

High Volume, Low Speed Fans

Model DS-M

Direct Drive HVLS



BUILDING VALUE IN AIR.



June
2023

Model DS-M HVLS Fan



Whether it is for comfort cooling, destratification, or architectural purposes, we have you covered! Greenheck provides you with the highest performing fans on the market through our extensive research, testing and product offering.

Greenheck's Model DS-M3 is an efficient and economical three-blade, direct drive fan designed for commercial or industrial spaces with medium to high ceilings. These fans are the ideal balance of cost and performance, making the DS-3 a smart choice for budget-conscious building owners. Plus, with a lighter weight than comparable overhead fans, the DS-3 is a breeze to install in any building.

- Fan diameters between 10 and 24 feet
- Up to 176,900 cfm
- AMCA Circulating Fan Performance

Greenheck's Model DS-M6 is a six-blade, direct drive fan designed for commercial or industrial spaces with medium to high ceilings. As the industry's best performing overhead fan, the DS-6 delivers unrivaled airflow at incredibly quiet sound levels. Along with reduced operating costs, the DS-6 is clearly the best value overhead fan on the market.

- Fan diameters between 10 and 24 feet
- Up to 243,000 cfm
- AMCA Circulating Fan Performance

Features and Benefits

- Budget friendly, direct drive fan for medium to large spaces
- Industry's easiest installation
- Multiple configurations
- Variety of applications
- Extended warranties



We are known worldwide as a leading manufacturer that provides high-quality air movement and control equipment. Our HVAC (heating, ventilation, air-conditioning) products efficiently move air in a variety of commercial and industrial spaces.



Stadiums and arenas



Automotive facilities



Distribution centers



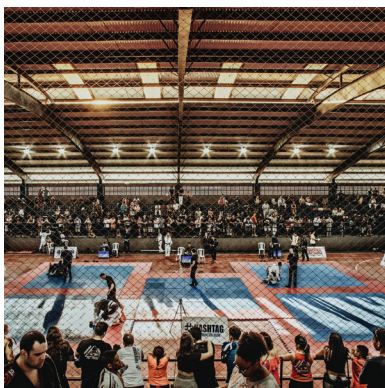
Agricultural facilities



Airports




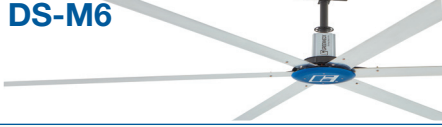
Manufacturing facilities



Gymnasiums

Typical Applications

- Room air stratification
- Comfort cooling
- Pest deterrence

	DS-M3	DS-M6
		
Building Types	Commercial and Industrial	Commercial and Industrial
Max CFM Range	43,500 - 176,900 cfm	46,700 - 243,000 cfm
Max Coverage Area Range m ² /(ft ²)	1,078 - 1,737 m ² (11,603 - 18,697 ft ²)	1,263 - 2,202 m ² (13,595 - 23,702 ft ²)
Fan Size m/(ft)	3.05 - 7.4 m / (10 - 24 ft)	3.05 - 7.4 m / (10 - 24 ft)
AMCA Certification	Circulating Fan Performance	Circulating Fan Performance
Universal Ceiling Mount	✓	✓
Weight kg/(lbs)	50 - 65 kg / (110 - 144 lbs)	63 - 101 kg / (138 - 222 lbs)
Direct Drive Motor kw/(hp)	0.55 kw/(0.75 hp)	0.55 kw/(0.75 hp) - 1.1 kw/(1.5 hp)
Voltage & Phase	220-240/1, 220-415/3	220-240/1, 220-4415/3
Forward and Reverse Operation	✓	✓
Drop Length (ft)	3.5 -10.0 ft	3.5 - 10.0 ft
Airfoil Finish	Mill	Mill
Accent Color	Black	Black
30 m / (100 ft.) of CAT-5e Control Cable	✓	✓
Fire Relay (For Fire Suppression System)	✓	✓
Mechanical Warranty	10 Years	10 Years
Electrical Warranty	1 Year	1 Year

Standard Construction Features

Airfoils - Unique extruded aluminum airfoil shape maximizes airflow and coverage area.

Intelligent VFD and Motor - Factory-mounted, wired and programmed variable frequency drive (VFD). Direct drive motor and VFD combination result in high-efficiency, low sound and ultra-light installation. Smart features include over-speed and impact detection dia 10-24 only along with temperature, voltage and current monitoring.

Fire Relay - Keep your buildings and products safe. Low voltage relay can be wired into a building's fire suppression system for automatic fan shutdown when sprinklers are activated.

Guy Wire Kit - Braided steel guy wires prevent lateral fan movement for safe installations.

Model DS-M: 6.1 meters (20-foot) guy wires included with all drop lengths.

Certifications



Greenheck India Pvt. Ltd. certifies that the DS-M model 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 comply with the requirements of the AMCA Certified Ratings Program.

The AMCA Certified Ratings Seals applies to air performance ratings only. The AMCA Certified Ratings Seal applies at free delivery only. Performance ratings do not include the effects of appurtenances (accessories).

Optional Accessories and Controls

Mounting Kits - Designed to mount to a variety of building structures. Kit options available for I-beam, steel truss, Unistrut®, wood beam, and Z-purlin construction.

Extended Drop Lengths - By using extended drop lengths, the fan can accommodate every space, even sloped ceilings. Various drop lengths are available.

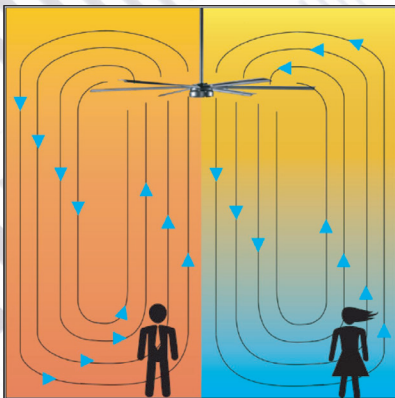
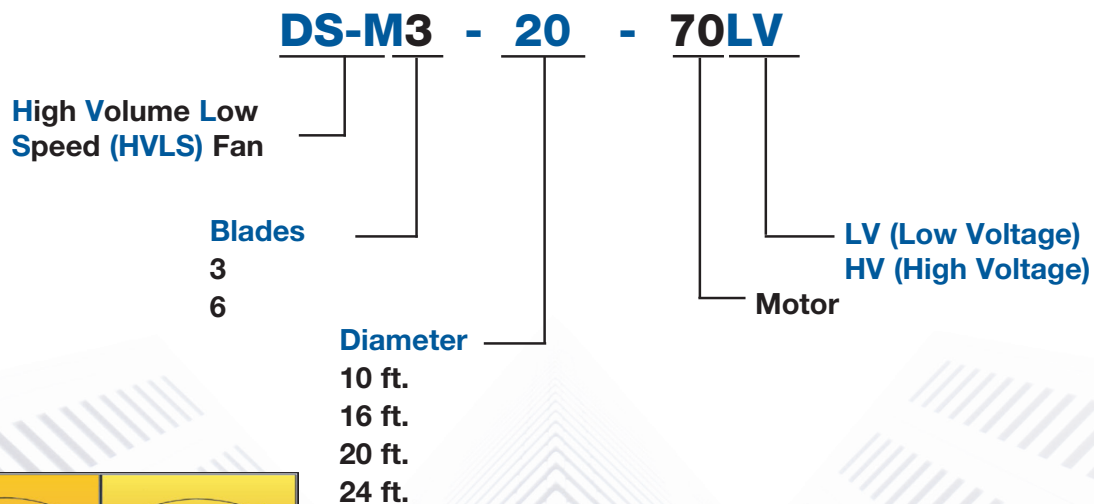
Model DS-M: 1.0 to 3.0 meters (3.5 to 10 foot)

Extended Length CAT-5e Control Cable - Allow flexibility with the installation and placement of control options by selecting pre-assembled 40 m or 60 m (150 ft. or 200 ft.) CAT-5e cables. Or, customize individual cable lengths with 305 m (1,000 ft.) bulk spools of CAT-5e cable and 20 RJ45 end connectors.

HVLS Standard Touchscreen Control - Features a sleek design that fits in a standard 2x4 junction box and has an intuitive LCD screen. Allows the user to operate up to 3, 5, or 10 fans with any combination of models and sizes. The touchscreen offers password protection along with advanced diagnostics for ease of troubleshooting.

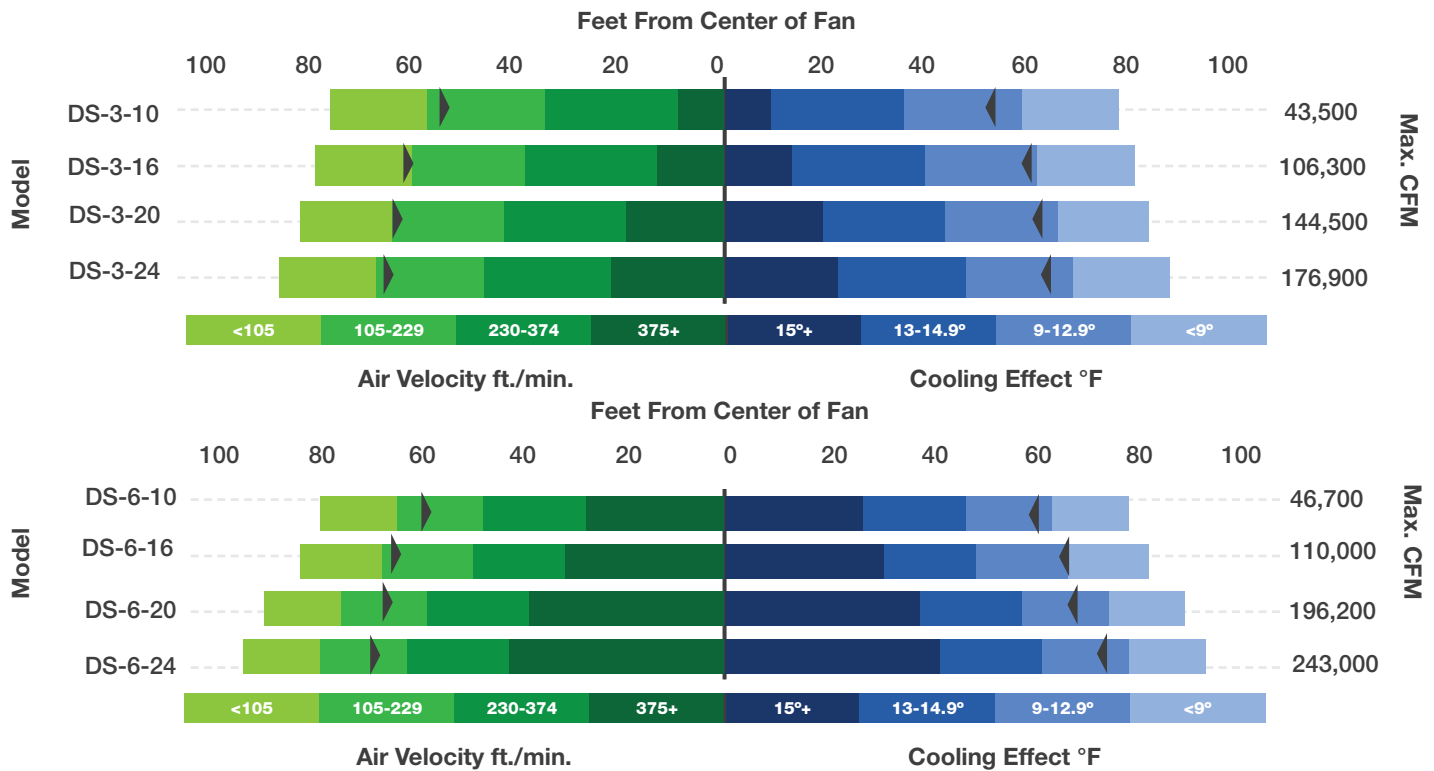


Model Number Code



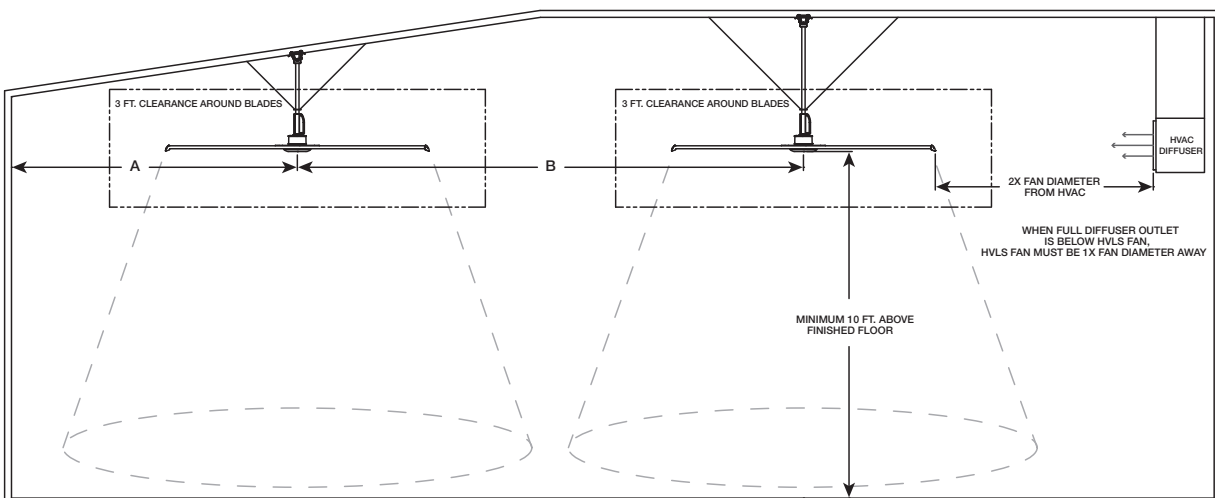
Air Velocity Selection Guide

It is important to understand how the size and aerodynamics of the fan affect the velocity of air movement and the benefits of increased air in the building area. Selection guides such as the one shown below help identify the best HVLS fan for your application based on fan size and aerodynamics. This selection guide uses the widely respected and accepted ANSI/ASHRAE 55 Standard to illustrate the perceived cooling effect that happens with the addition of HVLS fans.



Recommended Max. Coverage Area

Testing conditions are based on a fan operating at full speed mounted 6.1 meters (20 feet) above the floor with air velocity measured at a height of 1.2 meters (4 feet).



Air Performance

Model DS-M3

Fan Diameter (ft)	Fan RPM	CFM	Total Sound Pressure (dBA)	Max. Coverage Area (sq ft)	Max. Coverage Radius (ft)	Min. Fan Spacing (ft)	**CFEI at 40% Speed	**CFEI at 100% Speed	Base Fan Weight (lbs)	Input Power (W)	Stand Power (W)
10	141	43,500	46	11600	61	30	2.30	1.73	110	346	11
16	101	106,300	48	14200	68	48	2.82	1.28	123	766	11
20	76	144,500	48	17200	74	60	2.64	1.19	133	837	13
24	56	176,900	48	18700	78	72	2.88	1.27	142	725	13

**Ceiling Fan Energy Index (CFEI) based on ANSI/AMCA Standard 208 and 10 CFR 430

Model DS-M6

Fan Diameter (ft)	Fan RPM	CFM	Total Sound Pressure (dBA)	Max. Coverage Area (sq ft)	Max. Coverage Radius (ft)	Min. Fan Spacing (ft)	**CFEI at 40% Speed	**CFEI at 100% Speed	Base Fan Weight (lbs)	Input Power (W)	Stand Power (W)
10	136	46,700	49	13,600	66	30	2.59	1.18	138	585	11
16	81	110,000	48	16200	72	48	2.92	1.45	165	734	11
20	78	196,200	52	21,600	83	60	2.72	1.44	204	1428	11
24	61	243,000	50	23,700	87	72	2.82	1.14	222	1676	11

**Ceiling Fan Energy Index (CFEI) based on ANSI/AMCA Standard 208 and 10 CFR 430



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Model DS-M

Ceiling mounted circulation or destratification fans shall be of the large diameter direct drive (high volume, low speed) type.

Fan construction shall include a universal ceiling mount that is designed for fast and secure connection to a variety of ceiling substrates via heavy-duty mounting hardware kits (specified upon order). Universal ceiling mount shall be constructed of heavy gauge steel and shall include a bidirectional pivot to accommodate any ceiling angle. Fans shall also include a heavy gauge steel downtube to provide a structural connection between the universal ceiling mount and fan motor. Downtube shall include a factory-programmed variable frequency drive. Downtube shall also include a welded guy wire connection ring for fast and secure connection of the fan's guy wires. All components of the universal ceiling mount and downtube shall be powder-coated for corrosion resistance and aesthetic appearance.

Motors shall be of the high torque, low-speed direct drive type, carefully matched to the fan load and furnished at the specified voltage and phase. Motors shall include plug-and-play connectors for power and control wiring to the variable frequency drive. Motors shall also be provided with a factory-installed hub that consists of heavy-gauge, precision-cut aluminum plates and machined aluminum struts for ease of airfoil installation.

Airfoils shall be constructed of 6005A-T6 extruded aluminum with a unique aerodynamic profile that has been optimized for maximum airflow and efficiency. Airfoils shall be provided with a mill finish as standard, with additional finishes available in a variety of types and colors (specified upon order). Airfoils shall also be provided with precision-cut, powder-coated aluminum winglets as standard.

Fan shall be provided with a multi-point, redundant safety system comprised of a heavy-duty safety retention cable, guy wire kit, hub retention system, and airfoil retaining ring as standard.

Fan shall bear a manufacturer's nameplate containing the model number and individual serial number for future identification.

Fan shall be Model DS-M as manufactured by Greenheck India Private Ltd. of Bawal, India.

Design and Selection Support

Enjoy Greenheck's extraordinary service, before, during and after the sale.

Greenheck offers added value to our wide selection of top performing, energy-efficient products by providing unique Greenheck service programs.



Greenheck's free computer aided product selection program CAPS® is rated by many as the best in the industry. CAPS helps you conveniently and efficiently select the right products for the challenge at hand.

Greenheck continues to take an industry-wide leadership position to affect positive global sustainability. We believe that providing education on products we offer contributes to reducing energy consumption and improving healthier indoor environments.

Find out more about these special Greenheck services at greenheck.com or greenheck.co.in



Building Value in Air

Greenheck delivers value to mechanical engineers by helping them solve virtually any air quality challenges their clients face with a comprehensive selection of

top quality, innovative air-related equipment. We offer extra value to contractors by providing easy-to-install, competitively priced, reliable products that arrive on time.

And building owners and occupants value the energy efficiency, low maintenance and quiet dependable operation they experience long after the construction project ends.

Our Commitment

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

Product warranties can be found online at Greenheck.com, either on the specific product page or in the literature section of the website at Greenheck.com/Resources/Library/Literature.



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Greenheck India Private Ltd has been independently audited and confirmed as being in conformity with ISO 9001:2015 and ISO 14001:2015.

