)	0.371	15	6.5	1657
	0.05	(12.5)	2320	(1100)	0.371	17	6.3	1652
	0.10	(24.9)	2230	(1050)	0.367	19	6.1	1654
	0.125	(31.1)	2190	(1030)	0.373	20	5.9	1652
	0.25	(62.3)	1690	(798)	0.346	20	4.9	1665

*Complete results are available in PAMI Report No. 483.

DEL-AIR MODEL F20 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Del-Air Systems Limited

P.O. Box 2500

Humboldt, Saskatchewan

S0K 2A0

FAN DESCRIPTION:

19.4 in (492 mm) single or variable speed, direct drive, 0.54 hp (400 W) 240 V electric motor, equipped with optional intake louvres, outlet butterfly damper and insulated door.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3990	(1880)	0.345	28	11.6	1634
	0.05	(12.5)	3840	(1810)	0.351	31	10.9	1629
	0.10	(24.9)	3720	(1760)	0.360	34	10.3	1626
	0.125	(31.1)	3650	(1730)	0.364	35	10.0	1621
	0.25	(62.3)	3210	(1510)	0.388	37	8.3	1606
Variable Speed Maximum	0.0	(0.0)	3980	(1880)	0.349	28	11.4	1624
	0.05	(12.5)	3820	(1800)	0.353	31	10.8	1615
	0.10	(24.9)	3670	(1730)	0.361	33	10.2	1606
	0.125	(31.1)	3600	(1700)	0.371	33	9.7	1600
	0.25	(62.3)	3160	(1490)	0.388	38	8.1	1582
Variable Speed Mid Range	0.0	(0.0)	3440	(1620)	0.328	19	10.5	1409
	0.05	(12.5)	3190	(1500)	0.332	21	9.6	1377
	0.10	(24.9)	2970	(1400)	0.343	22	8.7	1350
	0.125	(31.1)	2840	(1340)	0.347	22	8.2	1335
	0.25	(62.3)	1930	(911)	0.370	18	5.2	1236
Variable Speed Minimum	0.0	(0.0)	2200	(1040)	0.239	7	9.2	907
	0.05	(12.5)	1790	(845)	0.244	8	7.9	832
	0.10	(24.9)	1260	(595)	0.242	7	5.2	808
	0.125	(31.1)	773	(367)	0.248	6	3.2	710
	0.25	(62.3)						
Single Speed Direct with Damper	0.0	(0.0)	3930	(1850)	0.350	27	11.2	1638
	0.05	(12.5)	3790	(1790)	0.359	30	10.6	1631
	0.10	(24.9)	3640	(1720)	0.372	31	9.8	1327
	0.125	(31.1)	3560	(1580)	0.372	33	9.6	1623
	0.25	(62.3)	3150	(1490)	0.392	36	8.0	1604
Single Speed Direct with Louvres	0.0	(0.0)	3600	(1700)	0.369	19	9.8	1627
	0.05	(12.5)	3430	(1820)	0.378	23	9.1	1618
	0.10	(24.9)	3320	(1570)	0.383	25	8.7	1614
	0.125	(31.1)	3240	(1530)	0.388	26	8.4	1612
	0.25	(62.3)	2860	(1350)	0.397	30	7.2	1600

*Complete results are available in PAMI Report No. 484.

EMI WLA 4/50 VENTILATION FAN

MANUFACTURER:

EMI Verkoop B.C.
P.O. Box 8100
3503 RC
Utrecht, Holland

DISTRIBUTOR:

Langer Manufacturing Limited
4603a - 13 St. N.E.
Calgary, Alberta
T2E 6M3

FAN DESCRIPTION:

19.5 in (495 mm) variable speed, direct drive, 0.56 hp (420 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	4400	(2080)	0.333	36	13.2	1672
	0.05	(12.5)	4170	(1970)	0.350	40	11.9	1662
	0.10	(24.9)	4080	(1920)	0.356	41	11.5	1658
	0.125	(31.1)	4030	(1900)	0.360	42	11.2	1655
	0.25	(62.3)	3670	(1730)	0.384	45	9.6	1637
Automatic Maximum	0.0	(0.0)	4360	(2060)	0.328	37	13.3	1661
	0.05	(12.5)	4200	(1980)	0.340	40	12.4	1651
	0.10	(24.9)	4060	(1920)	0.349	41	11.6	1642
	0.125	(31.1)	4000	(1890)	0.354	42	11.3	1637
	0.25	(62.3)	3640	(1720)	0.374	44	9.7	1616
Automatic Mid Range	0.0	(0.0)	3320	(1570)	0.241	16	13.8	1268
	0.05	(12.5)	2930	(1380)	0.247	18	11.9	1171
	0.10	(24.9)	2350	(1110)	0.251	21	9.4	1069
	0.125	(31.1)	2160	(1020)	0.251	24	8.6	1036
	0.25	(62.3)						
Automatic Minimum	0.0	(0.0)	1600	(755)	0.127	4	12.6	692
	0.05	(12.5)	900	(425)	0.130	4	6.9	525
	0.10	(24.9)	4140	(1950)	0.349	29	11.9	1650
	0.125	(31.1)	3950	(1860)	0.363	31	10.9	1641
	0.25	(62.3)	3790	(1790)	0.374	32	10.1	1634
Single Speed Direct with Louvres	0.0	(0.0)	4140	(1950)	0.349	29	11.9	1650
	0.05	(12.5)	3950	(1860)	0.363	31	10.9	1641
	0.10	(24.9)	3790	(1790)	0.374	32	10.1	1634
	0.125	(31.1)	3720	(1750)	0.379	33	9.8	1631
	0.25	(62.3)	3300	(1560)	0.400	34	8.3	1615

*Complete results are available in PAMI Report No. 339.

FAN INTERNATIONAL (GOLD) MODEL 4E30 VENTILATION FAN

MANUFACTURER

A. Vosterman BV
P.O. Box 366-5900 AJ
Venlo, Holland

DISTRIBUTOR:

Euromac Imports Incorporated
Box 40
Port Williams, Nova Scotia
B0P 1T0

FAN DESCRIPTION:

11.9 in (302 mm) variable speed, direct drive, 0.13 hp (100 W)
220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1390	(657)	0.113	28	12.3	1703
	0.05	(12.5)	1310	(618)	0.116	29	11.3	1698
	0.10	(24.9)	1260	(593)	0.118	31	10.7	1695
	0.125	(31.1)	1220	(576)	0.117	34	10.4	1691
	0.25	(62.3)	1020	(480)	0.120	35	8.5	1682
Setting Number 5	0.0	(0.0)	1370	(645)	0.126	24	10.9	1701
	0.05	(12.5)	1320	(623)	0.129	27	10.2	1697
	0.10	(24.9)	1270	(599)	0.133	29	9.5	1693
	0.125	(31.1)	1220	(576)	0.133	29	9.2	1690
	0.25	(62.3)	999	(227)	0.139	29	7.2	1684
Setting Number 4	0.0	(0.0)	1280	(603)	0.111	22	11.5	1607
	0.05	(12.5)	1200	(566)	0.119	23	10.1	1593
	0.10	(24.9)	1140	(538)	0.118	26	9.7	1577
	0.125	(31.1)	1100	(518)	0.117	27	9.4	1569
	0.25	(62.3)	850	(401)	0.124	26	6.9	1561
Setting Number 3	0.0	(0.0)	770	(363)	0.095	6	8.1	1000
	0.05	(12.5)	692	(327)	0.099	8	7.0	971
	0.10	(24.9)	504	(238)	0.096	8	5.2	964
	0.125	(31.1)	470	(222)	0.094	9	5.0	1106
	0.25	(62.3)	211	(100)	0.096	4	2.2	914
Setting Number 2	0.0	(0.0)	581	(274)	0.072	3	8.1	729
	0.05	(12.5)	345	(163)	0.072	4	4.8	662
	0.10	(24.9)	619	(292)	0.072	4	8.6	758
	0.125	(31.1)	364	(172)	0.072	4	4.7	678
	0.25	(62.3)						
Single Speed Direct	0.0	(0.0)	1280	(605)	0.120	20	10.7	1696
	0.05	(12.5)	1230	(580)	0.118	24	10.4	1694
	0.10	(24.9)	1160	(547)	0.120	26	9.7	1690
	0.125	(31.1)	1100	(519)	0.121	26	9.1	1688
	0.25	(62.3)	611	(288)	0.108	19	5.7	1711

*Complete results are available in PAMI Report No. 462.

FAN INTERNATIONAL (GOLD) MODEL 4E45 VENTILATION FAN

MANUFACTURER

A. Vosterman BV
P.O. Box 366-5900 AJ
Venlo, Holland .

DISTRIBUTOR:

Euromac Imports Incorporated
Box 40
Port Williams, Nova Scotia
B0P 1T0

FAN DESCRIPTION:

17.9 in (454 mm) variable speed, direct drive, 0.46 hp (340 W)
220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3810	(1800)	0.368	35	10.4	1599
	0.05	(12.5)	3670	(1730)	0.374	37	9.8	1582
	0.10	(24.9)	3540	(1670)	0.376	39	9.4	1577
	0.125	(31.1)	3480	(1640)	0.381	39	9.1	1573
	0.25	(62.3)	3150	(1490)	0.396	41	8.0	1541
Setting Number 5	0.0	(0.0)	3830	(1810)	0.375	35	10.2	1603
	0.05	(12.5)	3680	(1740)	0.385	37	9.6	1589
	0.10	(24.9)	3560	(1680)	0.396	38	9.0	1579
	0.125	(31.1)	3500	(1650)	0.395	38	8.9	1573
	0.25	(62.3)	3160	(1490)	0.407	40	7.8	1540
Setting Number 4	0.0	(0.0)	2790	(1320)	0.313	16	8.9	1187
	0.05	(12.5)	2610	(1230)	0.317	18	8.2	1134
	0.10	(24.9)	2330	(1100)	0.317	18	7.4	1090
	0.125	(31.1)	2190	(1030)	0.315	18	7.0	1080
	0.25	(62.3)	1640	(775)	0.313	19	5.2	1123
Setting Number 3	0.0	(0.0)	1680	(792)	0.189	6	8.9	712
	0.05	(12.5)	1310	(616)	0.187	7	7.0	652
	0.10	(24.9)	866	(409)	0.187	6	4.6	700
	0.125	(31.1)	575	(271)	0.192	5	3.0	722
	0.25	(62.3)	211	(100)	0.191	2	2.3	649
Setting Number 2	0.0	(0.0)	1270	(599)	0.135	4	9.4	538
	0.05	(12.5)	759	(358)	0.135	4	5.6	508
Setting Number 1	0.0	(0.0)	1320	(621)	0.141	4	9.4	562
	0.05	(12.5)	823	(388)	0.137	5	6.0	515
	0.10	(24.9)	15	(7)	0.142	0.4	0.1	464
Single Speed Direct, with Louvres	0.0	(0.0)	3500	(1650)	0.386	26	9.1	1577
	0.05	(12.5)	3320	(1570)	0.395	27	8.4	1559
	0.10	(24.9)	3150	(1490)	0.397	28	7.9	1550
	0.125	(31.1)	3070	(1450)	0.400	28	7.7	1549
	0.25	(62.3)	2660	(1250)	0.407	30	6.5	1533

*Complete results are available in PAMI Report No. 463.

FAN INTERNATIONAL (GOLD) MODEL 4E50 VENTILATION FAN

MANUFACTURER

A. Vosterman BV
P.O. Box 366-5900 AJ
Venlo, Holland

DISTRIBUTOR:

Euromac Imports Incorporated
Box 40
Port Williams, Nova Scotia
B0P 1T0

FAN DESCRIPTION:

19.75 in (502 mm) variable speed, direct drive, 0.58 hp (430 W)
220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	4900	(2310)	0.473	38	10.4	1639
	0.05	(12.5)	4800	(2760)	0.479	41	10.0	1634
	0.10	(24.9)	4630	(2190)	0.489	42	9.5	1630
	0.125	(31.1)	4560	(2150)	0.492	43	9.3	1628
	0.25	(62.3)	4160	(1960)	0.503	46	8.3	1610
Setting Number 5	0.0	(0.0)	4900	(2310)	0.490	38	10.0	1642
	0.05	(12.5)	4790	(2260)	0.496	40	9.7	1638
	0.10	(24.9)	4650	(2190)	0.507	41	9.2	1632
	0.125	(31.1)	4570	(2160)	0.510	42	9.0	1627
	0.25	(62.3)	4160	(1960)	0.518	45	8.0	1616
Setting Number 4	0.0	(0.0)	4140	(1950)	0.444	24	9.3	1307
	0.05	(12.5)	3910	(1840)	0.432	27	9.1	1350
	0.10	(24.9)	3490	(1650)	0.434	27	8.0	1298
	0.125	(31.1)	3510	(1660)	0.434	27	8.1	1302
	0.25	(62.3)	2900	(1370)	0.434	28	6.7	1299
Setting Number 3	0.0	(0.0)	2460	(1160)	0.271	9	9.1	825
	0.05	(12.5)	2070	(977)	0.271	9	7.6	782
	0.10	(24.9)	1700	(804)	0.267	10	6.4	791
	0.125	(31.1)	1540	(726)	0.265	10	5.8	800
	0.25	(62.3)	678	(320)	0.270	6	2.5	803
Setting Number 2	0.0	(0.0)	1900	(899)	0.190	5	10.0	640
	0.05	(12.5)	1415	(688)	0.191	6	7.4	604
	0.10	(24.9)	724	(342)	0.192	5	3.8	630
Setting Number 1	0.0	(0.0)	1880	(887)	0.193	5	9.7	632
	0.05	(12.5)	1370	(648)	0.191	6	7.2	595
	0.10	(24.9)	741	(350)	0.191	5	3.9	629
Single Speed Direct, with Louvres	0.0	(0.0)	4580	(2160)	0.477	32	9.6	1639
	0.05	(12.5)	4460	(2110)	0.480	33	9.3	1635
Setting Number 1	0.10	(24.9)	4300	(2030)	0.490	35	8.8	1628
	0.125	(31.1)	4200	(1980)	0.488	35	8.6	1622
	0.25	(62.3)	3600	(1700)	0.491	37	7.3	1613

*Complete results are available in PAMI Report No. 464.

HURST MODEL BF-12 VENTILATION FAN

MANUFACTURER:

Hurst Equipment Ltd.
75 Archibald St.
Winnipeg, Manitoba
R2J 0V7

DISTRIBUTORS:

1. U.F.A. Co-op Limited - Calgary, Alta.
2. Eastman Feeds - Lethbridge, Alta.
Winnipeg, Man.
3. Feed Rite Limited - Linden, Alta.
Humboldt, Sask.
Winnipeg, Man.
4. Prairie Poultry and Dairy Service - Regina, Sask.
5. Western Feed Mills - Regina, Sask.

FAN DESCRIPTION:

12.1 in (308 mm) single speed, direct drive, 0.25 hp (187 W), 115 V electric motor, equipped with inlet guard grill and optional butterfly shutter.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single	0.0	(0.0)	1190	(562)	0.156	10	7.6	1778
Speed	0.05	(12.5)	1160	(548)	0.163	13	7.1	1776
Direct	0.10	(24.9)	1090	(514)	0.169	15	6.4	1773
	0.125	(31.1)	1050	(495)	0.172	15	6.1	1772
	0.25	(62.3)	783	(369)	0.178	14	4.4	1769

*Complete results are available in PAMI Report No. 430.

HURST MODEL LF-20 VENTILATION FAN

MANUFACTURER:

Hurst Equipment Ltd.
75 Archibald St.
Winnipeg, Manitoba
R2J 0V7

DISTRIBUTORS:

1. U.F.A. Co-op Limited - Calgary, Alta.
2. Eastman Feeds - Lethbridge, Alta.
Winnipeg, Man.
3. Feed Rite Limited - Linden, Alta.
Humboldt, Sask.
Winnipeg, Man.
4. Prairie Poultry and Dairy Service - Regina, Sask.
5. Western Feed Mills - Regina, Sask.

FAN DESCRIPTION:

20 in (508 mm) single speed, direct drive, 0.5 hp (373 W), 115 V electric motor, equipped with inlet guard grill and louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single	0.0	(0.0)	4250	(2010)	0.575	17	7.4	1729
Speed	0.05	(12.5)	4140	(1960)	0.603	19	6.9	1723
Direct	0.10	(24.9)	4080	(1920)	0.625	22	6.5	1717
	0.125	(31.1)	4040	(1900)	0.641	23	6.3	1715
	0.25	(62.3)	3850	(1820)	0.683	27	5.6	1704

*Complete results are available in PAMI Report No. 432.

HURST MODEL BF-18 VENTILATION FAN

MANUFACTURER:

Hurst Equipment Ltd.
75 Archibald St.
Winnipeg, Manitoba
R2J 0V7

DISTRIBUTORS:

1. U.F.A. Co-op Limited - Calgary, Alta.
2. Eastman Feeds - Lethbridge, Alta.
Winnipeg, Man.
3. Feed Rite Limited - Linden, Alta.
Humboldt, Sask.
Winnipeg, Man.
4. Prairie Poultry and Dairy Service - Regina, Sask.
5. Western Feed Mills - Regina, Sask.

FAN DESCRIPTION:

18.5 in (470 mm) single speed, direct drive, 0.33 hp (249 W), 115 V electric motor, equipped with inlet guard grill and optional butterfly shutter.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single	0.0	(0.0)	3540	(1670)	0.414	21	8.6	1727
Speed	0.05	(12.5)	3440	(1620)	0.433	23	7.9	1722
Direct	0.10	(24.9)	3340	(1580)	0.449	25	7.4	1718
	0.125	(31.1)	3280	(1550)	0.458	26	7.2	1715
	0.25	(62.3)	3030	(1430)	0.497	29	6.1	1703

*Complete results are available in PAMI Report No. 431.

HURST MODEL VSIL-24 VENTILATION FAN

MANUFACTURER:

Hurst Equipment Ltd.
75 Archibald St.
Winnipeg, Manitoba
R2J 0V7

DISTRIBUTORS:

1. U.F.A. Co-op Limited - Calgary, Alta.
2. Eastman Feeds - Lethbridge, Alta.
Winnipeg, Man.
3. Feed Rite Limited - Linden, Alta.
Humboldt, Sask.
Winnipeg, Man.
4. Prairie Poultry and Dairy Service - Regina, Sask.
5. Western Feed Mills - Regina, Sask.

FAN DESCRIPTION:

24 in (610 mm) single or variable speed, direct drive, 0.33 hp (249 W), 115/230 V electric motor, equipped with outlet guard grill and inlet louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	5160	(2440)	0.410	23	12.6	1650
	0.05	(12.5)	4890	(2310)	0.410	27	11.9	1641
	0.10	(24.9)	4610	(2180)	0.417	29	11.1	1637
	0.125	(31.1)	4450	(2100)	0.418	30	10.6	1634
	0.25	(62.3)	3580	(1690)	0.425	32	8.4	1625
Variable Maximum	0.0	(0.0)	4870	(2300)	0.382	21	12.7	1561
	0.05	(12.5)	4550	(2150)	0.388	23	11.7	1552
	0.10	(24.9)	4220	(1990)	0.393	26	10.7	1539
	0.125	(31.1)	4060	(1920)	0.394	27	10.3	1535
	0.25	(62.3)	3050	(1440)	0.400	27	7.6	1529
Variable Mid Range	0.0	(0.0)	3650	(1720)	0.313	11	11.7	1216
	0.05	(12.5)	3170	(1500)	0.316	12	10.0	1186
	0.10	(24.9)	2550	(1200)	0.317	13	8.0	1179
	0.125	(31.1)	2200	(1040)	0.317	12	6.9	1177
	0.25	(62.3)	1020	(484)	0.315	10	3.2	1198
Variable Minimum	0.0	(0.0)	1650	(779)	0.208	2	7.9	744
	0.05	(12.5)	947	(447)	0.209	3	4.5	742
	0.10	(24.9)	404	(191)	0.207	2	2.0	772
	0.125	(31.1)	265	(125)	0.207	2	1.3	806

*Complete results are available in PAMI Report No. 433.

KOENDERS MODEL KS18 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Koender's Sales & Service
Box 171
Englefeld, Sask.
S0K 1N0

FAN DESCRIPTION:

17.5 in (445 mm) single speed, direct drive, 0.33 hp (249 W), 115/230 V electric motor, equipped with optional shutter.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2840	(1340)	0.257	18	11.0	1766
	0.05	(12.5)	2740	(1290)	0.268	20	10.2	1764
	0.10	(24.9)	2610	(1230)	0.278	22	9.4	1763
	0.125	(31.1)	2550	(1200)	0.282	23	9.0	1762
	0.25	(62.3)	2220	(1050)	0.295	26	7.5	1760
Single Speed Direct, with Shutter	0.0	(0.0)	2770	(1310)	0.268	16	10.3	1766
	0.05	(12.5)	2690	(1270)	0.277	19	9.7	1765
	0.10	(24.9)	2560	(1210)	0.285	21	9.0	1763
	0.125	(31.1)	2490	(1180)	0.288	22	8.6	1762
	0.25	(62.3)	2100	(992)	0.302	23	6.9	1759

Complete results are available in PAMI Report No. 344.

HURST MODEL VSBF-16 VENTILATION FAN

MANUFACTURER:

Hurst Equipment Ltd.
75 Archibald St.
Winnipeg, Manitoba
R2J 0V7

DISTRIBUTORS:

- U.F.A. Co-op Limited - Calgary, Alta.
- Eastman Feeds - Lethbridge, Alta.
Winnipeg, Man.
- Feed Rite Limited - Linden, Alta.
Humboldt, Sask.
Winnipeg, Man.
- Prairie Poultry and Dairy Service - Regina, Sask.
- Western Feed Mills - Regina, Sask.

FAN DESCRIPTION:

16.1 in (410 mm) single or variable speed, direct drive, 0.25 hp (187 W), 115/230 V electric motor, equipped with inlet guard grill and butterfly shutters.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2960	(1400)	0.328	23	9.0	1668
	0.05	(12.5)	2860	(1350)	0.335	25	8.5	1660
	0.10	(24.9)	2780	(1310)	0.345	27	8.1	1651
	0.125	(31.1)	2730	(1290)	0.351	28	7.8	1647
	0.25	(62.3)	2500	(1180)	0.379	31	6.6	1627
Variable Maximum	0.0	(0.0)	2930	(1380)	0.302	25	9.7	1633
	0.05	(12.5)	2820	(1330)	0.309	26	9.1	1610
	0.10	(24.9)	2710	(1280)	0.322	28	8.4	1592
	0.125	(31.1)	2640	(1250)	0.327	28	8.1	1581
	0.25	(62.3)	2330	(1100)	0.356	29	6.5	1525
Variable Mid Range	0.0	(0.0)	2410	(1140)	0.238	17	10.1	1310
	0.05	(12.5)	2110	(998)	0.244	16	8.6	1200
	0.10	(24.9)	1800	(851)	0.255	15	7.1	1106
	0.125	(31.1)	1610	(759)	0.257	14	6.3	1044
	0.25	(62.3)	460	(217)	0.273	5	1.7	756
Variable Minimum	0.0	(0.0)	1730	(815)	0.185	8	9.4	933
	0.05	(12.5)	1070	(507)	0.191	5	5.6	771
	0.10	(24.9)	460	(216)	0.195	3	2.3	621
	0.125	(31.1)	274	(129)	0.196	2	1.4	541

*Complete results are available in PAMI Report No. 434.

KOENDERS MODEL KV15 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Koender's Sales & Service
Box 171
Englefeld, Sask.
S0K 1N0

FAN DESCRIPTION:

14.5 in (368 mm) variable speed, direct drive, 0.25 hp (186 W), 115/230 V electric motor, equipped with optional shutter.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1500	(706)	0.227	7	6.6	1756
	0.05	(12.5)	1420	(673)	0.231	9	6.1	1753
	0.10	(24.9)	1360	(643)	0.234	11	5.8	1752
	0.125	(31.1)	1330	(627)	0.235	12	5.6	1751
	0.25	(62.3)	1100	(518)	0.245	14	4.5	1749
Variable Maximum	0.0	(0.0)	1480	(700)	0.213	7	6.9	1750
	0.05	(12.5)	1420	(671)	0.217	10	6.5	1747
	0.10	(24.9)	1370	(645)	0.221	12	6.2	1745
	0.125	(31.1)	1330	(630)	0.223	13	6.0	1743
	0.25	(62.3)	1110	(522)	0.231	15	4.8	1737
Variable Mid Range	0.0	(0.0)	1270	(598)	0.119	9	10.8	1502
	0.05	(12.5)	1200	(563)	0.124	11	9.7	1480
	0.10	(24.9)	1090	(515)	0.128	13	8.5	1449
	0.125	(31.1)	1040	(489)	0.130	14	8.0	1435
	0.25	(62.3)	594	(280)	0.143	11	4.1	1342
Variable Minimum	0.0	(0.0)	954	(450)	0.104	8	9.2	1168
	0.05	(12.5)	921	(435)	0.104	8	8.9	1151
	0.10	(24.9)	657	(310)	0.109	7	6.0	1044
	0.125	(31.1)	345	(163)	0.117	6	2.9	943
	0.25	(62.3)	1480	(697)	0.233	7	6.6	1754
Single Speed Direct, with Shutter	0.0	(0.0)	1410	(667)	0.237	8	5.9	1753
	0.05	(12.5)	1310	(618)	0.242	10	5.4	1750
	0.10	(24.9)	1250	(588)	0.244	10	5.1	1748
	0.125	(31.1)	879	(415)	0.253	10	3.5	1743

*Complete results are available in PAMI Report No. 345.

KOENDERS MODEL KV18 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Koender's Sales & Service
Box 171
Englefeld, Sask.
S0K 1N0

FAN DESCRIPTION:

17.5 in (445 mm) variable speed, direct drive, 0.33 hp (249 W),
115/230 V electric motor, equipped with optional shutter.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2830	(1340)	0.281	17	10.1	1727
	0.05	(12.5)	2730	(1290)	0.285	19	9.6	1727
	0.10	(24.9)	2600	(1230)	0.291	21	8.9	1721
	0.125	(31.1)	2530	(1200)	0.294	22	8.6	1719
	0.25	(62.3)	2150	(1010)	0.305	25	7.0	1713
Variable Maximum	0.0	(0.0)	2790	(1320)	0.258	18	10.8	1705
	0.05	(12.5)	2720	(1290)	0.263	20	10.3	1704
	0.10	(24.9)	2580	(1220)	0.271	22	9.5	1701
	0.125	(31.1)	2500	(1180)	0.275	24	9.1	1699
	0.25	(62.3)	2120	(1000)	0.287	26	7.4	1692
Variable Mid Range	0.0	(0.0)	2590	(1220)	0.219	17	11.8	1587
	0.05	(12.5)	2500	(1180)	0.224	19	11.2	1580
	0.10	(24.9)	2330	(1100)	0.232	21	10.1	1568
	0.125	(31.1)	2240	(1060)	0.235	22	9.5	1563
	0.25	(62.3)	1770	(837)	0.254	22	7.0	1537
Variable Minimum	0.0	(0.0)	1950	(919)	0.182	9	10.7	1192
	0.05	(12.5)	1660	(783)	0.187	10	8.9	1140
	0.10	(24.9)	1300	(614)	0.191	9	6.8	1066
	0.125	(31.1)	1030	(484)	0.197	8	5.2	996
Single Speed Direct with Shutter	0.0	(0.0)	2780	(1310)	0.279	16	10.0	1728
	0.05	(12.5)	2680	(1270)	0.285	18	9.4	1726
	0.10	(24.9)	2540	(1200)	0.293	20	8.7	1723
	0.125	(31.1)	2450	(1160)	0.297	21	8.2	1721
	0.25	(62.3)	1970	(932)	0.311	22	6.3	1712

*Complete results are available in PAMI Report No. 346.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	4260	(2010)	0.427	25	10.0	1700
	0.05	(12.5)	4180	(1970)	0.435	26	9.6	1697
	0.10	(24.9)	4020	(1900)	0.447	29	9.0	1692
	0.125	(31.1)	3940	(1860)	0.453	30	8.7	1690
	0.25	(62.3)	3550	(1680)	0.467	33	7.6	1685
Variable Maximum	0.0	(0.0)	4220	(1990)	0.418	25	10.1	1680
	0.05	(12.5)	4110	(1940)	0.425	26	9.7	1677
	0.10	(24.9)	3950	(1860)	0.435	29	9.1	1672
	0.125	(31.1)	3870	(1830)	0.440	29	8.8	1670
	0.25	(62.3)	3460	(1630)	0.459	32	7.5	1660
Variable Mid Range	0.0	(0.0)	3750	(1770)	0.370	19	10.1	1476
	0.05	(12.5)	3520	(1660)	0.385	20	9.1	1455
	0.10	(24.9)	3320	(1570)	0.394	21	8.4	1439
	0.125	(31.1)	3200	(1510)	0.397	21	8.1	1431
	0.25	(62.3)	2630	(1240)	0.415	22	6.3	1402
Variable Minimum	0.0	(0.0)	2500	(1180)	0.261	8	9.6	970
	0.05	(12.5)	2110	(995)	0.282	8	7.5	943
	0.10	(24.9)	0660	(783)	0.286	8	5.8	891
	0.125	(31.1)	1440	(682)	0.294	7	4.9	892
	0.25	(62.3)	3460	(1630)	0.471	31	7.3	1683

*Complete results are available in PAMI Report No. 347.

MULTIFAN MODEL 4E30-6PP VENTILATION FAN

MANUFACTURER:

A. Vostermans BV
P.O. Box 366-5900 AJ
Venlo, Holland

DISTRIBUTOR:

Godro Equipment Inc.
P.O. Box 280
Roxton Pond, Quebec
J0E 1Z0

FAN DESCRIPTION:

11.9 in (302 mm) variable speed, direct drive, 0.15 hp (110 W),
220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	1360	(642)	0.112	25	12.1	1702
	0.05	(12.5)	1330	(626)	0.111	32	12.0	1701
	0.10	(24.9)	1270	(598)	0.113	34	11.2	1698
	0.125	(31.1)	1210	(571)	0.117	33	10.3	1697
	0.25	(62.3)	1000	(470)	0.115	35	8.7	1699
Setting Number 5	0.0	(0.0)	1360	(641)	0.124	24	11.0	1701
	0.05	(12.5)	1300	(615)	0.123	27	10.6	1695
	0.10	(24.9)	1250	(588)	0.125	29	10.0	1694
	0.125	(31.1)	1200	(568)	0.126	30	9.5	1693
	0.25	(62.3)	940	(444)	0.119	31	7.9	1698
Setting Number 4	0.0	(0.0)	1280	(604)	0.107	23	12.0	1610
	0.05	(12.5)	1230	(582)	0.112	26	11.0	1601
	0.10	(24.9)	1170	(551)	0.113	28	10.4	1592
	0.125	(31.1)	1090	(515)	0.111	28	9.8	1587
	0.25	(62.3)	619	(292)	0.104	20	6.0	1616
Setting Number 3	0.0	(0.0)	683	(323)	0.084	4	8.1	876
	0.05	(12.5)	567	(267)	0.081	7	7.0	878
	0.10	(24.9)	194	(91)	0.081	3	2.4	831
	0.125	(31.1)	75	(35)	0.082	1	0.9	759
Setting Number 2	0.0	(0.0)	459	(216)	0.054	2	8.5	582
	0.05	(12.5)	93	(44)	0.053	1	1.8	496
Setting Number 1	0.0	(0.0)	462	(218)	0.052	2	8.9	595
	0.0	(12.5)	126	(59)	0.054	1	2.3	522
Single Speed Direct, with Louvres	0.0	(0.0)	1300	(614)	0.119	22	10.9	1700
	0.05	(12.5)	1260	(596)	0.117	26	10.8	1694
	0.10	(24.9)	1170	(554)	0.124	26	9.4	1690
	0.125	(31.1)	1120	(529)	0.123	27	9.1	1689
	0.25	(62.3)	524	(247)	0.106	16	4.9	1713

*Complete results are available in PAMI Report No. 459.

KOENDERS MODEL KV20 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Koender's Sales & Service
Box 171
Englefeld, Sask.
S0K 1N0

FAN DESCRIPTION:

19.75 in (502 mm) variable speed, direct drive, 0.5 hp (373 W),
115/230 V electric motor, equipped with optional shutter.

MULTIFAN MODEL 4E45-6PP VENTILATION FAN

MANUFACTURER

A. Vostermans BV
P.O. Box 366-5900 AJ
Venlo, Holland

DISTRIBUTOR:

Godro Equipment Inc.
P.O. Box 280
Roxton Pond, Quebec
J0E 1Z0

FAN DESCRIPTION:

17.9 in (454 mm) variable speed, direct drive, 0.46 hp (340 W)
220 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3820	(1800)	0.355	37	10.8	1646
	0.05	(12.5)	3720	(1760)	0.356	39	10.2	1636
	0.10	(24.9)	3580	(1690)	0.372	40	9.6	1630
	0.125	(31.1)	3520	(1660)	0.376	41	9.4	1625
	0.25	(62.3)	3170	(1500)	0.386	43	8.2	1601
Setting Number 5	0.0	(0.0)	3810	(1800)	0.366	35	10.4	1650
	0.05	(12.5)	3730	(1760)	0.370	39	10.1	1640
	0.10	(24.9)	3610	(1710)	0.376	41	9.6	1632
	0.125	(31.1)	3550	(1670)	0.384	41	9.2	1623
	0.25	(62.3)	3210	(1510)	0.401	43	8.0	1606
Setting Number 4	0.0	(0.0)	3050	(1440)	0.330	20	9.2	1313
	0.05	(12.5)	2850	(1340)	0.325	22	8.8	1269
	0.10	(24.9)	2550	(1200)	0.329	21	7.8	1212
	0.125	(31.1)	2480	(1170)	0.332	22	7.5	1211
	0.25	(62.3)	1980	(933)	0.335	23	5.9	1209
Setting Number 3	0.0	(0.0)	1460	(688)	0.175	4	8.3	632
	0.05	(12.5)	1120	(528)	0.169	6	6.6	601
	0.10	(24.9)	438	(207)	0.168	3	2.6	622
	0.125	(31.1)	101	(48)	0.178	1	0.6	538
Setting Number 2	0.0	(0.0)	982	(464)	0.104	2	9.4	441
	0.05	(12.5)	207	(98)	0.107	1	1.9	394
Setting Number 1	0.0	(0.0)	836	(394)	0.102	1	8.2	378
Single Speed Direct, with Louvres	0.0	(0.0)	3580	(1690)	0.381	28	9.4	1626
	0.05	(12.5)	3410	(1610)	0.385	28	8.9	1615
	0.10	(24.9)	3240	(1530)	0.391	30	8.3	1605
	0.125	(31.1)	3160	(1490)	0.393	31	8.0	1598
	0.25	(62.3)	2730	(1290)	0.403	32	6.8	1583

*Complete results are available in PAMI Report No. 460.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	7340	(3470)	0.709	35	10.4	1095
	0.05	(12.5)	7160	(3380)	0.723	38	9.9	1091
	0.10	(24.9)	6970	(3290)	0.727	40	9.6	1088
	0.125	(31.1)	6900	(3260)	0.741	42	9.3	1085
	0.25	(62.3)	6450	(3040)	0.767	47	8.4	1076
Setting Number 5	0.0	(0.0)	7340	(3460)	0.703	35	10.4	1095
	0.05	(12.5)	7140	(3370)	0.721	37	9.9	1091
	0.10	(24.9)	6980	(3300)	0.736	40	9.5	1088
	0.125	(31.1)	6890	(3250)	0.741	41	9.3	1084
	0.25	(62.3)	6420	(3030)	0.763	46	8.4	1072
Setting Number 4	0.0	(0.0)	6750	(3190)	0.589	33	11.5	1001
	0.05	(12.5)	6460	(3050)	0.601	34	10.7	989
	0.10	(24.9)	6210	(2930)	0.611	36	10.2	975
	0.125	(31.1)	6080	(2870)	0.609	38	10.0	973
	0.25	(62.3)	5430	(2560)	0.634	41	8.6	939
Setting Number 3	0.0	(0.0)	3970	(1880)	0.357	11	11.1	585
	0.05	(12.5)	3460	(1640)	0.358	13	9.7	557
	0.10	(24.9)	2680	(1260)	0.353	12	7.6	529
	0.125	(31.1)	2410	(1140)	0.365	12	6.6	538
	0.0	(0.0)	2920	(1380)	0.227	7	12.9	430
Setting Number 2	0.05	(12.5)	2090	(985)	0.221	8	9.4	387
	0.10	(24.9)	692	(327)	0.222	4	3.1	386
	0.125	(31.1)	228	(10)	0.228	2	1.0	333
	0.0	(0.0)	2890	(1360)	0.223	7	13.0	424
Setting Number 1	0.05	(12.5)	2020	(955)	0.223	8	9.1	382
	0.10	(24.9)	630	(297)	0.227	3	2.8	388
	0.125	(31.1)	280	(132)	0.231	2	1.2	346
	0.0	(0.0)	7080	(3340)	0.733	30	9.7	1095
Single Speed Direct, with Louvres	0.05	(12.5)	6850	(3230)	0.746	32	9.2	1088
	0.10	(24.9)	6580	(3110)	0.755	34	8.7	1083
	0.125	(31.1)	6490	(3070)	0.759	35	8.6	1077
	0.25	(62.3)	5950	(2810)	0.795	39	7.5	1078

*Complete results are available in PAMI Report No. 461.

MULTIFAN MODEL 6E63 VENTILATION FAN

MANUFACTURER

A. Vostermans BV
P.O. Box 366-5900 AJ
Venlo, Holland

DISTRIBUTOR:

Godro Equipment Inc.
P.O. Box 280
Roxton Pond, Quebec
J0E 1Z0

FAN DESCRIPTION:

24.9 in (633 mm) variable speed, direct drive, 0.80 hp (600 W)
220 V electric motor, equipped with inlet guard grill and optional louvres.

PRAIRIE PRIDE MODEL TR12 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Prairie Pride Enterprises Ltd.
P.O. Box 25
Sanford, Manitoba
R0G 2J0

FAN DESCRIPTION:

12.25 in (311 mm) two speed or variable speed, direct drive,
0.25 hp (186 W), 115/230 V electric motor, equipped with inlet and outlet guard grills and inlet louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
High Speed	0.0	(0.0)	1450	(682)	0.255	11	5.7	1725
	0.05	(12.5)	1360	(644)	0.252	12	5.4	1727
	0.10	(24.9)	1180	(558)	0.242	12	4.9	1732
	0.125	(31.1)	1020	(481)	0.232	10	4.4	1739
	0.25	(62.3)	640	(302)	0.245	9	2.6	1733
Low Speed	0.0	(0.0)	1290	(607)	0.144	13	9.0	1553
	0.05	(12.5)	1210	(571)	0.141	16	8.6	1566
	0.10	(24.9)	970	(458)	0.126	16	7.7	1607
	0.125	(31.1)	806	(380)	0.122	13	6.6	1613
	0.25	(62.3)	522	(246)	0.139	12	3.8	1581
Variable Maximum	0.0	(0.0)	1450	(683)	0.240	11	6.0	1712
	0.05	(12.5)	1350	(638)	0.239	13	5.6	1714
	0.10	(24.9)	1140	(537)	0.228	12	5.0	1726
	0.125	(31.1)	942	(445)	0.217	10	4.3	1733
	0.25	(62.3)	642	(303)	0.229	9	2.8	1724
Variable Mid Range	0.0	(0.0)	1260	(595)	0.170	11	7.4	1505
	0.05	(12.5)	1170	(554)	0.168	12	7.0	1518
	0.10	(24.9)	907	(428)	0.149	12	6.1	1601
	0.125	(31.1)	750	(354)	0.148	10	5.1	1598
	0.25	(62.3)	476	(225)	0.166	9	2.9	1511
Variable Minimum	0.0	(0.0)	1000	(474)	0.140	5	7.1	1153
	0.05	(12.5)	864	(408)	0.135	8	6.4	1255
	0.10	(24.9)	560	(264)	0.129	6	4.3	1326
	0.125	(31.1)	432	(204)	0.133	6	3.2	1238

*Complete results are available in PAMI Report No. 384.

PRAIRIE PRIDE MODEL TR18 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Prairie Pride Enterprises Ltd.
P.O. Box 25
Sanford, Manitoba
R0G 2J0

FAN DESCRIPTION:

18.25 in (464 mm) two speed or variable speed, direct drive, 0.33 hp (246 W), 115/230 V electric motor, equipped with inlet and outlet guard grills and inlet louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
High Speed	0.0	(0.0)	3730	(1760)	0.413	24	9.0	1641
	0.05	(12.5)	3560	(1680)	0.413	26	8.6	1643
	0.10	(24.9)	3380	(1600)	0.410	28	8.2	1645
	0.125	(31.1)	3280	(1550)	0.407	28	8.1	1646
	0.25	(62.3)	2507	(1180)	0.387	27	6.5	1660
Low Speed	0.0	(0.0)	2610	(1230)	0.259	13	10.1	1209
	0.05	(12.5)	2370	(1120)	0.255	15	9.3	1217
	0.10	(24.9)	2020	(953)	0.252	16	8.0	1236
	0.125	(31.1)	1760	(828)	0.245	15	7.2	1268
Variable Maximum	0.0	(0.0)	3530	(1670)	0.395	22	8.9	1574
	0.05	(12.5)	3390	(1600)	0.394	24	8.6	1576
	0.10	(24.9)	3150	(1490)	0.389	26	8.1	1581
	0.125	(31.1)	3070	(1450)	0.390	26	7.9	1580
	0.25	(62.3)	2160	(971)	0.362	22	6.0	1611
Variable Mid Range	0.0	(0.0)	2990	(1410)	0.338	14	8.8	1340
	0.05	(12.5)	2730	(1290)	0.340	17	8.0	1342
	0.10	(24.9)	2520	(1190)	0.336	18	7.5	1355
	0.125	(31.1)	2360	(1110)	0.333	18	7.1	1363
	0.25	(62.3)	957	(452)	0.352	8	2.7	1296
Variable Minimum	0.0	(0.0)	2270	(1070)	0.275	7	8.2	1050
	0.05	(12.5)	1854	(875)	0.273	8	6.8	1074
	0.10	(24.9)	1170	(552)	0.272	6	4.3	1080
	0.125	(31.1)	652	(308)	0.282	3	2.3	947

*Complete results are available in PAMI Report No. 385.

PRAIRIE PRIDE MODEL TR24 VENTILATION FAN

MANUFACTURER AND DISTRIBUTOR:

Prairie Pride Enterprises Ltd.
P.O. Box 25
Sanford, Manitoba
R0G 2J0

FAN DESCRIPTION:

24.25 in (616 mm) two speed or variable speed, direct drive, 0.33 hp (246 W), 115/230 V electric motor, equipped with inlet and outlet guard grills and inlet louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
High Speed	0.0	(0.0)	5100	(2410)	0.390	21	13.1	1121
	0.05	(12.5)	4730	(2230)	0.391	25	12.1	1118
	0.10	(24.9)	4440	(2100)	0.391	27	11.4	1118
	0.125	(31.1)	4250	(2000)	0.391	28	10.9	1119
	0.25	(62.3)	2880	(1360)	0.381	26	7.6	1120
Low Speed	0.0	(0.0)	3000	(1420)	0.238	7	12.6	680
	0.05	(12.5)	2490	(1180)	0.239	9	10.4	698
	0.10	(24.9)	1120	(528)	0.241	6	4.6	660
Variable Maximum	0.0	(0.0)	4950	(2340)	0.380	20	13.0	1092
	0.05	(12.5)	4530	(2140)	0.382	23	11.9	1083
	0.10	(24.9)	4220	(1990)	0.374	26	11.3	1082
	0.125	(31.1)	4010	(1890)	0.372	27	10.8	1082
	0.25	(62.3)	2630	(1240)	0.370	24	7.1	1082
Variable Mid Range	0.0	(0.0)	4320	(2040)	0.341	16	12.7	963
	0.05	(12.5)	3960	(1870)	0.349	18	11.3	962
	0.10	(24.9)	3510	(1660)	0.347	20	10.1	964
	0.125	(31.1)	3250	(1530)	0.343	21	9.5	964
Variable Minimum	0.0	(0.0)	3350	(1580)	0.307	8	10.9	765
	0.05	(12.5)	2790	(1320)	0.305	10	9.1	759
	0.10	(24.9)	1920	(907)	0.300	9	6.4	763
	0.125	(31.1)	1283	(606)	0.309	7	4.1	734

*Complete results are available in PAMI Report No. 386.

DISTRIBUTOR:

Ziehl Ventilating Equipment
803 - 30 Street North
Lethbridge, Alberta
T1H 5G5

FAN DESCRIPTION:

19.5 in (495 mm) single or variable speed, direct drive, 0.268 hp (200 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	4010	(1890)	0.315	35	12.7	1105
	0.05	(12.5)	3880	(1830)	0.328	37	11.8	1100
	0.10	(24.9)	3670	(1730)	0.334	38	11.0	1092
	0.125	(31.1)	3590	(1700)	0.339	39	10.6	1089
	0.25	(62.3)	2800	(1320)	0.336	23	8.3	1087
Variable Maximum	0.0	(0.0)	4000	(1890)	0.326	34	12.3	1097
	0.05	(12.5)	3860	(1820)	0.331	36	11.7	1090
	0.10	(24.9)	3660	(1730)	0.339	38	10.8	1081
	0.125	(31.1)	3600	(1700)	0.340	39	10.6	1080
	0.25	(62.3)	2870	(1350)	0.340	37	8.4	1081
Variable Mid Range	0.0	(0.0)	3620	(1710)	0.289	28	12.5	995
	0.05	(12.5)	3350	(1580)	0.301	28	11.1	968
	0.10	(24.9)	3000	(1420)	0.299	28	10.0	936
	0.125	(31.1)	2890	(1360)	0.302	27	9.6	931
	0.25	(62.3)	1520	(719)	0.301	17	5.0	984
Variable Minimum	0.0	(0.0)	2600	(1730)	0.222	14	11.7	677
	0.05	(12.5)	1900	(896)	0.217	11	8.8	619
	0.10	(24.9)	1480	(697)	0.215	10	6.9	643
	0.125	(31.1)	670	(316)	0.216	5	3.1	554
	0.25	(62.3)	1660	(795)	0.327	17	5.1	1096

*Complete results are available in PAMI Report No. 465.

SIEMENS MODEL 2CC2-636 VENTILATION FAN

MANUFACTURER:

Siemens Electric Limited
9829 - 45 Avenue
Edmonton, Alberta
T6E 5C8

DISTRIBUTOR:

Ziehl Ventilating Equipment
803 - 30 Street North
Lethbridge, Alberta
T1H 5G5

FAN DESCRIPTION:

24.6 in (625 mm) single or variable speed, direct drive, 0.563 hp (420 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	7180	(3390)	0.786	30	9.1	1077
	0.05	(12.5)	6820	(3220)	0.796	34	8.6	1070
	0.10	(24.9)	6670	(3150)	0.808	35	8.3	1065
	0.125	(31.1)	6600	(3110)	0.809	35	8.2	1065
	0.25	(62.3)	5760	(2720)	0.812	36	7.1	1057
Variable Maximum	0.0	(0.0)	7100	(3350)	0.770	31	9.2	1079
	0.05	(12.5)	6890	(3250)	0.780	33	8.8	1073
	0.10	(24.9)	6610	(3120)	0.792	35	8.3	1065
	0.125	(31.1)	6480	(3060)	0.795	35	8.2	1058
	0.25	(62.3)	5710	(2690)	0.804	36	7.1	1055
Variable Mid Range	0.0	(0.0)	6420	(3030)	0.660	27	9.7	970
	0.05	(12.5)	6140	(2900)	0.660	28	9.3	951
	0.10	(24.9)	5750	(2710)	0.667	29	8.6	933
	0.125	(31.1)	5520	(2600)	0.670	29	8.2	927
	0.25	(62.3)	4370	(2060)	0.667	27	6.6	928
Variable Minimum	0.0	(0.0)	3900	(1840)	0.390	10	10.0	590
	0.05	(12.5)	3260	(1540)	0.391	11	8.3	568
	0.10	(24.9)	2620	(1240)	0.398	11	6.6	590
	0.125	(31.1)	1890	(890)	0.399	8	4.7	564
	0.25	(62.3)	6620	(3120)	0.802	24	8.3	1080
Single Speed Direct with Louvres	0.0	(0.0)	6360	(3000)	0.811	26	7.8	1073
	0.05	(12.5)	6080	(2870)	0.818	27	7.4	1068
	0.10	(24.9)	5950	(2810)	0.819	28	7.3	1063
	0.125	(31.1)	4570	(2160)	0.811	25	5.6	1065

*Complete results are available in PAMI Report No. 466.

SIEMENS MODEL 2CC2-406 VENTILATION FAN

MANUFACTURER:

Siemens Electric Limited
9829 - 45 Avenue
Edmonton, Alberta
T6E 5C8

DISTRIBUTOR:

Ziehl Ventilating Equipment
803 - 30 Street North
Lethbridge, Alberta
T1H 5G5

FAN DESCRIPTION:

15.4 in (391 mm) single or variable speed, direct drive, 0.11 hp (80 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2120	(1000)	0.192	20	11.0	1077
	0.05	(12.5)	2070	(977)	0.187	26	11.1	1077
	0.10	(24.9)	1770	(835)	0.186	24	9.5	1080
	0.125	(31.1)	1630	(769)	0.185	22	8.8	1082
	0.25	(62.3)	250	(118)	0.185	4	1.4	1077
Variable Maximum	0.0	(0.0)	2120	(1000)	0.184	22	11.5	1075
	0.05	(12.5)	1950	(920)	0.183	22	10.7	1075
	0.10	(24.9)	1780	(840)	0.186	24	9.6	1075
	0.125	(31.1)	1640	(774)	0.183	23	9.0	1078
	0.25	(62.3)	308	(146)	0.184	5	1.7	1067
Variable Mid Range	0.0	(0.0)	1800	(850)	0.150	16	12.0	901
	0.05	(12.5)	1590	(750)	0.149	17	10.7	905
	0.10	(24.9)	1420	(670)	0.147	20	9.7	938
	0.125	(31.1)	996	(472)	0.145	13	6.9	976
	0.25	(62.3)	662	(312)	0.146	9	4.5	984
Variable Minimum	0.0	(0.0)	1590	(750)	0.139	12	11.4	810
	0.05	(12.5)	1330	(628)	0.137	13	9.7	808
	0.10	(24.9)	941	(444)	0.123	12	7.7	935
	0.125	(31.1)	397	(189)	0.135	5	2.9	818
	0.25	(62.3)	1750	(826)	0.186	12	9.4	1079
Single Speed Direct with Louvres	0.0	(0.0)	1470	(694)	0.183	12	8.0	1084
	0.05	(12.5)	860	(406)	0.174	7	4.9	1096
	0.10	(24.9)	801	(378)	0.176	8	4.6	1091
	0.125	(31.1)	470	(222)	0.185	7	2.5	1076

*Complete results are available in PAMI Report No. 467.

SIEMENS MODEL 2CC2-456 VENTILATION FAN

MANUFACTURER:

Siemens Electric Limited
9829 - 45 Avenue
Edmonton, Alberta
T6E 5C8

DISTRIBUTOR:

Ziehl Ventilating Equipment
803 - 30 Street North
Lethbridge, Alberta
T1H 5G5

FAN DESCRIPTION:

17.3 in (439 mm) single or variable speed, direct drive, 0.15 hp (110 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2770	(1310)	0.244	23	11.4	1051
	0.05	(12.5)	2630	(1240)	0.247	25	10.6	1046
	0.10	(24.9)	2460	(1160)	0.251	28	9.8	1035
	0.125	(31.1)	2420	(1140)	0.250	28	9.6	1032
	0.25	(62.3)	1460	(689)	0.239	21	6.1	1044
Variable Maximum	0.0	(0.0)	2720	(1280)	0.239	22	11.4	1030
	0.05	(12.5)	2560	(1210)	0.242	24	10.6	1014
	0.10	(24.9)	2360	(1110)	0.245	26	9.6	1000
	0.125	(31.1)	2310	(1090)	0.246	26	9.4	997
	0.25	(62.3)	1280	(604)	0.238	18	5.4	1023
Variable Mid Range	0.0	(0.0)	2360	(1110)	0.200	17	11.8	887
	0.05	(12.5)	2160	(1020)	0.207	19	10.4	869
	0.10	(24.9)	1920	(906)	0.206	20	9.3	849
	0.125	(31.1)	1800	(850)	0.209	20	9.0	848
	0.25	(62.3)	557	(264)	0.220	8	2.5	785
Variable Minimum	0.0	(0.0)	1750	(826)	0.153	9	11.4	661
	0.05	(12.5)	1420	(670)	0.159	10	8.9	623
	0.10	(24.9)	1000	(472)	0.151	9	6.6	713
	0.125	(31.1)	256	(123)	0.158	3	1.6	530
	0.25	(62.3)	963	(453)	0.254	12	3.8	1019

*Complete results are available in PAMI Report No. 468.

ZIEHL-ABEGG MODEL 451-6 VENTILATION FAN

MANUFACTURER:

Ziehl-Abegg GmbH & Co. KG
Postfach 1165, Zeppelinstrasse 28
D-7118 Kunzelsau
West Germany

DISTRIBUTOR:

Aston Industries Inc.
P.O. Box 220
St. Leonard d'Aston, Quebec
J0C 1M0

FAN DESCRIPTION:

17.6 in (448 mm) variable speed, direct drive, 0.33 hp (250 W), 120 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	2580	(1220)	0.222	15	11.6	948
	0.05	(12.5)	2380	(1120)	0.226	18	10.5	926
	0.10	(24.9)	2140	(1010)	0.228	19	9.4	902
	0.125	(31.1)	1970	(931)	0.227	19	8.7	891
	0.25	(62.3)	867	(409)	0.229	8	3.4	933
Variable Maximum	0.0	(0.0)	2570	(1210)	0.226	16	11.4	947
	0.05	(12.5)	2360	(1110)	0.226	18	10.4	922
	0.10	(24.9)	2100	(990)	0.229	18	9.2	898
	0.125	(31.1)	1930	(911)	0.228	18	8.5	888
	0.25	(62.3)	803	(379)	0.228	9	3.5	926
Variable Mid Range	0.0	(0.0)	2340	(1100)	0.184	11	12.7	816
	0.05	(12.5)	1950	(921)	0.183	14	10.7	773
	0.10	(24.9)	1600	(749)	0.184	14	8.7	751
	0.125	(31.1)	1460	(688)	0.184	14	7.9	756
	0.25	(62.3)	478	(226)	0.130	5	3.7	613
Variable Minimum	0.0	(0.0)	1690	(795)	0.130	8	13.0	624
	0.05	(12.5)	1400	(663)	0.129	10	10.8	597
	0.10	(24.9)	836	(395)	0.129	8	6.5	625
	0.125	(31.1)	478	(226)	0.130	5	3.7	613
	0.25	(62.3)	708	(334)	0.225	9	3.1	908

*Complete results are available in PAMI Report No. 379.

ZIEHL-ABEGG MODEL 501-6 VENTILATION FAN

MANUFACTURER:

Ziehl-Abegg GmbH & Co. KG
Postfach 1165, Zeppelinstrasse 28
D-7118 Kunzelsau
West Germany

DISTRIBUTOR:

Aston Industries Inc.
P.O. Box 220
St. Leonard d'Aston, Quebec
J0C 1M0

FAN DESCRIPTION:

19.75 in (502 mm) variable speed, direct drive, 0.54 hp (400 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	3740	(1760)	0.365	20	10.2	1087
	0.05	(12.5)	3570	(1690)	0.370	22	9.6	1082
	0.10	(24.9)	3370	(1590)	0.372	23	9.1	1077
	0.125	(31.1)	3260	(1540)	0.373	24	8.7	1075
	0.25	(62.3)	2690	(1270)	0.377	25	7.1	1072
Variable Maximum	0.0	(0.0)	3650	(1720)	0.354	19	10.3	1066
	0.05	(12.5)	3490	(1650)	0.356	21	9.8	1060
	0.10	(24.9)	3260	(1540)	0.357	23	9.1	1052
	0.125	(31.1)	3150	(1490)	0.360	23	8.8	1050
	0.25	(62.3)	2540	(1200)	0.364	24	7.0	1046
Variable Mid Range	0.0	(0.0)	3110	(1470)	0.289	14	10.8	907
	0.05	(12.5)	2830	(1340)	0.293	15	9.7	877
	0.10	(24.9)	2520	(1190)	0.294	16	8.6	856
	0.125	(31.1)	2390	(1130)	0.294	17	8.1	853
	0.25	(62.3)	1010	(477)	0.290	8	3.5	892
Variable Minimum	0.0	(0.0)	2230	(1050)	0.188	7	11.9	645
	0.05	(12.5)	1840	(870)	0.192	9	9.6	617
	0.10	(24.9)	1260	(596)	0.190	9	6.6	626
	0.125	(31.1)	803	(379)	0.190	5	4.2	639
	0.25	(62.3)	3460	(1630)	0.362	16	9.6	1073
Single Speed Direct with Louvres	0.0	(0.0)	3140	(1480)	0.368	16	8.5	1065
	0.05	(12.5)	2930	(1380)	0.367	17	8.0	1062
	0.10	(24.9)	2840	(1340)	0.362	18	7.8	1062
	0.125	(31.1)	1480	(700)	0.358	12	4.1	1076
	0.25	(62.3)	708	(334)	0.225	9	3.1	908

*Complete results are available in PAMI Report No. 380.

ZIEHL-ABEGG MODEL 562-6 VENTILATION FAN

MANUFACTURER:

Ziehl-Abegg GmbH & Co. KG
Postfach 1165, Zeppelinstrasse 28
D-7118 Kunzelsau
West Germany

DISTRIBUTOR:

Aston Industries Inc.
P.O. Box 220
St. Leonard d'Aston, Quebec
J0C 1M0

FAN DESCRIPTION:

21.9 in (556 mm) variable speed, direct drive, 1.06 hp (800 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	6270	(2960)	0.675	32	9.3	1107
	0.05	(12.5)	6070	(2860)	0.690	34	8.8	1102
	0.10	(24.9)	5880	(2770)	0.701	35	8.4	1099
	0.125	(31.1)	5760	(2720)	0.699	35	8.2	1098
	0.25	(62.3)	5160	(2440)	0.715	35	7.2	1094
Variable Maximum	0.0	(0.0)	6150	(2900)	0.673	31	9.1	1089
	0.05	(12.5)	6040	(2850)	0.681	33	8.9	1087
	0.10	(24.9)	5780	(2730)	0.685	34	8.4	1084
	0.125	(31.1)	5640	(2660)	0.692	34	8.1	1082
	0.25	(62.3)	5100	(2140)	0.703	35	7.2	1076
Variable Mid Range	0.0	(0.0)	4860	(2290)	0.572	18	8.5	874
	0.05	(12.5)	4530	(2140)	0.581	19	7.8	861
	0.10	(24.9)	4150	(1960)	0.583	18	7.1	825
	0.125	(31.1)	3860	(1820)	0.587	17	6.6	814
	0.25	(62.3)	2320	(1100)	0.560	13	4.1	877
Variable Minimum	0.0	(0.0)	3340	(1580)	0.408	9	8.2	613
	0.05	(12.5)	2880	(1360)	0.410	9	7.0	580
	0.10	(24.9)	2240	(1050)	0.412	8	5.4	574
	0.125	(31.1)	1600	(756)	0.414	6	3.9	590
	0.25	(62.3)	5210	(2460)	0.702	18	7.4	1101
Single Speed Direct with Louvres	0.05	(12.5)	4970	(2340)	0.712	19	7.0	1096
	0.10	(24.9)	4740	(2240)	0.714	20	6.6	1094
	0.125	(31.1)	4620	(2180)	0.716	21	6.4	1095
	0.25	(62.3)	3940	(1860)	0.712	22	5.5	1098

*Complete results are available in PAMI Report No. 381.

ZIEHL-ABEGG MODEL 631-6 VENTILATION FAN

MANUFACTURER:

Ziehl-Abegg GmbH & Co. KG
Postfach 1165, Zeppelinstrasse 28
D-7118 Kunzelsau
West Germany

DISTRIBUTOR:

Aston Industries Inc.
P.O. Box 220
St. Leonard d'Aston, Quebec
J0C 1M0

FAN DESCRIPTION:

24.5 in (622 mm) variable speed, direct drive, 1.61 hp (1200 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	8090	(3820)	0.945	33	8.6	1038
	0.05	(12.5)	7920	(3740)	0.957	34	8.3	1032
	0.10	(24.9)	7690	(3630)	0.972	35	7.9	1025
	0.125	(31.1)	7570	(3570)	0.978	36	7.7	1023
	0.25	(62.3)	6970	(3290)	1.000	37	7.0	1017
Variable Maximum	0.0	(0.0)	7970	(3760)	0.939	31	9.5	1021
	0.05	(12.5)	7760	(3660)	0.954	32	8.1	1012
	0.10	(24.9)	7530	(3550)	0.962	33	7.8	1010
	0.125	(31.1)	7410	(3500)	0.972	34	7.6	999
	0.25	(62.3)	6780	(3200)	0.994	35	6.8	993
Variable Mid Range	0.0	(0.0)	6450	(3040)	0.808	19	8.0	818
	0.05	(12.5)	6100	(2800)	0.816	20	7.5	800
	0.10	(24.9)	5660	(2670)	0.822	20	6.9	788
	0.125	(31.1)	5470	(2580)	0.829	20	6.6	783
	0.25	(62.3)	4300	(2030)	0.835	19	5.1	780
Variable Minimum	0.0	(0.0)	4030	(1900)	0.510	7	7.9	511
	0.05	(12.5)	3500	(1650)	0.511	8	6.8	495
	0.10	(24.9)	2600	(1230)	0.512	7	5.1	486
	0.125	(31.1)	1870	(884)	0.510	5	3.7	534
	0.25	(62.3)	7150	(3370)	0.988	22	7.2	1011
Single Speed Direct with Louvres	0.05	(12.5)	6980	(3290)	0.997	23	7.0	1010
	0.10	(24.9)	6700	(3160)	1.010	24	6.7	1010
	0.125	(31.1)	6550	(3090)	1.010	25	6.5	1011
	0.25	(62.3)	5800	(2740)	1.020	26	5.7	1005

*Complete results are available in PAMI Report No. 382.

ZIEHL-ABEGG MODEL 451-4 VENTILATION FAN

MANUFACTURER:

Ziehl-Abegg GmbH & Co. KG
 Postfach 1165, Zeppelinstrasse 28
 D-7118 Kunzelsau
 West Germany

DISTRIBUTOR:

Aston Industries Inc.
 P.O. Box 220
 St. Leonard d'Aston, Quebec
 J0C 1M0

FAN DESCRIPTION:

17.75 in (451 mm) variable speed, direct drive, 1.05 hp (780 W), 240 V electric motor, equipped with inlet guard grill and optional louvres.

SUMMARY OF RESULTS*

SETTING	STATIC PRESSURE		AIR FLOW RATE		POWER CONSUMPTION	TOTAL EFFICIENCY	CFM /W	FAN SPEED
	in wg	(Pa)	cfm	(L/s)				
Single Speed Direct	0.0	(0.0)	4420	(2090)	0.670	26	6.6	1546
	0.05	(12.5)	4330	(2040)	0.676	27	6.4	1540
	0.10	(24.9)	4220	(1990)	0.688	28	6.1	1534
	0.125	(31.1)	4170	(1970)	0.693	29	6.0	1530
	0.25	(62.3)	3900	(1840)	0.706	31	5.5	1521
Variable Maximum	0.0	(0.0)	4310	(2030)	0.684	24	6.3	1506
	0.05	(12.5)	4250	(2000)	0.689	25	6.2	1500
	0.10	(24.9)	4130	(1950)	0.695	26	5.9	1493
	0.125	(31.1)	4060	(1920)	0.697	27	5.8	1487
	0.25	(62.3)	3750	(1770)	0.707	28	5.3	1472
Variable Mid Range	0.0	(0.0)	3450	(1630)	0.578	15	6.0	1218
	0.05	(12.5)	3290	(1550)	0.583	15	5.6	1196
	0.10	(24.9)	3100	(1460)	0.591	16	5.2	1177
	0.125	(31.1)	3020	(1420)	0.592	16	5.1	1173
	0.25	(62.3)	2450	(1160)	0.597	16	4.1	1130
Variable Minimum	0.0	(0.0)	1980	(926)	0.368	4	5.4	713
	0.05	(12.5)	1700	(802)	0.371	5	4.6	678
	0.10	(24.9)	1330	(628)	0.371	5	3.6	672
	0.125	(31.1)	1090	(514)	0.370	4	2.9	683
Single Speed Direct with Louvres	0.0	(0.0)	4110	(1941)	0.682	21	6.0	1531
	0.05	(12.5)	4020	(1900)	0.694	22	5.8	1515
	0.10	(24.9)	3860	(1820)	0.705	22	5.5	1512
	0.125	(31.1)	3780	(1780)	0.711	23	5.3	1508
	0.25	(62.3)	3420	(1610)	0.721	24	4.7	1499

*Complete results are available in PAMI Report No. 383.

A Co-operative Program Between



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