



Acme Engineering & Manufacturing Corporation

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Form B183A
 September 2001

Windmaster

Model DCA



- All aluminum construction.
- Six-bladed propeller utilizing a cambered-twist blade design with a unique dihedral tip for higher air flow capacities at less horsepower.
- Non-overloading design maintains horsepower within catalog range of static pressure, resulting in lower motor load and reduced operating costs.
- Streamlined orifice insures higher air flow capacity.
- Available mounted in either slant housing or slant housing & diffuser.

SEALED BEARINGS

- Prelubricated oversize ball bearings are double sealed, require no service.
- Improved, more efficient drive assembly and super-duty neoprene belts provide longer service life.
- 5 year warranty on shaft and bearing assembly.



Acme Windmaster Fans are listed by Canadian Standards Association Testing Laboratory as approved.

ENERGY EFFICIENT ENCLOSED MOTORS

- Heavy duty totally enclosed motors with shielded ball bearings are designed for continuous work load.
- Available in two speed.
- Built-in thermal overload for low-line voltage protection on all single phase motors.



MOTOR NOTES

- All single speed single phase motors are dual voltage (115/230) except ¼ horsepower.
- All ¼ horsepower single phase motors are single voltage (115 or 230).
- Two speed motors are single voltage (115 or 230) and not available in 1 ½ horsepower.
- Low speed capacity of two speed fans is approximately one half of maximum.
- Three phase motors are triple voltage (200-230/460).

MOTOR DATA

HP	Mfg	Mfg. Model	Volts	Hz	Mfg.	Mfg. Model	Volts	Hz	Mfg.	Mfg. Model	Volts	Hz
1/3	GE	5KHC37MN11GS	115/230	60	Marathon	WN48N17T2A	115/208/230	60	Magnetek	HF2J061N	115/230	60
1/3	Baldor	34K99W137	200/230/460	60								
1/2	A.O. Smith	95GC071A-1	115/230	60	Magnetek	18613700	115/208/230	60	GE	5KCR46PN006AS	115/208/230	60
1/2	Marathon	56T17T348	200/230/460	60	Magnetek	15819400	200/230/460	60	GE	5K42HGA161	200/230/460	60
3/4	Emerson	T63ZZBMR-1002	115/208/230	60	Marathon	2WH56B17T5518B	115/208/230	60	GE	5KCR46NN0137AS	115/208/230	60
3/4	GE	5K49MN4096	115/230/460	60								
1	A.O. Smith	K56A40B83	115/230	60	Magnetek	81782	115/208/230	60	Marathon	N56B17T5517	115/230	60
1	GE	5KCR49SN0020S	115/208/230	60	GE	5K49PN4094	200/230/460	60	Marathon	56T17T5529	208/230/460	60
1	Emerson	P63EBD3552	208/230/460	60								
1 1/2	GE	5KCR48WN0139S	115/208/230	60	Marathon	U56B17T5519B	115/208/230	60	Marathon	56T17T5530	200/230/460	60
1 1/2	Baldor	M3554	208/230/460	60	GE	5K49SN409J	200/230/460	60				

WARNING! DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments.

DCA PERFORMANCE DATA

Fan Mounted in WS Slant Wall Housing with Inlet Shutter, Guard and Outlet Guard

CERTIFIED CFM VS. STATIC PRESSURE (INCHES WG)

FAN MODEL	HP	●RPM	.000"			.050"			.100"			.125"			.150"		
			CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W
DCA24F-B	1/3	735	5266	.48	9.6	4966	.47	9.0	4654	.48	8.4	4488	.48	8.1	4315	.49	7.7
DCA24G-B	1/2	820	5752	.64	9.0	5484	.64	8.5	5214	.65	8.1	5076	.65	7.8	4937	.65	7.6
DCA24H-B	3/4	949	7010	1.03	6.9	6793	1.04	6.7	6570	1.04	6.4	6455	1.05	6.3	6336	1.05	6.1
DCA30F-B	1/3	529	7104	.49	12.5	6662	.51	11.5	6142	.52	10.5	5789	.52	9.9	5254	.52	9.0
DCA30G-B	1/2	607	8654	.77	11.1	8304	.77	10.5	7932	.78	10.0	7726	.78	9.7	7499	.78	9.4
DCA30H-B	3/4	686	9482	.98	9.8	9092	.98	9.3	8686	.99	8.9	8470	.99	8.7	8243	.99	8.4
DCA36F-B	1/3	431	9315	.39	19.1	8526	.40	17.1	7609	.41	15.0	6898	.42	13.5	5943	.42	11.6
DCA36G-B	1/2	495	10661	.61	17.5	9972	.62	16.0	9222	.64	14.5	8791	.65	13.6	8282	.65	12.7
DCA36H-B	3/4	575	12418	.94	13.3	11852	.95	12.5	11253	.97	11.7	10926	.98	11.3	10567	1.00	10.8
DCA36J-B	1	634	13344	1.15	12.2	12753	1.17	11.4	12168	1.20	10.7	11880	1.21	10.4	11593	1.22	10.0
DCA42G-B	1/2	385	13952	.64	22.0	12888	.69	18.7	11691	.72	16.2	10966	.73	15.1	10067	.73	13.9
DCA42H-B	3/4	442	15699	.97	16.3	14819	.99	15.1	13831	1.02	13.8	13257	1.03	13.1	12610	1.04	12.3
DCA42J-B	1	485	16926	1.21	14.8	16108	1.23	13.8	15260	1.25	12.8	14811	1.26	12.3	14332	1.27	11.9
DCA48G-B	1/2	308	16301	.62	26.2	14828	.64	23.3	12983	.66	19.6	11626	.68	17.2	9832	.67	14.8
DCA48H-B	3/4	354	18847	.97	19.7	17512	1.01	17.6	16176	1.03	15.9	15415	1.05	15.0	14365	1.06	13.8
DCA48J-B	1	384	19826	1.15	18.2	18777	1.18	16.8	17574	1.21	15.3	16815	1.23	14.4	15893	1.24	13.5
DCA54-4J-B	1	356	24862	1.16	22.5	23124	1.19	20.4	21267	1.22	18.3	20204	1.24	17.2	18925	1.26	15.8
DCA54-4K-B	1 1/2	405	27100	1.52	17.3	25629	1.54	16.1	23922	1.57	14.8	23019	1.59	14.2	21999	1.61	13.5

Performance includes the effects of slant housing, shutter and guards in the airstream.

Fan Mounted in WSC Slant Wall Housing with Diffuser Cone, Inlet Shutter, Guard and Outlet Guard

CERTIFIED CFM VS. STATIC PRESSURE (INCHES WG)

FAN MODEL	HP	●RPM	.000"			.050"			.100"			.125"			.150"		
			CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W
DCA24F-D	1/3	735	5747	.47	10.6	5462	.47	9.9	5147	.48	9.2	4963	.49	8.9	4758	.49	8.5
DCA24G-D	1/2	763	6345	.60	10.6	6052	.60	10.0	5755	.61	9.5	5603	.61	9.2	5449	.62	8.8
DCA24H-D	3/4	949	7640	1.01	7.6	7429	1.03	7.3	7214	1.04	7.0	7103	1.05	6.9	6990	1.05	6.7
DCA30F-D	1/3	529	8187	.45	15.3	7679	.47	14.0	7109	.49	12.6	6765	.49	11.9	6348	.50	11.1
DCA30G-D	1/2	607	9532	.74	12.8	9133	.75	12.0	8704	.76	11.2	8463	.77	10.8	8193	.77	10.4
DCA30H-D	3/4	686	10899	1.08	10.2	10498	1.10	9.7	10087	1.12	9.1	9873	1.13	8.9	9651	1.14	8.6
DCA36F-D	1/3	431	9738	.38	20.3	8978	.40	18.1	8042	.41	15.9	7330	.42	14.2	6460	.43	12.4
DCA36G-D	1/2	495	11019	.57	19.1	10396	.60	17.2	9645	.63	15.4	9154	.64	14.4	8606	.65	13.3
DCA36H-D	3/4	575	13364	.86	15.5	12725	.90	14.2	12077	.94	13.0	11745	.95	12.5	11400	.96	12.0
DCA36J-D	1	634	14354	1.06	14.2	13784	1.10	13.2	13199	1.13	12.2	12894	1.15	11.8	12577	1.16	11.4
DCA42G-D	1/2	385	15091	.68	22.4	13942	.71	19.8	12661	.73	17.4	11983	.73	16.2	11269	.74	15.1
DCA42H-D	3/4	442	17403	1.04	17.1	16423	1.07	15.6	15376	1.10	14.3	14801	1.11	13.5	14179	1.13	12.8
DCA42J-D	1	485	20916	1.17	18.8	19872	1.21	17.2	18779	1.25	15.8	18192	1.26	15.2	17564	1.27	14.5
DCA48G-D	1/3	308	17648	.58	30.2	16112	.62	26.0	14217	.65	21.9	12931	.66	19.7	10108	.67	15.1
DCA48H-D	3/4	354	20279	.93	22.0	18964	.97	19.8	17547	1.01	17.7	16714	1.02	16.5	15588	1.04	15.3
DCA48J-D	1	382	21687	1.09	20.9	20343	1.15	18.7	18896	1.20	16.6	18096	1.22	15.7	17227	1.23	14.8
DCA54-4J-D	1	356	26900	1.14	23.6	25051	1.19	21.1	22745	1.23	18.6	21315	1.24	17.3	19750	1.25	15.9
DCA54-4K-D	1 1/2	405	29990	1.58	19.4	28329	1.63	17.8	26461	1.67	16.2	25390	1.69	15.4	24184	1.71	14.5

Performance includes the effects of slant housing, shutter, guards and diffuser cone in the airstream.

Performance shown is for installation type A - Free inlet, Free outlet.

●Speed (RPM or RPS) shown in nominal. Performance based on actual speed of test.

Refer to Motor Table (page 1) for motor nameplate information.

Brake horsepower capability of a fan motor is dependent on the degree of cooling the motor receives from the airstream moving over the motor. Motor loading beyond the motor nameplate rating does not overheat the motor and is within NEMA recommended limits. Therefore, it is not detrimental to motor and is economically desirable.



Acme Engineering and Manufacturing Corporation certifies that the Windmaster DCA fan shown hereon is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

TWO-SPEED DCA PERFORMANCE DATA

Fan Mounted in WS Slant Wall Housing with Inlet Shutter, Guard and Outlet Guard																	
CFM VS. STATIC PRESSURE (INCHES WG)																	
FAN MODEL	HP	RPM	.000"			.050"			.100"			.125"			.150"		
			CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W
DCA24G-2S-B	1/2	763	5352	.51	8.6	5064	.52	8.1	4773	.52	7.6	4623	.52	7.3	4468	.53	7.0
DCA24H-2S-B	3/4	875	6463	.81	7.0	6227	.81	6.7	5983	.82	6.4	5855	.82	6.2	5712	.83	6.0
DCA30G-2S-B	1/2	546	7784	.56	11.3	7393	.56	10.7	6961	.57	10.0	6706	.57	9.5	6404	.57	9.0
DCA30H-2S-B	3/4	647	8943	.83	9.4	8529	.83	9.0	8093	.83	8.5	7857	.83	8.2	7607	.84	7.9
DCA36G-2S-B	1/2	463	9972	.48	16.6	9234	.51	15.0	8403	.53	13.3	7893	.53	12.3	7229	.54	11.2
DCA36H-2S-B	3/4	511	11036	.66	14.5	10396	.67	13.4	9690	.69	12.2	9278	.70	11.6	8794	.71	10.8
DCA36J-2S-B◆	1	634	13344	1.15	11.4	12753	1.17	10.6	12168	1.20	10.0	11880	1.21	9.7	11593	1.22	9.3
DCA42G-2S-B	1/2	356	12901	.50	21.3	11741	.55	17.6	10369	.57	15.0	9452	.57	13.6	8183	.57	12.0
DCA42H-2S-B	3/4	413	14669	.80	15.3	13720	.81	13.9	12621	.84	12.7	11958	.85	12.0	11192	.86	11.1
DCA42J-2S-B◆	1	485	16926	1.21	13.8	16108	1.23	12.9	15260	1.25	12.0	14811	1.26	11.5	14332	1.27	11.1
DCA48G-2S-B	1/2	276	14607	.45	27.1	12929	.46	23.3	10446	.49	17.9	8433	.48	14.6	6098	.50	10.1
DCA48H-2S-B	3/4	314	16717	.68	21.4	15217	.71	18.7	13610	.73	16.2	12302	.74	14.4	10616	.74	12.4
DCA48J-2S-B◆	1	384	19826	1.15	17.0	18777	1.18	15.7	17574	1.21	14.3	16815	1.23	13.4	15893	1.24	12.6
DCA54J-2S-B◆	1	356	24862	1.16	21.0	23124	1.19	19.0	21267	1.22	17.1	20204	1.24	16.1	18925	1.26	14.8

Performance includes the effects of slant housing, shutter and guards in the airstream.

Fan Mounted in WSC Slant Wall Housing with Diffuser Cone, Inlet Shutter, Guard and Outlet Guard																	
CFM VS. STATIC PRESSURE (INCHES WG)																	
FAN MODEL	HP	RPM	.000"			.050"			.100"			.125"			.150"		
			CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W	CFM	BHP	C/W
DCA24G-2S-D	1/2	763	5904	.48	10.2	5589	.49	9.6	5268	.49	8.9	5103	.50	8.5	4934	.50	8.2
DCA24H-2S-D	3/4	875	7044	.79	7.7	6815	.81	7.3	6580	.82	7.0	6458	.83	6.8	6331	.83	6.6
DCA30G-2S-D	1/2	546	8574	.54	13.1	8182	.55	12.2	7625	.56	11.1	7323	.56	10.6	6974	.57	10.0
DCA30H-2S-D	3/4	647	10279	.91	9.9	9854	.93	9.3	9414	.95	8.7	9183	.96	8.4	8941	.97	8.1
DCA36G-2S-D	1/2	463	10307	.47	18.2	9635	.50	16.1	8769	.52	14.1	8195	.53	13.0	7589	.54	11.8
DCA36H-2S-D	3/4	511	11877	.60	16.9	11157	.64	15.1	10420	.67	13.5	10025	.68	12.8	9566	.69	12.1
DCA36J-2S-D◆	1	634	14354	1.06	13.3	13784	1.10	12.3	13199	1.13	11.4	12894	1.15	11.0	12577	1.16	10.6
DCA42G-2S-D	1/2	356	13954	.54	21.7	12704	.54	18.8	11282	.58	16.1	10527	.59	14.8	9471	.59	13.2
DCA42H-2S-D	3/4	413	15762	.77	18.6	14674	.80	16.7	13473	.80	14.9	12788	.84	13.9	12023	.85	12.9
DCA42J-2S-D◆	1	485	20916	1.17	17.6	19872	1.21	16.1	18779	1.25	14.8	18192	1.26	14.2	17564	1.27	13.5
DCA48G-2S-D	1/2	276	15814	.42	31.2	14065	.45	25.8	11617	.47	20.5	8683	.48	15.0	6728	.50	11.2
DCA48H-2S-D	3/4	314	17988	.65	25.1	16496	.68	21.9	14757	.72	18.7	13302	.72	16.7	11222	.73	14.0
DCA48J-2S-D◆	1	382	21687	1.09	19.5	20343	1.15	17.5	18896	1.20	15.5	18096	1.22	14.7	17227	1.23	13.8
DCA54J-2S-D◆	1	356	26900	1.14	22.0	25051	1.19	19.7	22745	1.23	17.4	21315	1.24	16.2	19750	1.25	14.8

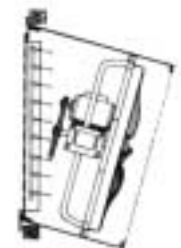
Performance includes the effects of slant housing, shutter, guards and diffuser cone in the airstream.

Two speed models are not licensed to bear the AMCA seal.
 ◆ 1 Horsepower models available in 230/1 only.
 Performance shown is for installation type A - Free inlet, Free outlet.

MODEL WS SLANT WALL HOUSING

- Slant arrangement protects motor and drives from weather.
- Constructed of heavy gauge galvanized steel or aluminum.
- High air flow capacity - shutter directs air to fan.
- Select fan at .05" sp. instead of .10".
- Includes guard on outlet side.
- Shutter and inlet guard held in place by quick release clips.
- Wiring knockout allows wiring connections inside building.

FAN SIZE	FOR DCA MODEL FAN			
	WALL HOUSING		SHUTTER	
	MODEL	WT	MODEL	WT
24"	WS24DC	35	WAA2727	14
30"	WS30DC	42	WAA3333	20
36"	WS36DC	46	WAA3939	27
42"	WS42DC	53	WAA4545	30
48"	WS48DC	78	WAA5454	44
54"	WS54DC	106	WAA6060	54



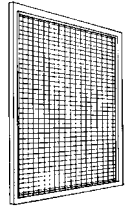


Discharge Air Diffuser Cone

Made of galvanized steel or aluminum, the cone increases air flow with the same HP and includes safety guards, brackets and hardware for easy mounting. Cone is designed for use with slant wall collar (not slant housing) and shipped knocked down.

Aluminum Shutters

- All aluminum construction.
- Counter balanced blades.
- Nylon bearing.
- Stainless steel hinge pins.
- Low air resistance.
- Reduces sticking in dusty and moist conditions.



Guards

- Galvanized heavy gauge welded wire in aluminum frames.

Fan Size	Guard Model for Slant Housing	
24"	GS24	5 lbs.
30"	GS30	7 lbs.
36"	GS36	10 lbs.
42"	GS42	12 lbs.
48"	GS48	15 lbs.
54"	GS54	18 lbs.

CAUTION! Guards are strongly recommended when the fan is installed within seven (7) feet of floor, working level or within reach of personnel. Guards complying with OSHA regulations are available as optional equipment. Review OSHA Codes and obtain a quotation.

WARNING Acme products are designed and manufactured to provide reliable performance but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by the User. If these products are used in a life support ventilation system where failure could result in loss or injury, the User should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

WARNING DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments.

CAUTION Guards must be installed when fan is within reach of personnel or within seven (7) feet (2.134 m) of working level or when deemed advisable for safety.

DISCLAIMER The Company has made a diligent effort to illustrate and describe the products in this literature accurately; however, such illustrations and descriptions are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose, or that the products will necessarily conform to the illustrations or descriptions or dimension.

WARRANTY AND DISCLAIMER: Acme Engineering and Manufacturing Corporation extends this limited warranty to the original buyer and warrants that products manufactured by the Company shall be free from original defects in workmanship and materials for two years from date of shipment, provided same have been properly stored, installed, serviced, maintained and operated. This warranty shall not apply to products which have been altered or repaired without the Company's express authorization, or altered or repaired in any way so as, in the Company's judgment, to affect its performance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. The Buyer assumes all risks and liability for results of use of the products. Warranties on purchased parts, such as but not limited to bearings, sheaves, belts, couplings, electric motors, pumps, controls and heaters are limited to the terms of warranty extended by our supplier.

Polyethylene tubing and cooling pads are warranted to be free of defects in material and workmanship for a period of 90 days from date of shipment and a like warranty applies to the cross fluted cellular type cooling cells for a period of two years from date of shipment provided same have been properly handled, stored, installed, serviced, maintained and operated. And further, not subjected to excessive heat, corrosive agents or chemicals, or mechanical abuse that may cause tearing, crushing or undue deterioration nor used on a system or in a manner other than that for which it was designed as explained in the product literature.

LIMITATION OF REMEDY AND DAMAGES: All claims under this warranty must be made in writing and delivered to P. O. Box 978, Muskogee, Oklahoma, 74402, within 15 days after discovery of the defect and prior to the expiration of two years from the date of shipment by the Company of the product claimed defective, and Buyer shall be barred from any remedy if Buyer fails to make such claim within such period.

Within 30 days after receipt of a timely claim, the Company shall have the option either to inspect the product while in Buyer's possession or to request Buyer to return the product to the Company at Buyer's expense for inspection by the Company. The Company shall replace, or at its option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to Buyer F.O.B. point of shipment; provided, however, if circumstances are such as in the Company's judgment to prohibit repair or replacement to remedy the warranted defects, the Buyer's sole and exclusive remedy shall be a refund to the Buyer of any part of the invoice price, paid to the Company, for the defective product or part.

The Company is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from the Company's plant, or the installation of the repaired or replaced product or part.

Implied warranties, when applicable, shall commence upon the same date as the express warranty provided above, and shall, except for warranties of title, extend only for the duration of the express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. The only remedy provided to you under an applicable implied warranty and the express warranty shall be the remedy provided under the express warranty, subject to the terms and conditions contained therein. The Company shall not be liable for incidental and consequential losses and damages under the express warranty, any applicable implied warranty, or claims for negligence, except to the

extent that this limitation is found to be unenforceable under applicable state law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

No employee, agent, dealer, or other person is authorized to give any warranties on behalf of the Company or to assume for the Company any other liability in connection with any of its products except in writing and signed by an officer of the Company.

REPLACEMENT PARTS If replacement parts are ordered, buyer warrants that the original components in which these replacement parts will be placed are in satisfactory working condition, and when said replacement parts are installed, the resultant installation will operate in a safe manner, at speeds and temperatures for which the original equipment was purchased.

TECHNICAL ADVICE AND RECOMMENDATIONS, DISCLAIMER: Notwithstanding any past practice or dealings or any custom of the trade, sales shall not include the furnishing of technical advice or assistance or system design. Any such assistance shall be at the Company's sole option and may be subject to additional charge.

The Company assumes no obligation or liability on account of any recommendations, opinions or advice as to the choice, installation or use of products. Any such recommendations, opinions or advice are given and shall be accepted at your own risk and shall not constitute any warranty or guarantee of such products or their performance.

GENERAL In no event shall any claim for consequential damages be made by either party. The Company will comply with all applicable Federal, State, and local laws.



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