Mancoolers
Models MCY, MCB, MCP

GREENHECK®
Building Value in Air.

October 2007

Mancoolers

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Greenheck Model MC Mancooler fans are direct drive, tube axial fans designed for applications where localized air direction and circulation are required. Mancoolers increase comfort levels in high temperature work environments, cool processes and equipment, remove smoke and fumes and generate a barrier for insects. These fans are also effective in destratifying air. Warm air accumulated at ceiling level can be directed toward the floor, and hot spots can be dissipated. Destratifying reduces energy costs and directs warm air where it is needed. Multiple mancoolers can also be used as part of a general plant ventilation system to improve air quality and general comfort.

All fans sizes have been thoroughly tested in Greenheck's modern AMCA registered research and development facility to ensure complete and accurate performance ratings. Model MC is licensed to bear the AMCA Certified Ratings Seal for Air Performance.

Sizes:
Available in seven sizes, 18 — 48 in.

Performance:
3,000 - 33,000 cfm with guards
3,400 - 37,000 cfm without guards

Performance capabilities are obtained through combinations selected from a broad range of blade options (2, 3, 4 or 6), propeller pitches and motor RPMs (860, 1140 or 1725).

Standard Construction Features

Finish: All structural steel components are coated with Permatector™, a thermosetting polyester urethane, for a long lasting finish.

Housings are constructed of heavy gauge, continuously welded steel with rolled inlet and outlet flanges for additional strength and rigidity.

Heavy duty ball bearing **motors** are carefully matched to the fan load and are available open drip proof, or totally enclosed.

Rigid structural steel **motor supports** are welded to the fan housing.

Motor wiring is provided to a NEMA-1 handy box mounted on the exterior of the fan housing. (Disconnect switch is optional)

Unit shown is Model MCB base mount with optional casters

Model MC **propellers** and hubs are designed to produce a high level of efficiency over a broad selection range. Tapered airfoil blades are cast as one piece in durable aluminum alloy. Each propeller is statically and dynamically balanced.

OSHA Guards
Protective guards are constructed of welded wire rings coated with Permatector™. Rings are spaced at a minimum of 1/2 in. to meet OSHA requirements.

Greenheck Fan Corporation certifies that the MC fans 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 Programs.

Leading Edge Support

All Greenheck products are supported by the industry's best product literature, electronic media, and Computer Aided Product Selection program (CAPS). You'll also find extensive product and Installation and Operation and Maintenance Manuals (IOM) information on the Internet.

And, of course, you can always count on the personal service and expertise of our national and international representative organization. To locate your nearest Greenheck representative call 715-359-6171 or visit our website at www.greenheck.com

Mounting Arrangements

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Three mounting arrangements offer maximum directional flexibility and ease of mounting. Options include beam, base (available with or without casters) and portable mounts.

Yoke Mount — Model MCY

This mounting arrangement allows Model MC fans to be mounted on vertical or horizontal beams. Airflow direction is unlimited. The fan housing can rotate 360° within the yoke, which can also rotate 360° on its axis.

The beam mount allows the fan to be mounted near the ceiling to destratify trapped warm air. This results in reduced heating costs. With maximum directional flexibility, the beam mounted fan can also be positioned to provide spot cooling in the exact location required.

To ensure proper installation, the beam or other structure the fan is to be mounted on must be capable of supporting fan weight.

Base Mount — Model MCB

The base mount allows Model MC fans to be mounted directly to floors, walls or ceilings. Fans can be rotated a full 360°.

Mounted high on walls or ceilings, Model MC fans can circulate heated air and reduce heating costs. They can also be mounted near heat-producing processes to balance temperatures and cool personnel in the vicinity. The caster mounted option (shown above) allows even the largest size fans to be portable.

Model MC fans are designed for stability with wide-set casters and a low center of gravity.

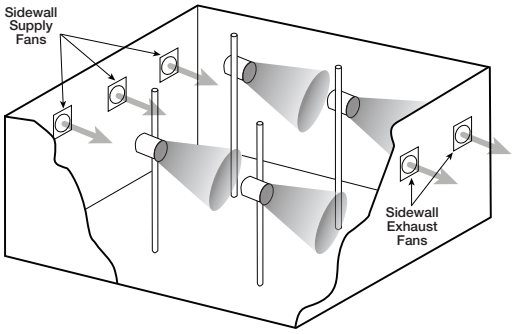
Portable — Model MCP

This portable mount is available for Model MC fan sizes 18 through 36 inches. Single phase motors are recommended. Two polymer wheels and a steel handle are attached to the fan housing. Housing position is fixed to deliver horizontal airflow (fan housing does not rotate).

Where cooling needs do not require a large fan but do require portability, the portable mount option is the most economical option for process and personnel cooling.

Multiple Mancooler Installation

Multiple mancoolers can be used as part of a general plant ventilation system to improve air quality and individual comfort. In the winter, they can move hot air from the ceiling to the floor and break up hot spots generated by unit heaters. (see diagram).



Options and Accessories

Casters - Four casters allow base mounted fans to be moved easily. Casters are constructed with durable, non-marketing polymer wheels. Two of the four are fixed in position. The other two swivel and lock.

Inlet Bells - Inlet bells minimize entry losses and increase outlet air volumes approximately 8%.

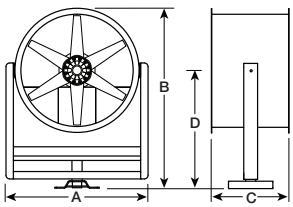
Special Coatings - A baked enamel finish is available to match or complement building color. Protective coatings are also available. These include epoxy, tung oil phenolic and air dry phenolic.

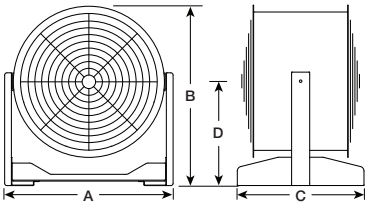
Disconnect Switches - NEMA-1 disconnect switches are available for applications where a visible disconnect is required to be mounted on the exterior of the unit for positive electrical shutoff or when servicing the fan. Other switch enclosures are available upon request.

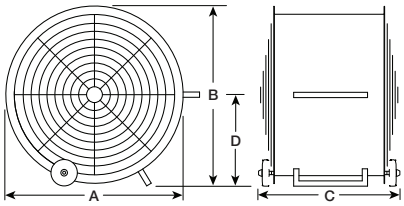
Motor Selection

<table>
<tr><th rowspan="2">HP</th><th colspan="3">Open</th><th colspan="2">TE</th></tr>
<tr><th>115V
1PH</th><th>230V
1PH</th><th>200
or
230/460V
3PH</th><th>115
or
230V
1PH</th><th>200
or
230/460V
3PH</th></tr>
<tr><td>1/4</td><td rowspan="3">860
1140
1725</td><td rowspan="4">1140
1725</td><td>1140
1725</td><td colspan="2">860, 1140, 1725</td></tr>
<tr><td>1/3</td><td rowspan="4">860
1140
1725</td><td rowspan="3">1140
1725</td><td rowspan="6">860
1140
1725</td></tr>
<tr><td>1/2</td></tr>
<tr><td>3/4</td><td rowspan="2">1140
1725</td></tr>
<tr><td>1</td><td rowspan="5">860
1140
1725</td></tr>
<tr><td>1½</td><td rowspan="4">1725</td><td rowspan="4">1725</td><td rowspan="3">1725</td></tr>
<tr><td>2</td></tr>
<tr><td>3</td></tr>
<tr><td>5</td><td>1725*</td></tr>
</table>

*Only available in 230 single phase.
575V 3 phase is only available in motors 1/2 hp and greater (1725 rpm only)
Each column contains available motor RPMs based on HP, voltage and enclosure.
2-speed motor selections are available, consult factory representative.







Fan Size	YOKE MOUNT*					BASE MOUNT					PORTABLE				
	A	B	C	D	Unit Weight	A	B	C	D	Unit Weight	A	B	C	D	Unit Weight
18	27	36	18	25½	140	26	28	22	17	120	24	22	24½	11	90
20	29	39	19	27	160	28	29	23	17½	140	26	24	25½	12	100
24	33	42	19	28½	190	32	33	28	19½	170	30	28	25½	14	130
30	39	49	21	32	240	38	40	28	23	220	37	35	27½	17½	170
36	45	55	21	35½	350	45	47	34	27	330	43	41	27½	20½	270
42	51	64	27	41	600	51	53	40	30	590					
48	58	70	27	43	660	58	60	42	33½	660					

NOTE: To ensure proper installation, beam or other structure fan is to be mounted on must be capable of supporting fan weight.
Weights (lbs.) shown include the motor weight for the maximum frame size motor.
Columns A, B, and C have been rounded up to the nearest inch.
*Yoke mount shown without guards.

Sound

The sound power that a mancooler emits is another consideration in fan selection. All sound tests were conducted in accordance to AMCA Standard 300, Figure 1 - "Total Sound Testing". This test method includes the sound power generated at both inlet and outlet and also includes the sound radiated from the fan casing. Sound power levels at eight octave bands are available from the factory upon request.

To simplify the sound data, a single number sound pressure level (dBA) has been calculated and included in the performance page. This number is a logarithmic sum of the A-weighted pressure levels in each octave band calculated at a distance of 5 ft. from the fan. The A-weighting network is a correction applied to the measured sound which accounts for the response of the human ear to sound pressure.

Sound pressure levels are roughly proportional to the tip speed of the propeller (rpm x propeller diameter). For a given diameter fan, higher motor speeds will generate higher sound levels. For a given motor speed (e.g. 1140 rpm), larger diameter fans will be louder.

The following chart suggests fan sound pressure levels for different applications. Fans and other equipment that generate a room sound pressure level of 85 dBA or greater are subject to OSHA regulations. Ambient sound levels of installation site should be considered in making the fan selection. Fan dB rating should not exceed ambient sound level where sound is a critical factor.

Application	Suggested Fan Sound Pressure Levels dBA @ 5 ft.	Mancooler Size Range		
		860 rpm	1140 rpm	1725 rpm
Warehouse, Machine Shop Stock Rooms	65-75	30	18-30	18
Light Manufacturing, Assembly Lines, Garages	76-85	30-42	24-36	18-24
Heavy Manufacturing, Foundries, Stamping	85 +	42-48	30-48	24-30

The sound pressure levels shown in the performance pages are calculated at a distance of 5 ft. from the fan. Sound pressure levels are reduced 6 dB for each doubling of the distance from the fan. For example, a mancooler that generates 86 dB at 5 ft. will measure 80 dB at 10 ft. and 74 dB at 20 ft. Since tube axial mancoolers have a relatively long throw, they can be located far from the worker level.

The air and sound application data in this catalog was based on actual tests conducted in Greenheck's laboratory without the presence of obstructions in the airstream. Walls, ceilings, equipment and other high velocity airstreams will disturb the airflow and serve as sound reflecting surfaces. These obstructions to airflow must be accounted for by the system designer when sizing and selecting mancoolers.

Selection

To make a Mancooler selection from the performance pages, the CFM and/or outlet velocity must first be determined. The CFM is used mainly as an indicator of air mixing capacity. The outlet velocity is used to determine the terminal velocity at a specified distance from the fan.

The air velocity downstream from the fan depends on the initial outlet velocity, the fan diameter, and the distance from the fan.

$$V_{CL} = \frac{K\ (O.V.)}{X} = \frac{K\ (cfm)}{X\ (O.A.)}$$

VCL = Maximum velocity along the centerline of the fan [fpm]
O.V. = Outlet velocity - CFM divided by fan outlet area [fpm]
O.A. = Outlet area - [ft²]
X = Distance from fan discharge [ft]
K = Constant dependent on unit size

Note: Equation is accurate for X greater than 10 ft. and centerline velocities over 100 fpm.

Unit	K		O.A. (Outlet Area) [ft²]
	Without Guards	With Guards	
18	4.7	3.3	1.84
20	5.3	3.6	2.27
24	6.3	4.3	3.24
30	7.8	5.4	5.03
36	9.4	6.4	7.22
42	11.0	7.5	9.85
48	12.5	8.6	12.83

An approximate airstream velocity used to cool personnel is 150 fpm. Light objects such as papers on a desk tend to move at about 170-190 fpm. Velocities over 400 fpm should be avoided in applications for cooling personnel.

THROW is defined as the distance from the fan to a specified terminal velocity.

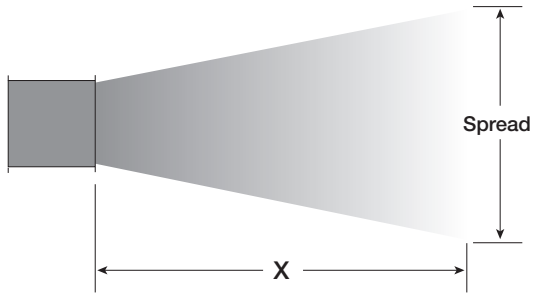
$$\text{Throw [ft]} = \frac{K\ (O.V.)}{\text{Terminal Velocity [fpm]}}$$

Throw [ft] for a Terminal Velocity of a 150 fpm (Fan with Guards)					
Unit	Outlet Velocity				
	1500	2000	2500	3000	3500
18	33	44	55		
20	36	48	60		
24	43	57	72	86	100
30	54	72	90	110	130
36	64	85	110	130	150
42	85	100	130	150	
48	86	115	140	170	

The area of coverage or **SPREAD** of the airstream is virtually independent of unit size or velocity, and varies only with the distance from the fan.

Spread [ft] = 2.5 + 0.39 (X)

X = Distance from fan (ft.)	10	20	30	40	60	80	100
Spread (ft.)	6	10	14	18	26	34	42



Model Numbering System

The model numbering system is designed to completely identify the fan. The correct code letters and numbers must be specified to designate the size and performance selected from pages 6-7.

*Motor rpm
C = 860
B = 1140
A = 1725

**Motor hp
4 = 1/4 hp
3 = 1/3 hp
5 = 1/2 hp
7 = 3/4 hp
10 = 1 hp
15 = 1½ hp
20 = 2 hp
30 = 3 hp
50 = 5 hp

MCY - 18 - 4 36 - B 4

- MCY — Mancooler
- Y-Yoke Mount / B- Base Mount / P- Portable
- 18 — Propeller Diameter
- 4 — Number of Blades
- 36 — Propeller Pitch
- B — Motor RPM*
- 4 — Motor HP**

Performance Data

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MC-18

Outlet area = 1.84 ft. Max Motor Frame Size = 145T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
1140 (5372)	1/4	MC-18-436-B4	3460	.287	69	1880	59	MC-18-436-B4	3090	.284	68	1680	37
	1/3	MC-18-635-B3	3740	.370	71	2030	64	MC-18-636-B3	3360	.381	70	1830	40
1725 (9032)	1/4	MC-18-221-A4	3300	.284	75	1790	56	MC-18-221-A4	3040	.283	74	1650	36
	1/3	MC-18-226-A3	3720	.387	76	2020	63	MC-18-228-A3	3370	.380	77	1830	40
	1/2	MC-18-329-A5	4330	.579	79	2350	74	MC-18-328-A5	3890	.569	77	2110	46
	3/4	MC-18-338-A7	4940	.863	80	2690	84	MC-18-432-A7	4450	.845	80	2420	53
	1	MC-18-440-A10	5530	1.17	82	3010	94	MC-18-440-A10	4860	1.13	82	2640	58

MC-20

Outlet area = 2.27 ft. Max Motor Frame Size = 145T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
1140 (5969)	1/4	MC-20-429-B4	3980	.285	71	1750	62	MC-20-425-B4	3620	.286	69	1600	38
	1/3	MC-20-432-B3	4450	.382	71	1960	69	MC-20-432-B3	3970	.383	71	1750	42
	1/2	MC-20-636-B5	5170	.588	74	2280	81	MC-20-635-B5	4600	.566	73	2030	49
1725 (9032)	1/4	MC-20-210-A4	3300	.282	77	1450	51	MC-20-309-A4	3240	.292	78	1430	34
	1/3	MC-20-312-A3	3990	.367	79	1760	62	MC-20-312-A3	3640	.370	79	1600	38
	1/2	MC-20-224-A5	4870	.580	79	2150	76	MC-20-224-A5	4380	.583	78	1930	46
	3/4	MC-20-423-A7	5630	.842	82	2480	87	MC-20-422-A7	5170	.849	81	2280	55
	1	MC-20-429-A10	6390	1.15	83	2820	100	MC-20-428-A10	5750	1.14	82	2530	61

MC-24

Outlet area = 3.24 ft. Max Motor Frame Size = 184T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
1140 (7163)	1/4	MC-24-319-B4	5700	.288	73	1760	74	MC-24-318-B4	5090	.279	73	1570	45
	1/3	MC-24-323-B3	6240	.381	74	1930	81	MC-24-323-B3	5630	.389	73	1740	50
	1/2	MC-24-330-B5	7070	.554	75	2180	92	MC-24-330-B5	6260	.542	74	1930	55
	3/4	MC-24-433-B7	8020	.856	77	2480	100	MC-24-434-B7	7170	.865	77	2210	63
	1	MC-24-634-B10	8950	1.16	79	2760	120	MC-24-633-B10	7880	1.12	78	2430	70
1725 (10838)	1/4	MC-24-207-A4	5330	.269	82	1650	69	MC-24-206-A4	4730	.269	82	1460	42
	1/3	MC-24-210-A3	6040	.360	83	1860	78	MC-24-307-A3	5400	.359	84	1670	48
	1/2	MC-24-215-A5	7070	.559	83	2180	92	MC-24-312-A5	6540	.574	84	2020	58
	3/4	MC-24-317-A7	8200	.848	85	2530	110	MC-24-316-A7	7340	.823	84	2270	65
	1	MC-24-321-A10	9040	1.15	85	2790	120	MC-24-320-A10	8050	1.12	85	2490	71
	1½	MC-24-327-A15	10200	1.66	87	3150	130	MC-24-328-A15	9220	1.73	86	2850	82
	2	MC-24-427-A20	11000	2.24	88	3400	140	MC-24-427-A20	9930	2.25	88	3070	88
	3	MC-24-631-A30	12800	3.46	91	3950	170	MC-24-630-A30	11400	3.40	90	3520	100

MC-30

Outlet area = 5.03 ft. Max Motor Frame Size = 184T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
860 (6754)	1/4	MC-30-220-C4	7290	.292	71	1450	75	MC-30-313-C4	6430	.279	72	1280	46
	1/3	MC-30-318-C3	7910	.367	74	1570	82	MC-30-318-C3	7110	.371	73	1410	51
	1/2	MC-30-422-C5	9260	.583	77	1840	96	MC-30-616-C5	8180	.569	76	1630	59
	3/4	MC-30-624-C7	10600	.865	78	2110	110	MC-30-623-C7	9300	.842	77	1850	67
	1	MC-30-629-C10	11400	1.11	80	2270	120	MC-30-630-C10	10000	1.11	78	1990	72
1140 (8954)	1/4	MC-30-207-B4	7050	.285	77	1400	73	MC-30-206-B4	6300	.278	76	1250	45
	1/3	MC-30-211-B3	8000	.387	78	1590	83	MC-30-210-B3	7070	.366	77	1410	51
	1/2	MC-30-217-B5	9200	.575	79	1830	95	MC-30-218-B5	8150	.579	78	1620	58
	3/4	MC-30-318-B7	10500	.855	82	2090	110	MC-30-318-B7	9430	.863	80	1880	68
	1	MC-30-419-B10	11600	1.15	84	2310	120	MC-30-614-B10	10300	1.16	83	2050	74
	1½	MC-30-621-B15	13200	1.70	86	2620	140	MC-30-620-B15	11700	1.68	85	2330	84
	2	MC-30-626-B20	14500	2.24	87	2880	150	MC-30-626-B20	12800	2.24	86	2550	92

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The AMCA Certified Ratings Seal applies to air performance ratings only.

THROW: Measured in (ft) at terminal velocity of 150 FPM

MC-30 *Continued*

Outlet area = 5.03 ft. Max Motor Frame Size = 184T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
1725 (13548)	3/4	MC-30-205-A7	9900	.842	89	1970	100	MC-30-204-A7	8860	.835	87	1760	64
	1	MC-30-209-A10	11400	1.15	89	2270	120	MC-30-208-A10	10100	1.11	88	2010	72
	1½	MC-30-214-A15	13100	1.65	91	2600	140	MC-30-215-A15	11800	1.71	89	2350	85
	2	MC-30-219-A20	14400	2.23	93	2860	150	MC-30-313-A20	12900	2.25	91	2570	93
	3	MC-30-320-A30	16400	3.30	94	3260	170	MC-30-416-A30	14900	3.45	93	2960	110
	5	MC-30-426-A50	19700	5.74	94	3920	200	MC-30-619-A50	17500	5.51	97	3480	130

MC-36

Outlet area = 7.22 ft. Max Motor Frame Size = 215T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
860 (8105)	3/4	MC-36-316-C7	13400	.760	79	1860	120	MC-36-318-C7	11700	.790	78	1620	69
	1	MC-36-417-C10	14900	1.05	81	2060	130	MC-36-611-C10	12900	1.03	81	1780	76
	1½	MC-36-618-C15	17000	1.53	83	2360	150	MC-36-618-C15	14700	1.55	82	2040	87
1140 (10744)	3/4	MC-36-209-B7	13400	.800	83	1860	120	MC-36-305-B7	12000	.820	84	1660	71
	1	MC-36-308-B10	14700	1.01	85	2040	130	MC-36-308-B10	13000	1.04	84	1800	77
	1½	MC-36-314-B15	17100	1.56	87	2370	150	MC-36-314-B15	14700	1.52	85	2040	87
	2	MC-36-319-B20	18700	2.10	87	2590	160	MC-36-414-B20	16100	2.05	87	2230	95

MC-42

Outlet area = 9.85 ft. Max Motor Frame Size = 256T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
860 (9456)	1	MC-42-318-C10	17800	1.12	81	1810	130	MC-42-318-C10	15900	1.12	80	1610	81
	1½	MC-42-420-C15	20200	1.71	84	2050	150	MC-42-420-C15	18200	1.71	82	1850	93
	2	MC-42-620-C20	22400	2.24	86	2270	170	MC-42-620-C20	20300	2.30	85	2060	100
	3	MC-42-628-C30	25200	3.47	87	2560	190	MC-42-627-C30	22100	3.32	86	2240	110
1140 (12535)	1	MC-42-211-B10	17800	1.16	87	1810	130	MC-42-211-B10	16000	1.16	86	1620	81
	1½	MC-42-217-B15	20300	1.69	89	2060	150	MC-42-311-B15	18100	1.68	87	1840	92
	2	MC-42-316-B20	22700	2.29	89	2310	170	MC-42-316-B20	20400	2.32	88	2070	100
	3	MC-42-417-B30	25300	3.32	91	2570	190	MC-42-417-B30	22900	3.36	90	2330	120
	5	MC-42-621-B50	30300	5.55	94	3080	230	MC-42-621-B50	27300	5.69	93	2770	140

MC-48

Outlet area = 12.83 ft. Max Motor Frame Size = 256T

RPM (TS)	HP	WITHOUT GUARDS						WITH GUARDS					
		Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)	Model	cfm @ F.A.	Max Bhp	dBA @ 5 ft.	O.V. FPM	Throw (ft.)
860 (10807)	1	MC-48-310-C10	21600	1.11	84	1680	140	MC-48-310-C10	19500	1.14	82	1520	87
	1½	MC-48-413-C15	25500	1.75	86	1990	170	MC-48-412-C15	22400	1.70	85	1750	100
	2	MC-48-417-C20	27800	2.28	87	2170	180	MC-48-417-C20	24700	2.30	86	1930	110
	3	MC-48-617-C30	31100	3.39	89	2420	200	MC-48-616-C30	27400	3.31	87	2140	120
1140 (14326)	1	MC-48-203-B10	19700	1.10	88	1540	130	MC-48-203-B10	17800	1.10	87	1390	80
	1½	MC-48-209-B15	24700	1.71	90	1930	160	MC-48-209-B15	22000	1.70	89	1720	100
	2	MC-48-213-B20	27000	2.23	92	2100	180	MC-48-308-B20	24300	2.33	90	1890	110
	3	MC-48-314-B30	31800	3.40	93	2480	210	MC-48-314-B30	28100	3.40	92	2190	130
	5	MC-48-418-B50	37600	5.66	95	2930	240	MC-48-418-B50	33200	5.68	94	2590	150

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The AMCA Certified Ratings Seal applies to air performance ratings only.

THROW: Measured in (ft) at terminal velocity of 150 FPM

Shaded text indicates fan sound pressure levels in excess of 90 dBA. See page 5 for sound application data.

Typical Specifications

Air circulation fans shall be of the direct drive, tube axial type. Propeller construction shall be cast aluminium airfoil. A standard square key type or tapered bushing shall lock the propeller to the motor shaft. Propellers shall be statically and dynamically balanced. The housing shall be constructed of welded heavy gauge steel for strength and rigidity. The motor support shall be constructed of structural steel members to prevent vibration and to rigidly support the motor and propeller. All structural steel parts shall be coated with Permatector™ for a long lasting finish. Fan performance shall be based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program. Fans shall be licensed to bear the AMCA Seal.

Mancoolers fans shall be Model MC as manufactured by Greenheck Fan Corporation of Schofield, Wisconsin.

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.

Specific Greenheck product warranties are located on greenheck.com within the product area tabs and in the Library under Warranties.

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