

# ***Air Movement*** SOURCE BOOK

ACME AIR MOVING SOLUTIONS

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Est. 1938



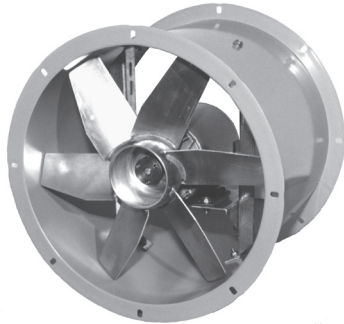
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# Direct Drive Tubeaxial Fan Model HDD

Includes the following Model/Options	
HDD	General Ventilation

Inline Axial Fans

Model HDD fan is a direct drive, tubeaxial exhauster with the motor in the airstream. Capacities up to 14,792 CFM and up to 3/4 inch static pressure. The compact design provides easy installation with ducted ventilation systems. The HDD is designed to operate in any position and is furnished with mounting flanges on both ends for easy installation.



Standard Construction Features	HDD
Heavy Gauge Rolled Steel	x
Charcoal Baked Enamel w/UV Inhibitors	x
Integral Inlet and Outlet Flanges	x
Aluminum Propeller	x
Motor in the Airstream	x
Continuous Duty Motors	x
NEMA 1 Disconnect Mounted and Wired	x
UL705	x

\*Fans with EXP motors receive an EXP disconnect not mounted or wired  
Listed models are available in all sizes and performance ranges.  
For submittals, detailed air and sound information, available options and accessories, please go to FANtastic!® Commercial [www.acmefan.com](http://www.acmefan.com).

## Construction Features

### Housing

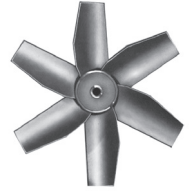
- Rolled flange at each end for ease of mounting
- Steel fasteners are zinc dichromate plated

### Coating

- All steel components shall have ACME-SEAL polyester powder coating

### Aluminum Propeller

- Heavy duty, all welded aluminum construction
- Precision balanced circular-arc blades for high airflow capacity



### Disconnect Switch

- All units are equipped with a factory wired disconnect switch
- Explosion proof switch separate when explosion proof motors are selected

### Motors

- Continuous duty motors located in the airstream
- Motors shipped mounted to the fan

## Options/Accessories

- Coatings
- 2 Speed Switch
- Solid State Speed Controller
- Companion Flange
- Mounting Base
- Guards
- Isolators



Acme Engineering & Manufacturing Corporation certifies that the models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



U.L. 705 Listed

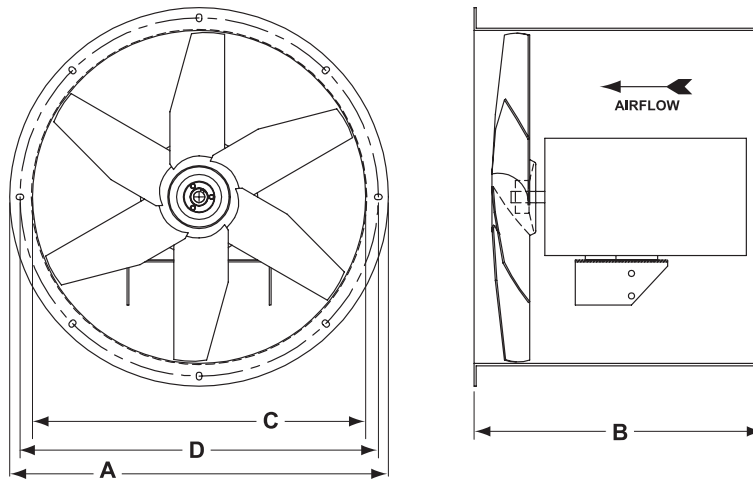


CSA Certified

Consult your Acme representative for availability.



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DIMENSIONS				
Fan Model	A	B	C	D
HDD12	14.56	14.00	12.22	13.44
HDD16	18.50	14.00	16.10	17.50
HDD18	21.00	16.00	18.48	19.88
HDD21	23.88	16.00	21.25	22.56
HDD24	26.88	18.00	24.44	25.75
HDD30	33.64	21.00	30.60	32.25

Dimensions are shown in inches.

## HDD12E4

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1750	1625		1468											
	0.13	11.1	0.14	12.3										

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD12E4	1/4 Hp	1750 - 1750	35	40

## HDD16F4

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1750	2762		2603		2379									
	0.32	22	0.35	20	0.36	19.8								

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD16F4	1/3 Hp	1750 - 1750	45	50

## HDD18G4

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1160	2608		2304		1790									
	0.12	7.0	0.14	9.4	0.15	11.3								
1750	3936		3728		3525		3329		3049					
	0.41	20	0.44	24	0.48	26	0.50	28	0.52	30				

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD18G4	1/2 Hp	1160 - 1160	64	74
HDD18G4	1/2 Hp	1750 - 1750	64	74

Performance certified is for Installation Type A: Free Inlet, Free Outlet. The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances (accessories).

## HDD18H4

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1160	3093		2734											
	0.20	8.8	0.22	10.7										
1750	4668		4434		4197		3935		3667					
	0.69	26	0.72	28	0.74	30	0.77	32	0.80	34				

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD18H4	3/4 Hp	1160 - 1160	68	74
HDD18H4	3/4 Hp	1750 - 1750	68	74

## HDD21J4

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1750	6190		5997		5757		5479		5189		4895		4492	
	0.85	27	0.90	27	0.95	26	1.00	24	1.05	24	1.08	25	1.10	31

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD21J4	1 Hp	1750 - 1750	75	85

## HDD24J6

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
580	4196													
	0.11	5.4												
1160	8403		7962		7437									
	0.90	20	0.95	22	1.00	23								

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD24J6	1 Hp	580 - 1160	108	130

Performance certified is for Installation Type A: Free Inlet, Free Outlet. The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances (accessories).

# HDD30

PERFORMANCE DATA														
CFM and Sones vs. Static Pressure														
RPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
232	3159													
	0.02	0.9												
1160	15902		15339		14772		14190		13538		12865		12042	
	2.65	27	2.74	28	2.84	30	2.93	31	3.02	33	3.11	34	3.19	34

Fan Model	HP	RPM Range	Est. Unit Wt. lbs.	Est. Ship Wt. lbs.
HDD30M6	3 Hp	232 - 1160	237	241

Performance certified is for Installation Type A: Free Inlet, Free Outlet. The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances (accessories).

**Your Representative is**

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**Form C189J**