



MP



The Mini-Power's (MP) compact low-profile design is ideal for entrances where space is limited. The MP air curtain from Powered Aire has met all criteria to be used as an exception to vestibules as well as being tested in accordance with the ANSI/AMCA 220 standard. The MP model is often seen in toll booths (for fume control), zoos/amusements parks, food trucks, cannabis grow houses, restaurants (to separate smoking and nonsmoking sections) and offices.

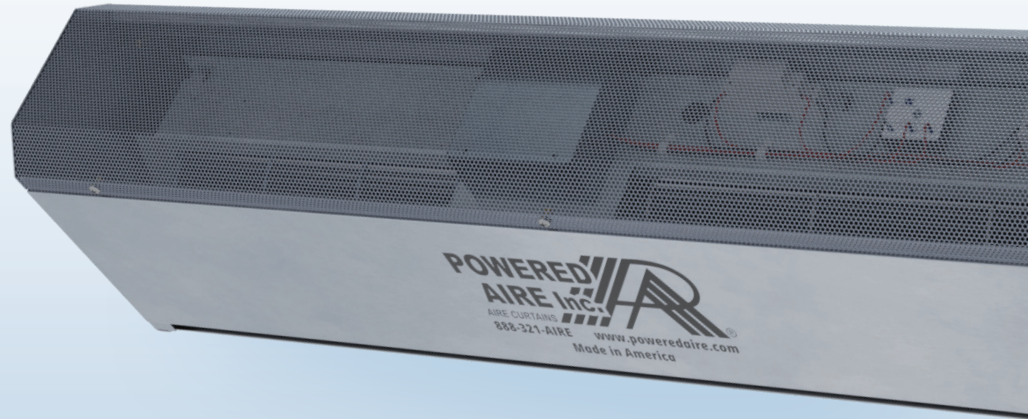
OPTIONS

HEATING

Electric.....pg 123
Hot Water.....Consult Factory
Steam.....Consult Factory

FILTER

½" Cleanable (Unheated only)



AT A GLANCE

Single Incremental Widths

30" to 10'

Max Installation Height

10'

Heavy Duty Motors

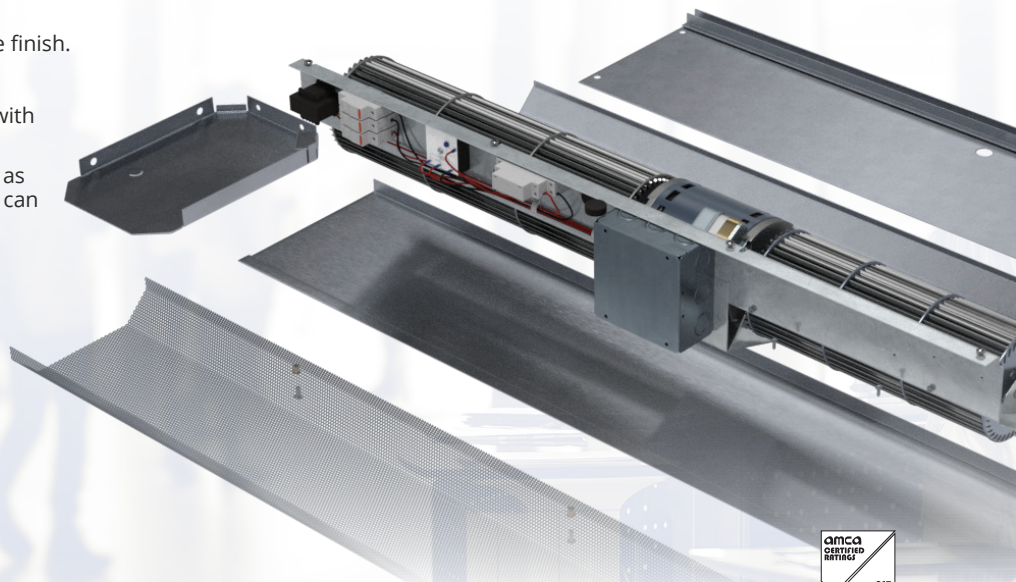
1/5 HP

KEY DESIGN FEATURES

- 18 gauge 304 stainless steel in a number three finish.
- Heavy duty 1/5 HP motors. 1625 rpm each.
- Air intake screen is perforated stainless steel with mill grain finish.
- The motor/blower plate comes out of the unit as an entire piece and the electrical connections can be made on the top or sides of the unit for more versatility.

RECOMMENDED CONTROLS

- ON / OFF switch
- Built-in Time Delay Relay
- Magnetic Door Switch for activation



► MP | PERFORMANCE

MP | Performance Table

MODEL	Nozzle Width (in.)	Max. FPM at Nozzle	Avg. Outlet Velocity (FPM)	Airflow Rate (CFM)	Outlet Velocity Uniformity	Power Rating (kW)	Number of Motors	Motor HP	Weight (lbs)
MP-1-30	29	3050	1335	801	66%	0.22	1	1/5	42
MP-1-36	35	3262	1348	984	84%	0.28	1	1/5	53
MP-1-42	41	3269	1462	1243	84%	0.33	1	1/5	60
MP-1-48	48	3256	1520	1474	85%	0.38	1	1/5	67
MP-1-60	59	3218	1529	1865	84%	0.46	1	1/5	85
MP-2-72	71	3262	1348	1968	84%	0.56	2	1/5	94
MP-2-84	83	3269	1462	2486	84%	0.66	2	1/5	105
MP-2-96	95	3256	1520	2948	85%	0.76	2	1/5	114
MP-2-108	107	3242	1525	3339	84%	0.84	2	1/5	130
MP-2-120	117	3218	1529	3730	84%	0.92	2	1/5	141



For Hot Water or Steam heat, consult factory.

MP | Velocity Projection

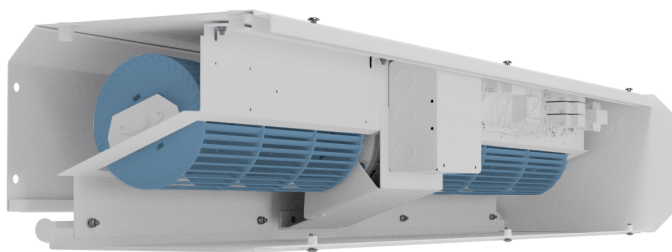
Distance From Nozzle	40"	80"	120"	160"
MP-1-36 Core Velocity (fpm)	1048	784	677	603

MP | Sound Levels

Measured 10 ft. from unit in a free field based on a 1 motor unit	53 dBA
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MP | Single Phase Motor Options

Voltages available	120	208/230	480	575
Amp draw per motor	4.4	2.0	1.1	0.9



Performance Highlight

This unit can fit a larger diameter tangential blower wheel than competitors' models to increase performance without increasing size. The motor/ blower plate comes out of the unit as an entire piece and the electrical connections can be made on the top or sides of the unit for more versatility.

The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

Powered Aire Inc. certifies that the Model MP Air Curtain shown herein is licensed to bear the AMCA Seal for Air Performance. 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.

May 2020
PAAC-601





MP-E

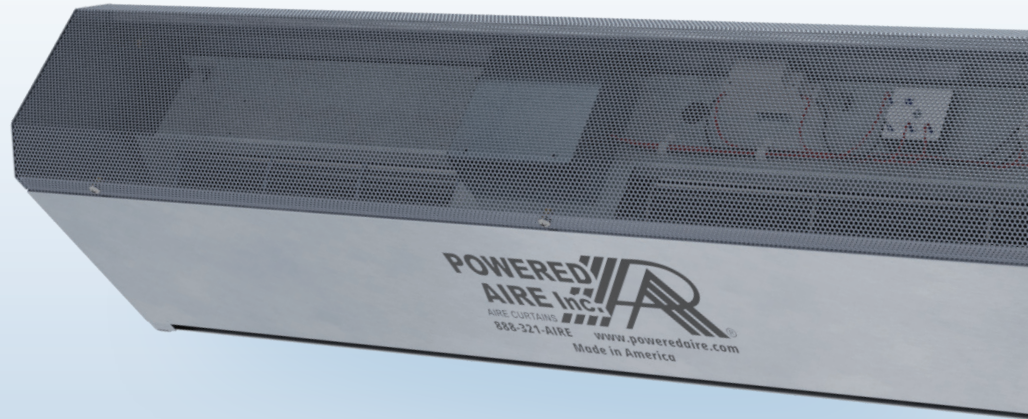


The Mini-Power's with electric heat (MP-E) compact low-profile design is ideal for entrances where space is limited. The MP air curtain from Powered Aire has met all criteria to be used as an exception to vestibules as well as being tested in accordance with the ANSI/AMCA 220 standard. The MP-E model is often seen in toll booths (for fume control), zoos/amusements parks, food trucks, cannabis grow houses, restaurants (to separate smoking and nonsmoking sections) and offices.

OPTIONS

HEATING

Unheatedpg 121
Hot Water.....Consult Factory
SteamConsult Factory



AT A GLANCE

Single Incremental Widths

30" to 10'

Max Installation Height

10'

Heavy Duty Motors

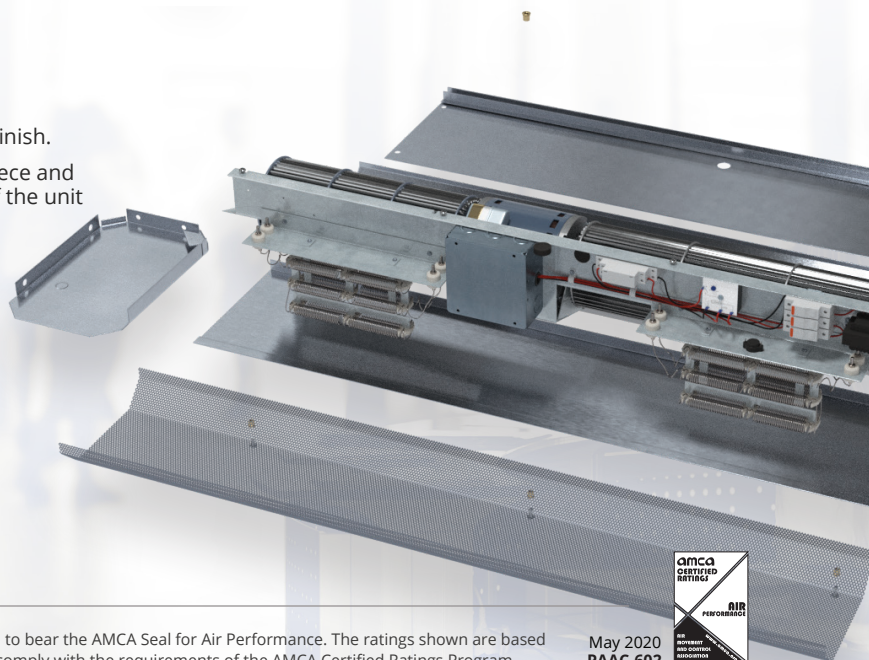
1/5 HP

KEY DESIGN FEATURES

- 18 gauge 304 stainless steel in a number three finish.
- Heavy duty 1/5 HP motors. 1625 rpm each.
- Air intake screen is perforated stainless steel with mill grain finish.
- The motor/blower plate comes out of the unit as an entire piece and the electrical connections can be made on the top or sides of the unit for more versatility.

RECOMMENDED CONTROLS

- ON / OFF switch
- Built-in Time Delay Relay
- Thermostat
- Magnetic Door Switch for activation



► MP-E | PERFORMANCE

MP-E | Performance Table

MODEL	Nozzle Width (in.)	Max. FPM at Nozzle	Avg. Outlet Velocity FPM	Airflow Rate (CFM)	Outlet Velocity Uniformity	Power Rating (kW)	Number of Motors	Motor HP	Heater kW	Temp. Rise (°F)	Weight (lbs)
MP-1-30E	29	3050	1243	746	66%	0.20	1	1/5	8	34	47
MP-1-36E	35	3262	1316	961	87%	0.27	1	1/5	8	27	59
MP-1-42E	41	3269	1294	1100	75%	0.29	1	1/5	8	23	69
MP-1-48E	48	3256	1386	1344	85%	0.33	1	1/5	16	38	77
MP-1-60E	59	3218	1406	1715	83%	0.54	1	1/5	16	30	91
MP-2-72E	71	3262	1316	1922	87%	0.54	2	1/5	16	27	102
MP-2-84E	83	3269	1294	2200	75%	0.58	2	1/5	24	35	115
MP-2-96E	95	3256	1386	2688	85%	0.66	2	1/5	32	38	123
MP-2-108E	107	3242	1397	3059	83%	0.87	2	1/5	32	33	139
MP-2-120E	117	3218	1406	3430	83%	1.08	2	1/5	32	30	152



For Hot Water or Steam heat, consult factory.

MP-E | Velocity Projection

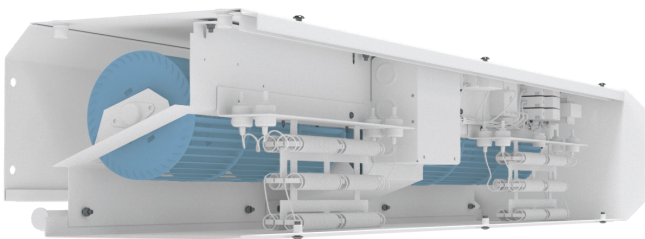
Distance From Nozzle	40"	80"	120"	160"
MP-1-36E Core Velocity (fpm)	990	738	659	542

MP-E | Sound Levels

Measured 10 ft. from unit in a free field based on a 1 motor unit	53 dBA
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MP-E | Single Phase Motor Options

Voltages available	120	208/230	480	575
Amp draw per motor	4.4	2.0	1.1	0.9



Performance Highlight

This unit can fit a larger diameter tangential blower wheel than competitors' models to increase performance without increasing size. The motor/ blower plate comes out of the unit as an entire piece and the electrical connections can be made on the top or sides of the unit for more versatility.

The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only. Rated data shown are based on tests of units with heating elements present but not in use.

Powered Aire Inc. certifies that the Model MP-E Air Curtain shown herein is licensed to bear the AMCA Seal for Air Performance. 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.


May 2020
PAAC-602

► MP-E | ELECTRICAL

MP-E | AMP Draw, Circuits & Breaker Size Table

* With optional branch fusing for Single Point Power (SPP) - REQUIRES A REMOTE ENCLOSURE

^ SPP By Default

‡ High amp draws may be prohibitive. Reduced and custom kW available. Contact factory.

MODEL	AMP DRAW (Breaker Size)								
	208 / 1 / 60	240 / 1 / 60	208 / 3 / 60			240 / 3 / 60			480 / 3 / 60
			Separate Supply Circuits			Separate Supply Circuits			
	Circuit 1	Circuit 1	1	2	SPP*	1	2	SPP*	Circuit 1
MP-1-30E									
MP-1-36E	40.5 (60)	35.3 (45)	24.2 (35)	-	^	21.2 (30)	-	^	10.7 (15)
MP-1-42E									
MP-1-48E	‡	‡	46.4 (60)	-	^	40.5 (60)	-	^	20.3 (30)
MP-1-60E									
MP-2-72E	‡	‡	47.3 (60)	-	^	42.5 (60)	-	^	21.4 (30)
MP-2-84E	‡	‡	26.2 (35)	44.4 (60)	70.6 (90)	23.2 (30)	38.5 (50)	61.7 (80)	31.1 (40)
MP-2-96E									
MP-2-108E	‡	‡	47.3 (60)	43.3 (60)	90.6 (125)	42.5 (60)	38.5 (50)	81.0 (110)	40.7 (60)
MP-2-120E									



Consult factory for disconnects on electrically heated MP air curtains.



Model MP | Entry Door

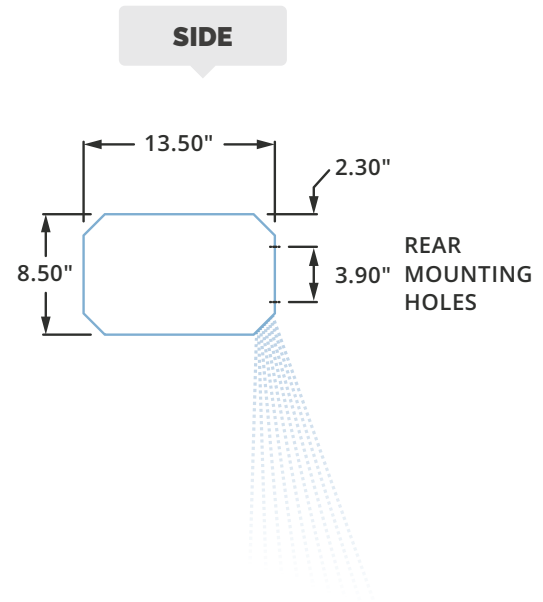


Model MP | Restaurant

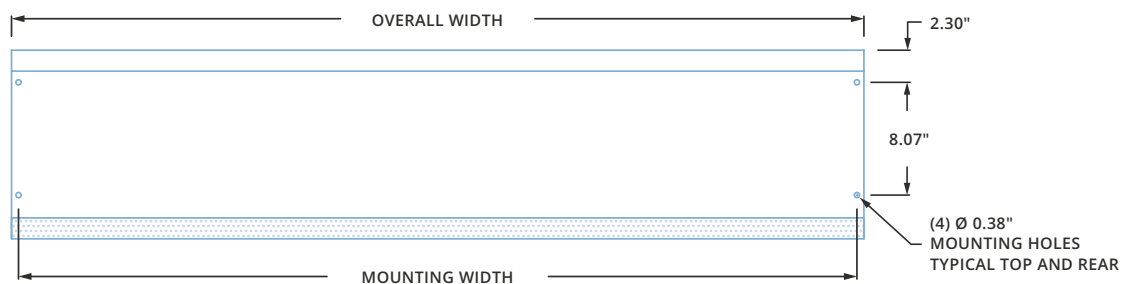
► MP & MP-E | MECHANICAL DETAILS & DRAWINGS

MP & MP-E | Mechanical Information Table

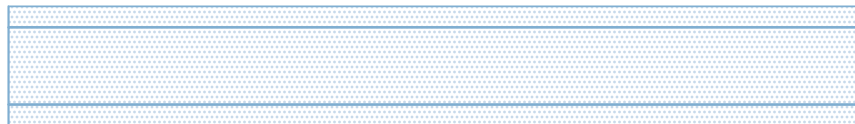
MODEL	Overall Width (in.)	Mounting Width (in.)	Nozzle Width (in.)
MP-1-30 (E)	31	30	29
MP-1-36 (E)	37	36	35
MP-1-42 (E)	43	42	41
MP-1-48 (E)	49	48	47
MP-1-60 (E)	61	60	59
MP-2-72 (E)	73	72	71
MP-2-84 (E)	85	84	83
MP-2-96 (E)	97	96	95
MP-2-108 (E)	109	108	107
MP-2-120 (E)	119	118	117



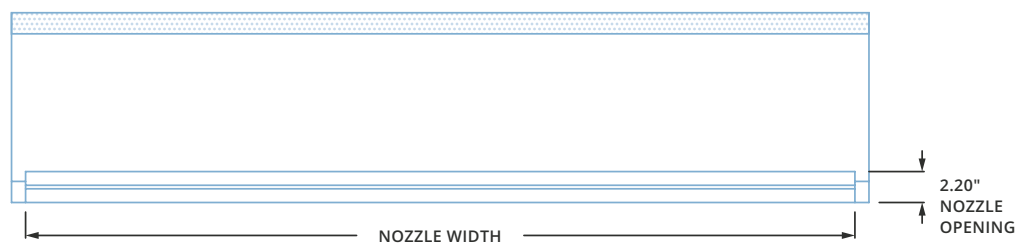
TOP



FRONT



BOTTOM



► MP & MP-E | INSTALLATION

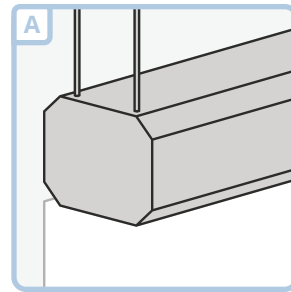


IMPORTANT

- ✓ **NOTE:** The air curtain should be mounted as close to the door header/opening as possible for maximum performance. For every one inch the bottom of the air curtain is mounted above the door header, the back side of the air curtain should be moved away from the wall 1/2 inch.
- ✓ Trained and experienced mechanic / electrician required.
- ✓ **WARNING:** Risk of electrical shock, can cause injury or death: Disconnect all remote electrical supplies before servicing.
- ✓ Units must be field wired in accordance with all applicable local, state, provincial and national codes, including wire size and materials.
- ✓ All hardware and brackets must be of sufficient strength to safely support air curtain.

A TOP MOUNT

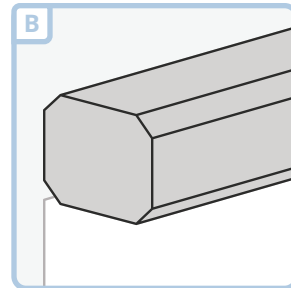
Unit has four 3/8 – 16 threaded inserts for installing one end of threaded rods. The other ends of the threaded rods can be attached to the ceiling. Threaded rod should not extend more than 3/4 inch into air curtain.



B WALL MOUNT

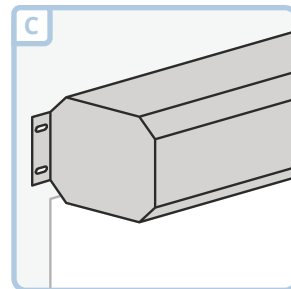
Back side of air curtain has 4 mounting holes capable of accepting four 3/8 mounting bolts or lags, with washers (use these holes only for mounting). Mark and pre-drill mounting surface accurately. A long extension and ratchet will negate the need to remove the motor/blower plate when installing. Mounting bolts or lags of sufficient size and strength should be installed and tightened through the four slots in motor/blower plate.

If motor/blower plate has to be removed, the junction box inside the unit must be removed along with any electrical switches that may be in the way. Remove 7/16 whizlock nuts holding plate in place, and slide plate out, rotating top portion of plate so it comes out first. Remember when installing plate to put bottom of plate in first and push and rotate top in last.



C EXTENSION BRACKETS (WALL MOUNT)

Extension brackets bolt on to the back of the unit, utilizing the 4 original mounting holes, and allowing for external mounting of unit to wall. Brackets have elongated mounting slots that extend the mounting width by 2½ to 3½ inches.



D LP123 BRACKETS

Universal mounting slots are used to lag the bracket to the wall (bolts by others). 3/8" mounting bolts (supplied) are threaded into the holes located in all four corners of the back side of the air curtain, leaving 1/2" of the bolts exposed.

