

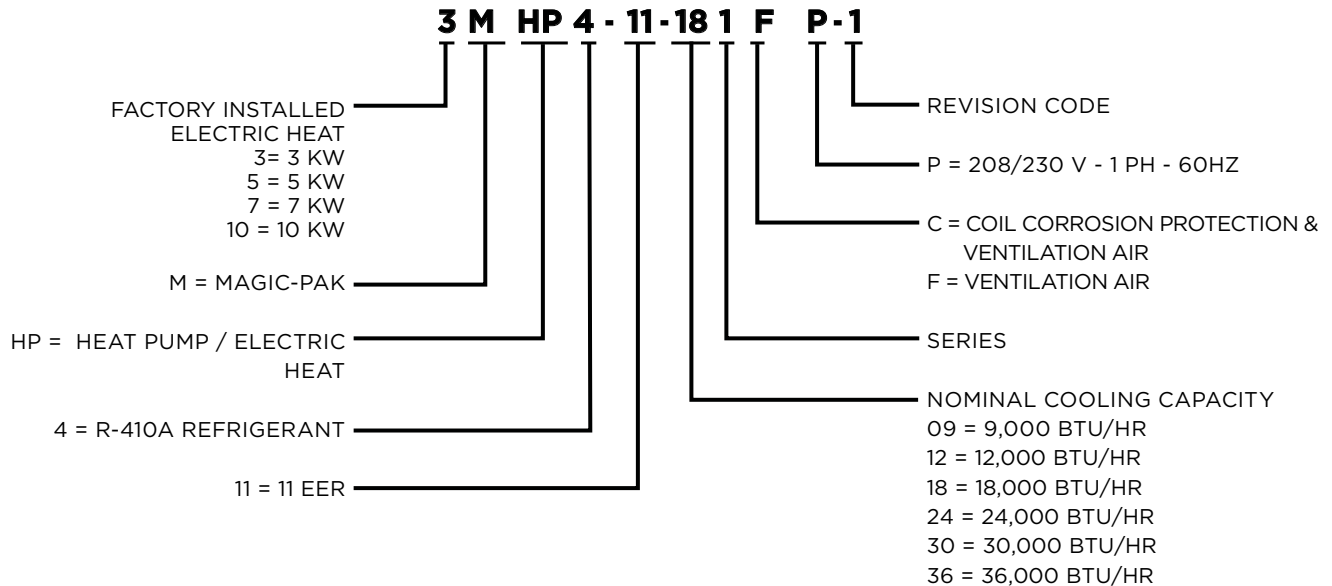
ELECTRIC HEAT PUMP
PACKAGED UNIT



FORM NO. MHP4-100 (01/2021)



MODEL NUMBER GUIDE



* Check that equipment complies with all applicable building codes, laws, and regulations for its intended use prior to installation.

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APPLICATIONS

- Magic-Pak units are designed for use in all multifamily residential and commercial applications, such as: apartments, condominiums, student housing and senior living
- Installation in conditioned and non-conditioned mechanical spaces

UNIT APPROVALS

ETL (INTERTEK)

- Design certified by ETL Intertek to latest edition of UL 1995
- Certified for the U.S. and Canada
- Certified for less than 1.4% cabinet air leakage using ASHRAE Standard 193
- Factory-installed electric heaters are ETL listed for the U.S. and Canada
- Rated and tested in accordance with DOE test procedures and Federal Trade Commission (FTC) labeling regulations
- Rated with a 5kA Short Circuit Current Rating (SCCR) in accordance with RMS Symmetrical per UL 508A
- Refer to Unit Electrical and Physical Data table for additional details

AHRI/DOE

- Certified to AHRI Standard 390 for single package vertical units (SPVAC); refer to the AHRI Directory for AHRI certificates
- Cooling system rated in accordance with Department of Energy (DOE) test procedures

CORROSION PROTECTION

- Coating is specifically designed for use on HVAC type coils and demonstrates 6800+ hours of Sea Water Acetic Acid Testing (SWAAT) per ASTM G85:A3

SOUND RATING

- Outdoor sound level measurements tested per ANSI/AHRI Standard 270
- Refer to Outdoor Sound Rating & Cabinet Air Leakage table for additional details

LOUVER - PAINT SPECS

- Standard and impact-resistant louvers meet AAMA 2605 specifications

WARRANTY (RESIDENTIAL AND COMMERCIAL)

COMPRESSOR

- Five (5) years limited parts warranty

ALL OTHER COVERED COMPONENTS

- Refer to Equipment Limited Warranty for additional details

STANDARD FEATURES

AIRFLOW CHOICE

- Factory shipped ready for top supply and return duct connections
- Field-adaptable free return configuration, which may utilize the top or the front as return points
- Front access panel doubles as cover for top return (except 3.0 ton)

ELECTRICAL CONNECTIONS & GAUGE PORTS

- Line voltage knockouts (two concentric) to accommodate field required wire size
- Thermostat connections are located at the top of the cabinet
- Two gauge ports are located within the lower compartment of the unit
- Refer to Unit Dimension figure for additional details

CABINET

- Embossed steel cabinet
- Indoor section of the cabinet insulated with 0.5 in. dual density fiberglass insulation
- Outdoor section of the cabinet insulated with 0.5 in. weather-resistant polystyrene insulation

INTERNAL FILTER

- Tool-less filter access
- Factory-installed 1 in. filter rack with washable filter
- Field-provided filters up to MERV 6 can typically be installed in the unit's factory filter location in lieu of washable filter, when proper duct design is applied
- If a higher resistance filter is field installed in the unit, the added resistance must be included in the external static pressure and must not exceed 0.5 in. w.c. including ductwork
- Refer to Factory Filter Size and Pressure Drop and Blower Performance tables for additional details

VENTILATION AIR

- Units are outfitted with ventilation air openings and are shipped with the openings sealed
- Refer to Optional Ventilation Air Capability table and Optional Field-Installed Accessories section for additional details
- Check that equipment complies with all applicable building codes, laws, and regulations for its intended use prior to installation

REFRIGERATION SYSTEM

- Factory charged with R-410A refrigerant
- Factory sealed and tested
- Refer to Unit Electrical and Physical Data table for additional details

Indoor and Outdoor Coils

- Copper tube with aluminum fin coils

High Pressure Switch

- Shuts off unit if abnormal operating conditions cause the refrigerant discharge pressure to rise above acceptable levels

Low Pressure Switch

- Provides loss of charge protection by shutting off unit if refrigerant liquid pressure falls below acceptable levels

Reversing Valve

- Reverses the direction of refrigerant flow within the unit's refrigeration circuit, to change between cooling and heating operation.
- Reverses refrigerant flow direction during heat pump defrost cycles to clear outdoor coil of frost buildup.

Defrost Control

- Factory mounted sensor determines when defrost cycle starts and ends
- Anti-short cycle, timed-off control is incorporated in the control board

TRANSFORMER

- Rated for 40VA
- Factory wired for 230/240V power supply, and includes field selectable terminal for 208V
- Converts line voltage to 24V for the thermostat and control circuits within the unit

SUPPLY AIR BLOWER**ECM Constant Torque Blower Motor**

- Electrically efficient motor for reduced electrical consumption
- Motor provides specified air volume at 0.1 in. - 0.5 in. w.c. external static pressure
- Motor is resiliently mounted for quiet operation
- Blower assembly is easily removed for servicing
- Refer to Blower Performance tables for additional details

Electronic Blower Control

- Dedicated blower speed taps for continuous fan, cooling, and heating operation are programmed for optimal airflow and controlled by 24V thermostat signals
- Blower speed adjustment is easily accomplished by speed tap selection
- Fixed blower delays have been selected to enhance comfort
- Refer to Blower Performance tables for additional details

OUTDOOR COIL FAN

- Heavy duty, fully enclosed and weatherproof
- Aluminum fan blades

CONDENSATE MANAGEMENT**Primary Drain Pan**

- Antimicrobial protection: drain pan is injected with an antibacterial agent that destabilizes the membrane of microorganism cells, disrupting the cellular function of odor-causing mold and bacteria so that they can no longer grow or reproduce

Overflow Protection

- Indoor drain pan overflow switch, which monitors the condensate level in primary drain pan
- Prevents units from operating if drain clogs and water is sensed

Secondary Drain Pan

- Polypropylene wall sleeve base is specifically designed to direct rain water out of the building and in the event of any restriction in the primary drain will act as a redundant overflow protection

OPTIONS & ACCESSORIES**FACTORY-INSTALLED OPTIONS****ELECTRIC HEAT**

- Mounted internal to unit cabinet
- Multiple kW sizes available; must specify the electric heating element size (3kW to 10kW)
- Optional two stage electric heat wiring on 7 & 10kW. In order to utilize this option, it will require a thermostat with single stage cooling and two stage heating
- Compatible with 208V, 230V and 240V
- Helix wound nichrome heating elements exposed directly into the air stream resulting in instant heat transfer and low element temperatures
- Cutoff limit control provides positive protection in case of excessive temperatures
- Refer to Rated Cooling & Heating Performance table for additional details

CORROSION PROTECTION

- Epoxy coated indoor and outdoor coils

FIELD-INSTALLED ACCESSORIES**WALL SLEEVES & LOUVERS**

- Units must be installed with approved wall sleeve and louver accessories for safe operation and are required for all new construction installations

WALL SLEEVES (ASLEEVE)

- Penetrates the building envelope and creates a path for condenser air intake and exhaust
- Provides a sealed connection to the unit and a secure attachment foundation for the louvers
- Larger height wall sleeves may be used on smaller tonnage equipment to maintain a uniform wall opening on the building façade
- Available in 6 in. to 12 in. depths

WALL SLEEVE EXTENSION (ASLEEVEXT4)

- Option provides an additional 4 in. of depth to the wall sleeve, for a maximum depth of 16 in.

LOUVERS**Polypropylene Louvers (ALVRP)**

- Constructed from durable, corrosion-resistant plastic
- Available in four standard colors

Aluminum Louvers (ALVRAL)

- Constructed with 6063-T6 grade aluminum
- Available in anodized clear coat, primer (to be painted in the field), standard paint colors and custom colors with paint matching*

Impact-Resistant Aluminum Louvers (ALVRALC)

- 29" and 33" impact-resistant louvers are impact and wind load certified up to 186 MPH, risk categories III and IV, and wind exposures C and D (FBC Notice of Acceptance number 18-0522.03)
- Constructed with 6063-T6 grade aluminum
- Available in anodized clear coat, primer (to be painted in the field), standard paint colors and custom colors with paint matching*

CRANKCASE HEATER (ACASE841)

- Warms compressor crankcase to limit migration of liquid refrigerant back to compressor during off cycle
- Available for models with scroll compressors
- Refer to Crankcase Heater table for additional details

SHORT CIRCUIT CURRENT RATING KIT (ASCCR)

- Provides 200kA of SCCR protection
- Refer to SCCR Accessory table for additional details

FILTERS

- Field-supplied MERV 6 filters (as required by ASHRAE 62.2) can typically be applied at the unit's factory filter location

VENTILATION DAMPERS

- Optional field-installed
- Check that the equipment complies with all applicable building codes, laws, and regulations for its intended use prior to installation

Motorized Damper w/ Controller

- Utilizes a ventilation air control module that is field programmable to assist with meeting ASHRAE 62.2 requirements
- Once programmed with values for ventilation air amounts, the control module opens the damper in response to thermostat inputs and monitors the run time
- Upon meeting the ventilation air needs, the control module will close the damper until the start of the next cycle
- If, during an observation period it is determined that thermostat operation alone may not provide the desired ventilation air, the control module can independently operate the unit's indoor blower, in continuous fan mode, and open the damper to aid in providing ventilation air needs

Motorized Damper w/ Field-Supplied Relay

- Opens ventilation air damper during indoor blower operation and closes during blower off periods
- Requires field-supplied and installed current sensing relay to detect indoor blower operation

THERMOSTAT

- Required for all installations (field-supplied)
- Units are individually controlled with conventional 24V thermostat
- Thermostat must be capable of:
 - Single stage cooling, single stage heat pump operation (compressor heating), and single stage auxiliary heat (3 and 5 kW)
 - Single stage cooling, single stage heat pump operation (compressor heating), and two stage auxiliary heat (7 and 10 kW)
- Refer to Unit Electrical and Physical Data table for additional details

* Certain exclusions apply. Refer to louver manufacturer's literature and warranty documentation.

UNIT ELECTRICAL AND PHYSICAL DATA (208/230 Volt - 1 Phase - 60HZ)¹

Model	MCA ²				MOCP ³				Default SCCR (kA) ⁴	Compressor		Outdoor Fan			Indoor Blower			R-410A Refrigerant Charge (oz)	Approx. Shipping Weight (lbs)	
	Circuit 1		Circuit 2		Circuit 1		Circuit 2			Rated Load Amps (RLA)	Locked Rotor Amps (LRA)	Dia. (in.)	Nominal RPM	Rated Load Amps (RLA)	Rated HP	Wheel D x W (in.)	Rated Load Amps (RLA)			Rated HP
	208V	230V	208V	230V	208V	230V	208V	230V												
3MHP4-11-091*P	23.0	25.5	--	--	25	30	--	--	5	4.4	21.0	16	1,100	0.9	1/8	9 x 6	0.4	1/3	44	192
5MHP4-11-091*P	28.4	31.8	--	--	30	35	--	--												
3MHP4-11-121*P	24.2	26.7	--	--	25	30	--	--	5	5.1	27.0	16	1,125	0.9	1/8	9 x 6	0.6	1/3	52	202
5MHP4-11-121*P	29.6	32.9	--	--	30	35	--	--												
3MHP4-11-181*P	26.6	29.1	--	--	30	30	--	--	5	6.7	37.5	16	1,125	0.9	1/8	9 x 6	1.0	1/3	80	219
5MHP4-11-181*P	32.0	35.3	--	--	35	40	--	--												
7MHP4-11-181*P	42.8	47.8	--	--	45	50	--	--												
10MHP4-11-181*P	10.3	10.3	43.3	50.0	15	15	45	50												
5MHP4-11-241*P	37.4	40.8	--	--	40	45	--	--	5	10.0	52.0	18	1,100	1.6	1/4	9 x 6	1.6	1/3	82	268
7MHP4-11-241*P	48.3	53.3	--	--	50	60	--	--												
10MHP4-11-241*P	15.8	15.8	43.3	50.0	25	25	45	50												
5MHP4-11-301*P	41.9	45.2	--	--	50	50	--	--	5	13.4	72.5	18	1,100	1.6	1/4	10 x 8	1.8	1/2	60	271
7MHP4-11-301*P	20.2	20.2	32.5	37.5	30	30	35	40												
10MHP4-11-301*P	20.2	20.2	43.3	50.0	30	30	45	50												
5MHP4-11-361*P	44.4	47.7	--	--	50	50	--	--	5	14.7	75.0	18	1,100	1.6	1/4	10 x 8	2.8	1/2	102	298
7MHP4-11-361*P	22.7	22.7	32.5	37.5	35	35	35	40												
10MHP4-11-361*P	22.7	22.7	43.3	50.0	35	35	45	50												

¹ Acceptable voltage range 197 - 253V

² MCA = Minimum Circuit Ampacity

³ MOCP = Maximum Over Current Protection

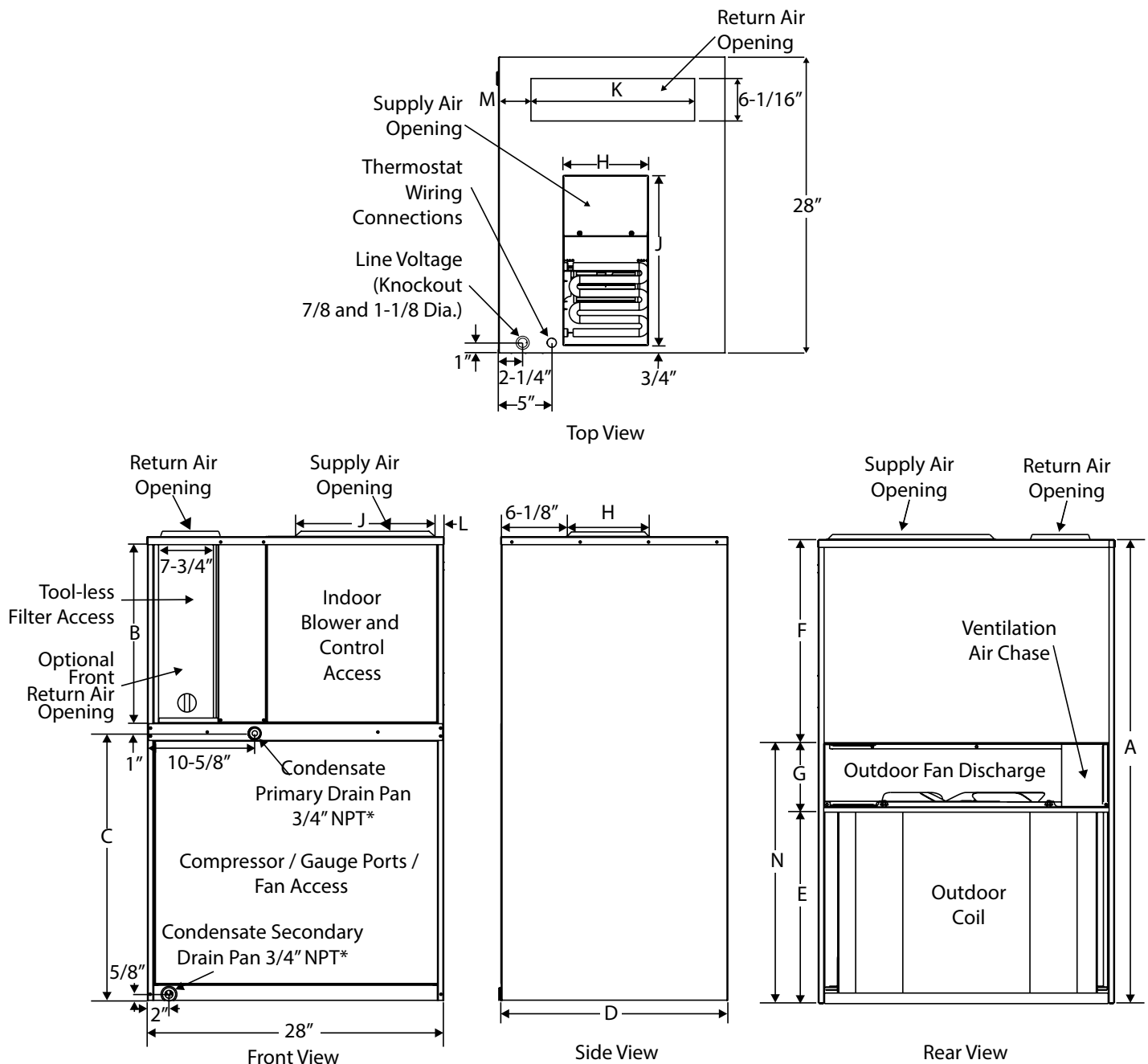
⁴ SCCR = Short Circuit Current Rating; refer to SCCR Accessory table, up to 200kA

NOTE: Units are rated at 208/230V, but MOCP & MCA values are calculated at 240V

UNIT DIMENSIONS (IN.)

Model	A	B*	C	D	E	F	G	H	J	K	L	M	N
*MHP4-11-091*P *MHP4-11-121*P	43-7/8	16-7/8	25-1/4	21-1/2	18-5/8	19-1/4	6	8	16	17-1/16	3/4	2-1/4	24-5/8
*MHP4-11-181*P	47-7/8	18-7/8	27-1/4	21-1/2	20-5/8	21-1/4	6	8	16	19-1/16	3/4	2-1/4	26-5/8
*MHP4-11-241*P	55-7/8	22-7/8	31-1/4	24-3/8	24-5/8	25-1/4	6	8	16	22-7/16	3/4	1	30-5/8
*MHP4-11-301*P	55-7/8	22-7/8	31-1/4	24-3/8	24-5/8	25-1/4	6	11-3/8	10-7/16	22-7/16	3-3/4	1	30-5/8
*MHP4-11-361*P	67-7/8	26-7/8	35-1/4	24-3/8	28-5/8	29-1/4	10	11-3/8	10-7/16	22-7/16	3-3/4	1	38-5/8

* Dimension B represents the height of the optional front return air duct opening



* Provisions must be made to properly drain the primary and secondary drain pan. Piping the condensate to an inside drain is required.

MINIMUM CLEARANCES

Accessibility Clearances

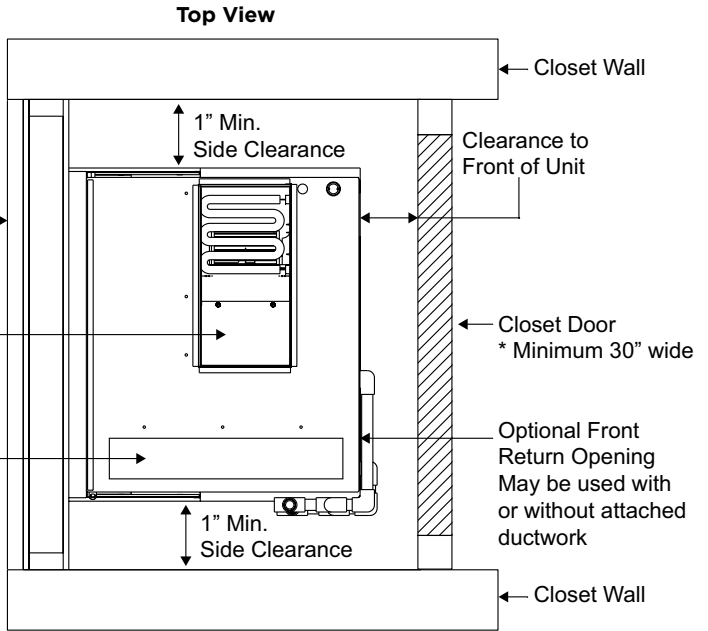
The front of the unit must be accessible for service. A minimum clearance of 30" in front of unit is required for service.

If the unit is enclosed, a door or access panel aligned with the front of the unit is the preferred method of providing access. The door or access panel opening must be a minimum of 30" wide (centered on the unit) and be as tall as the unit.

If a return duct is not installed, in order to provide adequate return air, the minimum clearance required between the front of the unit and the door or access panel is 4" for 43" tall cabinets and 5" for 48" and 56" tall cabinets.

IMPORTANT

The unit must be installed with approved wall sleeve and louver accessories for safe operation. Improper installations could result in property damage, personal injury, or death.



Supply Duct Clearances

Minimum Clearances to Combustible Materials [1]		
Front	Sides	Top
0"	0"	0"

[1] Accessibility clearances take precedence.

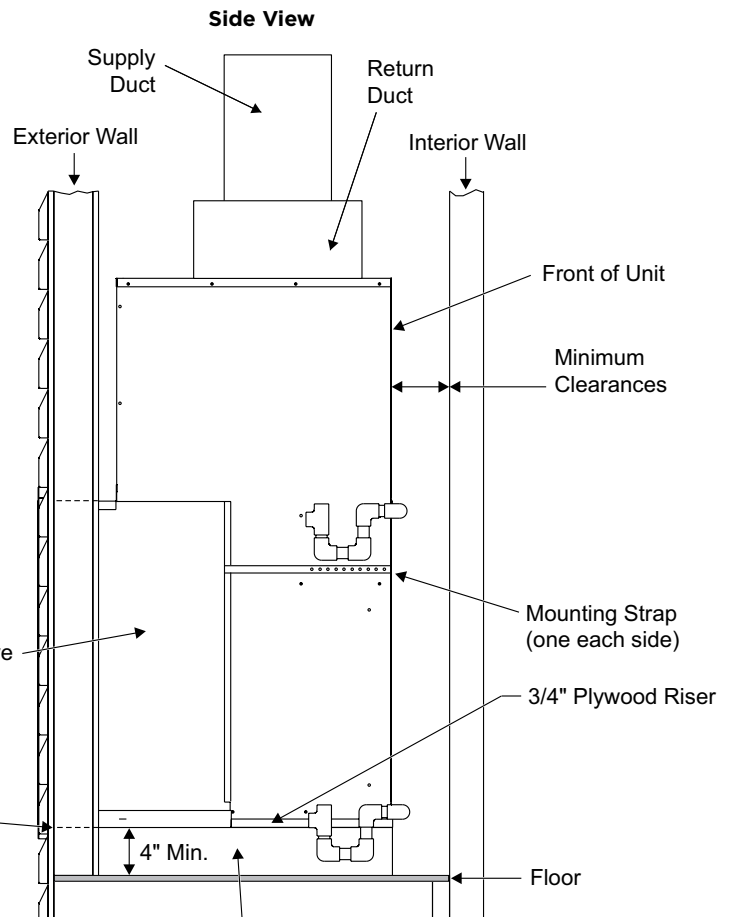
Unit Clearances

Return Duct Configuration	Unit Height	Minimum Clearances [1]	
		Front	Sides [3]
Connected to unit's: - Top Duct Opening, or - Optional Front Return	All	See Note 2	1"
No Return Duct (Open Optional Front Return)	43"	4"	1"
	48" or 56"	5"	1"

[1] Accessibility clearances take precedence.

[2] Clearance must accommodate field-installed condensate drain line / drain trap.

[3] Additional clearance required if field-installed condensate drain line / drain trap is routing alongside unit.



Platform (field supplied) - Unit must be supported by platform, which must be level with sill plate of opening in exterior wall.

OUTDOOR SOUND RATING & CABINET AIR LEAKAGE

Model	Outdoor Sound Rating (dBa) ¹	Cabinet Air Leakage (%) ²
*MHP4-11-091*P	73	1.4
*MHP4-11-121*P	73	1.4
*MHP4-11-181*P	73	1.4
*MHP4-11-241*P	79	1.4
*MHP4-11-301*P	79	1.4
*MHP4-11-361*P	79	1.4

¹ Per ANSI / AHRI Standard 270
² Per ASHRAE Standard 193

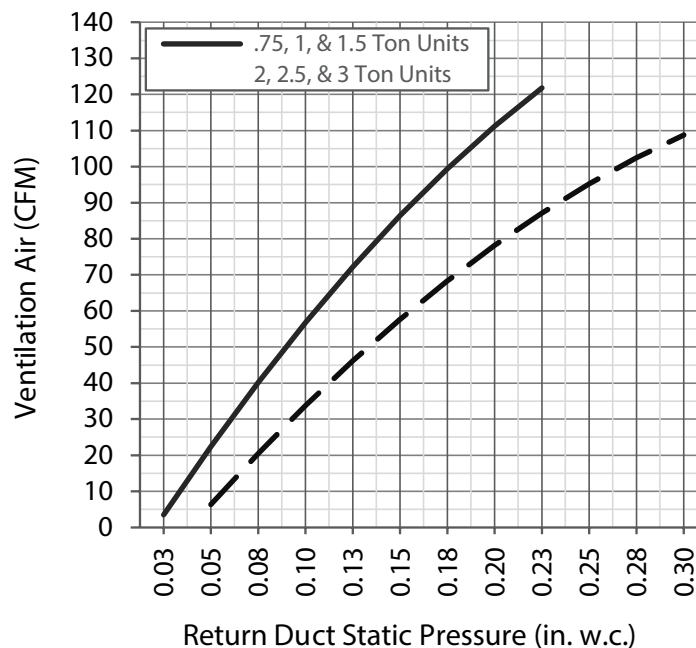
FACTORY FILTER SIZE (IN.) AND PRESSURE DROP (IN. W.C.)

Model	Filter Size	Supply Airflow (CFM)											
		200	300	400	500	600	700	800	900	1000	1100	1200	1300
*MHP4-11-091*P *MHP4-11-121*P	18 x 20 x 1	0.01	0.01	0.01	0.02	0.03	0.04	---	---	---	---	---	---
*MHP4-11-181*P	20 x 20 x 1	---	0.01	0.01	0.02	0.02	0.03	0.04	---	---	---	---	---
*MHP4-11-241*P *MHP4-11-301*P	24 x 22 x 1	---	---	---	0.01	0.01	0.02	0.03	0.03	0.04	0.05	---	---
*MHP4-11-361*P	28 x 22 x 1	---	---	---	---	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04

Performance based on factory-provided washable filter installed in the unit. If a higher resistant filter is field installed in the unit, the added resistance must be included in the external static pressure and must not exceed 0.5 in. w.c. including ductwork.

OPTIONAL VENTILATION AIR CAPABILITY

Figure below shows the amount of ventilation air as a function of unit tonnage and return duct static pressure. Data is pending final testing along with low ambient operation.

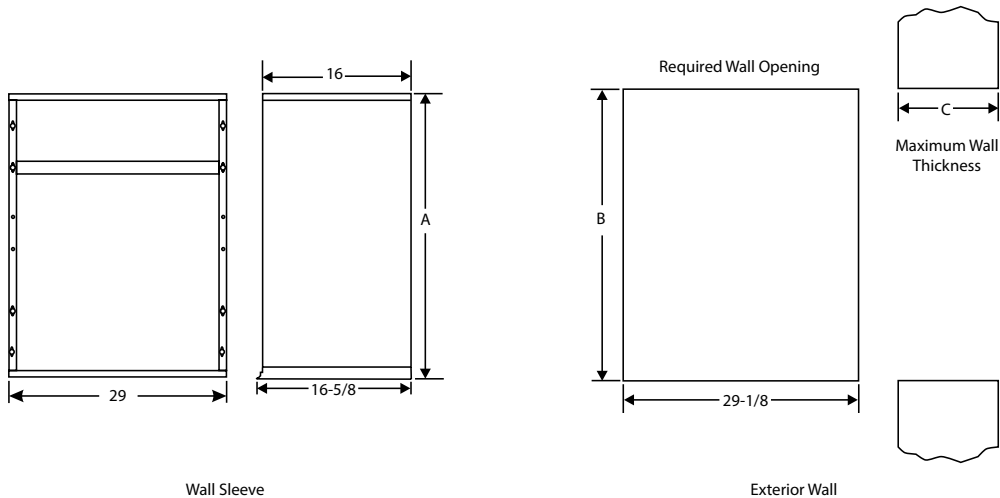


WALL SLEEVES & LOUVERS

Wall Sleeves		Louvers			Model						Dimensions (in.)			
Wall Sleeve	Wall Sleeve Extension	Polypropylene Louvers	Aluminum Louvers	Impact Louvers	*MHP4-11-091*P	*MHP4-11-121*P	*MHP4-11-181*P	*MHP4-11-241*P	*MHP4-11-301*P	*MHP4-11-361*P	Wall Sleeve	Wall Opening		
											Height (A)	Height (B)	Depth (C)	
												Sleeve Only	Sleeve Plus Extension	
ASLEEVE6-1	---	ALVRP***-1	ALVRAL-1^	ALVRALC-1^	•	•	•				29	29-1/8	6	---
ASLEEVE8-1	---	ALVRP***-1	ALVRAL-1^	ALVRALC-1^	•	•	•				29	29-1/8	8	---
ASLEEVE10-1	ASLEEVEEXT4-1	ALVRP***-1	ALVRAL-1^	ALVRALC-1^	•	•	•				29	29-1/8	10	14
ASLEEVE12-1	ASLEEVEEXT4-1	ALVRP***-1	ALVRAL-1^	ALVRALC-1^	•	•	•				29	29-1/8	12	16
ASLEEVE6-2	---	ALVRP***-2	ALVRAL-2^	ALVRALC-2^				•	•		32-3/4	32-7/8	6	---
ASLEEVE8-2	---	ALVRP***-2	ALVRAL-2^	ALVRALC-2^				•	•		32-3/4	32-7/8	8	---
ASLEEVE10-2	ASLEEVEEXT4-2	ALVRP***-2	ALVRAL-2^	ALVRALC-2^				•	•		32-3/4	32-7/8	10	14
ASLEEVE12-2	ASLEEVEEXT4-2	ALVRP***-2	ALVRAL-2^	ALVRALC-2^				•	•		32-3/4	32-7/8	12	16
ASLEEVE6-2	---	ALVRP***-2	ALVRAL-7^		o	o	o				32-3/4	32-7/8	6	---
ASLEEVE8-2	---	ALVRP***-2	ALVRAL-7^		o	o	o				32-3/4	32-7/8	8	---
ASLEEVE10-2	ASLEEVEEXT4-2	ALVRP***-2	ALVRAL-7^		o	o	o				32-3/4	32-7/8	10	14
ASLEEVE12-2	ASLEEVEEXT4-2	ALVRP***-2	ALVRAL-7^		o	o	o				32-3/4	32-7/8	12	16
ASLEEVE6-5	---	ALVRP***-3	---	---	o	o	o	o	o	•	45	45-1/8	6	---
ASLEEVE8-5	---	ALVRP***-3	---	---	o	o	o	o	o	•	45	45-1/8	8	---
ASLEEVE10-5	ASLEEVEEXT4-3	ALVRP***-3	---	---	o	o	o	o	o	•	45	45-1/8	10	14
ASLEEVE12-5	ASLEEVEEXT4-3	ALVRP***-3	---	---	o	o	o	o	o	•	45	45-1/8	12	16
ASLEEVE6-5	---	---	ALVRAL-3^	---	o	o	o				45	45-1/8	6	---
ASLEEVE8-5	---	---	ALVRAL-3^	---	o	o	o				45	45-1/8	8	---
ASLEEVE10-5	ASLEEVEEXT4-3	---	ALVRAL-3^	---	o	o	o				45	45-1/8	10	14
ASLEEVE12-5	ASLEEVEEXT4-3	---	ALVRAL-3^	---	o	o	o				45	45-1/8	12	16
ASLEEVE6-5	---	---	ALVRAL-4^	---				o	o	•	45	45-1/8	6	---
ASLEEVE8-5	---	---	ALVRAL-4^	---				o	o	•	45	45-1/8	8	---
ASLEEVE10-5	ASLEEVEEXT4-3	---	ALVRAL-4^	---				o	o	•	45	45-1/8	10	14
ASLEEVE12-5	ASLEEVEEXT4-3	---	ALVRAL-4^	---				o	o	•	45	45-1/8	12	16

Note: Wall Sleeve and Louver size must be coordinated
 *** Louver colors: WHT = white, SAN = sandstone, BGE = beige, TPST = taupestone
 ^ -P: Option to paint standard, aluminum, and impact-resistant louver
 • Wall sleeve and louver sizes equal to the required wall opening dimensions for the unit size
 o Optional: Wall sleeves and louvers can be oversized to maintain a uniform appearance

WALL SLEEVE & WALL OPENING DIMENSIONS (IN.)



SCCR ACCESSORY

Model	Kit*
3MHP4-11-091	ASCCR2
5MHP4-11-091	ASCCR3
3MHP4-11-121	ASCCR2
5MHP4-11-121	ASCCR3
3MHP4-11-181	ASCCR2
5MHP4-11-181	ASCCR3
7MHP4-11-181	ASCCR4
10MHP4-11-181	ASCCR6
5MHP4-11-241	ASCCR4
7MHP4-11-241	ASCCR5
10MHP4-11-241	ASCCR7
5MHP4-11-301	ASCCR4
7MHP4-11-301	ASCCR8
10MHP4-11-301	ASCCR7
5MHP4-11-361	ASCCR4
7MHP4-11-361	ASCCR9
10MHP4-11-361	ASCCR10

*200kA RMS Symmetrical (per UL 508A)

CRANKCASE HEATER

Model	Kit
*MHP4-11-091*P	N/A
*MHP4-11-121*P	
*MHP4-11-181*P	
*MHP4-11-241*P	ACASE841
*MHP4-11-301*P	
*MHP4-11-361*P	

MOTORIZED VENTILATION DAMPER

Model	Kit	
	AVADAMP1 (w/ Controller)	AVADAMP2 (w/ Field-Supplied Relay)
*MHP4-11-091*P	ALL	ALL
*MHP4-11-121*P		
*MHP4-11-181*P		
*MHP4-11-241*P		
*MHP4-11-301*P		
*MHP4-11-361*P		

RATED COOLING & HEATING PERFORMANCE

Model	Supply Airflow (SCFM)	Cooling			Heating				Electric Heat					
		Net Capacity (Btu/hr)	Efficiency (EER)	S/T [^]	17°F		47°F		240V		230V		208V	
					Net Capacity (Btu/hr)	Efficiency (COP)	Net Capacity (Btu/hr)	Efficiency (COP)	kW	BTU/hr	kW	BTU/hr	kW	BTU/hr
3MHP4-11-091*P	350	8,600	11.1	0.79	5,200	2.0	8,600	3.3	3.60	12,284	3.31	11,281	2.70	9,226
5MHP4-11-091*P									4.80	16,378	4.41	15,042	3.61	12,302
3MHP4-11-121*P	475	12,000	11.0	0.79	6,800	2.0	11,400	3.3	3.60	12,284	3.31	11,281	2.70	9,226
5MHP4-11-121*P									4.80	16,378	4.41	15,042	3.61	12,302
3MHP4-11-181*P	600	17,000	11.0	0.77	9,200	2.0	16,200	3.3	3.60	12,284	3.31	11,281	2.70	9,226
5MHP4-11-181*P									4.80	16,378	4.41	15,042	3.61	12,302
7MHP4-11-181*P									7.20	24,567	6.61	22,563	5.41	18,453
10MHP4-11-181*P									9.60	32,757	8.82	30,084	7.21	24,604
5MHP4-11-241*P	800	22,800	11.0	0.76	14,000	2.0	22,800	3.3	4.80	16,378	4.41	15,042	3.61	12,302
7MHP4-11-241*P									7.20	24,567	6.61	22,563	5.41	18,453
10MHP4-11-241*P									9.60	32,757	8.82	30,084	7.21	24,604
5MHP4-11-301*P	1,025	28,200	11.0	0.75	16,400	2.0	26,200	3.3	4.80	16,378	4.41	15,042	3.61	12,302
7MHP4-11-301*P									7.20	24,567	6.61	22,563	5.41	18,453
10MHP4-11-301*P									9.60	32,757	8.82	30,084	7.21	24,604
5MHP4-11-361*P	1,200	34,600	11.3	0.75	20,400	2.0	32,400	3.3	4.80	16,378	4.41	15,042	3.61	12,302
7MHP4-11-361*P									7.20	24,567	6.61	22,563	5.41	18,453
10MHP4-11-361*P									9.60	32,757	8.82	30,084	7.21	24,604

[^] Not a rated value

S/T = ratio of sensible to total cooling load

SCFM = standard cubic feet per minute

EXTENDED HEATING PERFORMANCE DATA (HEAT PUMP ONLY)

Model	Outdoor Temperature - DB / WB (°F)							
	17 / 15		35 / 33		47 / 43		62 / 56	
	Net Capacity (Btu/hr)	System Power Input (kW)	Net Capacity (Btu/hr)	System Power Input (kW)	Net Capacity (Btu/hr)	System Power Input (kW)	Net Capacity (Btu/hr)	System Power Input (kW)
*MHP4-11-091*P	5,200	0.71	7,200	0.74	8,600	0.76	10,300	0.79
*MHP4-11-121*P	6,800	0.93	9,500	0.98	11,400	1.01	13,800	1.05
*MHP4-11-181*P	9,200	1.28	13,500	1.38	16,200	1.44	19,600	1.52
*MHP4-11-241*P	14,000	1.95	19,300	2.00	22,800	2.02	27,100	2.06
*MHP4-11-301*P	16,400	2.18	22,100	2.27	26,200	2.33	31,300	2.40
*MHP4-11-361*P	20,400	2.69	27,600	2.80	32,400	2.88	38,400	2.97

COMBINED EXTENDED HEATING PERFORMANCE DATA (HEAT PUMP + ELECTRIC HEAT) ¹

Tonnage	Model	Outdoor Temperature - DB / WB (°F)							
		17 / 15				35 / 33			
		208V		230V		208V		230V	
		Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)	Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)	Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)	Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)
0.75	3MHP4-11-091*P	14,300	3.41	16,400	4.02	16,300	3.44	18,400	4.05
	5MHP4-11-091*P	17,400	4.32	20,200	5.12	19,400	4.35	22,200	5.15
1.0	3MHP4-11-121*P	15,900	3.63	18,000	4.24	18,600	3.68	20,700	4.29
	5MHP4-11-121*P	19,000	4.54	21,800	5.34	21,700	4.59	24,500	5.39
1.5	3MHP4-11-181*P	18,300	3.98	20,400	4.59	22,500	4.08	24,700	4.69
	5MHP4-11-181*P	21,400	4.89	24,200	5.69	25,600	4.99	28,500	5.79
	7MHP4-11-181*P	27,500	6.69	31,700	7.89	31,800	6.79	36,000	7.99
	10MHP4-11-181*P	33,700	8.49	39,200	10.10	37,900	8.59	43,500	10.20
2.0	5MHP4-11-241*P	26,100	5.56	29,000	6.36	31,400	5.61	34,300	6.41
	7MHP4-11-241*P	32,300	7.36	36,500	8.56	37,500	7.41	41,800	8.61
	10MHP4-11-241*P	38,400	9.16	44,000	10.77	43,700	9.21	49,300	10.82
2.5	5MHP4-11-301*P	28,500	5.79	31,400	6.59	34,100	5.88	37,100	6.68
	7MHP4-11-301*P	34,600	7.59	38,900	8.79	40,300	7.68	44,600	8.88
	10MHP4-11-301*P	40,800	9.39	46,400	11.00	46,400	9.48	52,100	11.09
3.0	5MHP4-11-361*P	32,400	6.30	35,400	7.10	39,600	6.41	42,600	7.21
	7MHP4-11-361*P	38,600	8.10	42,900	9.30	45,700	8.21	50,100	9.41
	10MHP4-11-361*P	44,700	9.90	50,400	11.51	51,900	10.01	57,600	11.62

¹ Combined performance of Heat Pump operation (compressor) plus Electric Heat.

COMBINED EXTENDED HEATING PERFORMANCE DATA (HEAT PUMP + ELECTRIC HEAT) ¹

Tonnage	Model	Outdoor Temperature - DB / WB (°F)							
		47 / 43				62 / 56			
		208V		230V		208V		230V	
		Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)	Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)	Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)	Combined Heating Capacity (Btu/hr)	Combined System Power Input (kW)
0.75	3MHP4-11-091*P	17,700	3.46	19,800	4.07	19,400	3.49	21,500	4.10
	5MHP4-11-091*P	20,800	4.37	23,600	5.17	22,400	4.40	25,300	5.20
1.0	3MHP4-11-121*P	20,500	3.71	22,600	4.32	22,800	3.75	25,000	4.36
	5MHP4-11-121*P	23,500	4.62	26,400	5.42	25,900	4.66	28,800	5.46
1.5	3MHP4-11-181*P	25,200	4.14	27,400	4.75	28,600	4.22	30,800	4.83
	5MHP4-11-181*P	28,300	5.05	31,200	5.85	31,700	5.13	34,600	5.93
	7MHP4-11-181*P	34,400	6.85	38,700	8.05	37,800	6.93	42,100	8.13
	10MHP4-11-181*P	40,600	8.65	46,200	10.26	44,000	8.73	49,600	10.34
2.0	5MHP4-11-241*P	34,800	5.63	37,800	6.43	39,100	5.67	42,100	6.47
	7MHP4-11-241*P	41,000	7.43	45,300	8.63	45,200	7.47	49,600	8.67
	10MHP4-11-241*P	47,100	9.23	52,800	10.84	51,400	9.27	57,100	10.88
2.5	5MHP4-11-301*P	38,200	5.94	41,200	6.74	43,200	6.01	46,300	6.81
	7MHP4-11-301*P	44,300	7.74	48,700	8.94	49,400	7.81	53,800	9.01
	10MHP4-11-301*P	50,500	9.54	56,200	11.15	55,500	9.61	61,300	11.22
3.0	5MHP4-11-361*P	44,300	6.49	47,400	7.29	50,300	6.58	53,400	7.38
	7MHP4-11-361*P	50,500	8.29	54,900	9.49	56,400	8.38	60,900	9.58
	10MHP4-11-361*P	56,600	10.09	62,400	11.70	62,600	10.18	68,400	11.79

¹ Combined performance of Heat Pump operation (compressor) plus Electric Heat.

EXTENDED COOLING PERFORMANCE DATA

Tonnage	Model	Indoor Temp DB/WB (°F)	Outdoor Temperature - DB (°F)														
			65			85			95			105			115		
			Net Capacity (Btu/hr)	S/T	System Power Input (kW)	Net Capacity (Btu/hr)	S/T	System Power Input (kW)	Net Capacity (Btu/hr)	S/T	System Power Input (kW)	Net Capacity (Btu/hr)	S/T	System Power Input (kW)	Net Capacity (Btu/hr)	S/T	System Power Input (kW)
0.75	*MHP4-11-091*P	85/72	10,800	0.64	0.62	9,900	0.68	0.72	9,400	0.70	0.77	8,700	0.74	0.85	8,000	0.77	0.94
		80/67	10,200	0.70	0.61	9,100	0.76	0.72	8,600	0.79	0.77	7,900	0.82	0.84	7,200	0.85	0.91
		75/63	9,500	0.74	0.61	8,400	0.79	0.72	7,900	0.82	0.77	7,100	0.86	0.83	6,400	0.90	0.89
		75/57	8,800	1.00	0.61	7,700	1.00	0.71	7,200	1.00	0.76	6,700	1.00	0.83	6,100	1.00	0.89
1.0	*MHP4-11-121*P	85/72	15,100	0.64	0.82	13,700	0.67	1.01	13,000	0.69	1.10	12,000	0.73	1.21	11,000	0.76	1.32
		80/67	14,100	0.72	0.82	12,700	0.77	1.00	12,000	0.79	1.09	11,000	0.83	1.19	9,900	0.86	1.29
		75/63	13,300	0.74	0.82	11,800	0.79	0.99	11,000	0.81	1.07	9,900	0.86	1.17	8,800	0.90	1.27
		75/57	12,100	1.00	0.81	10,800	1.00	0.98	10,200	1.00	1.06	9,300	1.00	1.16	8,500	1.00	1.26
1.5	*MHP4-11-181*P	85/72	21,200	0.60	1.14	19,300	0.65	1.38	18,400	0.67	1.50	16,900	0.72	1.64	15,400	0.77	1.78
		80/67	19,900	0.67	1.13	18,000	0.74	1.38	17,000	0.77	1.50	15,300	0.82	1.63	13,600	0.86	1.77
		75/63	18,800	0.72	1.13	16,800	0.77	1.36	15,800	0.80	1.48	14,000	0.85	1.61	12,200	0.90	1.74
		75/57	17,100	1.00	1.13	15,300	1.00	1.36	14,400	1.00	1.47	13,300	1.00	1.60	12,100	1.00	1.74
2.0	*MHP4-11-241*P	85/72	27,900	0.60	1.54	25,800	0.65	1.89	24,700	0.67	2.06	23,000	0.70	2.28	21,400	0.73	2.50
		80/67	26,200	0.67	1.55	23,900	0.73	1.90	22,800	0.76	2.07	20,900	0.80	2.29	19,000	0.84	2.50
		75/63	24,800	0.71	1.55	22,400	0.76	1.88	21,200	0.79	2.05	19,100	0.84	2.26	17,100	0.88	2.48
		75/57	22,700	1.00	1.55	20,300	1.00	1.88	19,200	1.00	2.04	17,700	1.00	2.26	16,200	1.00	2.49
2.5	*MHP4-11-301*P	85/72	33,000	0.64	1.92	31,700	0.66	2.37	31,100	0.67	2.59	29,200	0.69	2.90	27,300	0.71	3.20
		80/67	32,000	0.70	1.91	29,500	0.73	2.35	28,200	0.75	2.56	26,600	0.78	2.85	25,100	0.80	3.13
		75/63	31,100	0.72	1.90	28,800	0.76	2.33	27,700	0.78	2.54	25,400	0.81	2.83	23,200	0.84	3.11
		75/57	27,900	1.00	1.87	26,600	1.00	2.30	25,900	1.00	2.51	24,000	1.00	2.80	22,100	1.00	3.10
3.0	*MHP4-11-361*P	85/72	41,300	0.63	2.27	38,400	0.66	2.80	36,900	0.67	3.06	34,500	0.70	3.37	32,200	0.72	3.68
		80/67	39,200	0.69	2.25	36,100	0.73	2.77	34,600	0.75	3.04	32,000	0.78	3.34	29,500	0.81	3.64
		75/63	37,300	0.72	2.25	33,800	0.76	2.75	32,100	0.78	2.99	29,500	0.81	3.29	27,000	0.84	3.59
		75/57	33,900	1.00	2.25	31,100	1.00	2.73	29,700	1.00	2.97	27,600	1.00	3.27	25,500	1.00	3.58

BLOWER PERFORMANCE

- Performance based on factory-provided washable filter installed in the unit.
- If a higher resistance filter is field installed in the unit, the added resistance must be included in the external static pressure and must not exceed 0.5 in. w.c. including ductwork
- Refer to Factory Filter Size and Pressure Drop table for additional details

SUPPLY AIRFLOW PERFORMANCE AS A FUNCTION OF EXTERNAL STATIC PRESSURE																	
Model	Indoor Blower Speed	0.1" w.c.			0.2" w.c.			0.3" w.c.			0.4 "w.c.			0.5" w.c.			
		SCFM	Watts	HP	SCFM	Watts	HP	SCFM	Watts	HP	SCFM	Watts	HP	SCFM	Watts	HP	
*MHP4-11-091*P	TAP 1 (FAN)	365	28	0.04	330	31	0.04	275	35	0.05	225	38	0.05	180	41	0.05	
	TAP 2 (COOL / HP)*	375	28	0.04	325	32	0.04	275	35	0.05	N/A	N/A	N/A	N/A	N/A	N/A	
	TAP 3 (COOL / HP)	N/A	N/A	N/A	N/A	N/A	N/A	395	54	0.07	370	58	0.08	330	62	0.08	
	3 kW	TAP 4 (HEAT)*	515	55	0.07	485	58	0.08	450	62	0.08	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	600	73	0.10	570	78	0.10	545	84	0.11	515	88	0.12	475	92	0.12
	5 kW	TAP 4 (HEAT)*	570	69	0.09	545	73	0.10	515	77	0.10	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	660	92	0.12	635	98	0.13	605	104	0.14	580	109	0.15	550	114	0.15
*MHP4-11-121*P	TAP 1 (FAN)	365	28	0.04	330	31	0.04	275	35	0.05	225	38	0.05	180	41	0.05	
	TAP 2 (COOL / HP)*	490	50	0.07	460	55	0.07	420	59	0.08	N/A	N/A	N/A	N/A	N/A	N/A	
	TAP 3 (COOL / HP)	N/A	N/A	N/A	555	77	0.10	525	82	0.11	495	86	0.12	460	91	0.12	
	3 kW	TAP 4 (HEAT)*	515	55	0.07	485	58	0.08	450	62	0.08	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	600	73	0.10	570	78	0.10	545	84	0.11	515	88	0.12	475	92	0.12
	5 kW	TAP 4 (HEAT)*	570	69	0.09	545	73	0.10	515	77	0.10	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	660	92	0.12	635	98	0.13	605	104	0.14	580	109	0.15	550	114	0.15
*MHP4-11-181*P	TAP 1 (FAN)	365	32	0.04	335	35	0.05	280	39	0.05	235	42	0.06	175	46	0.06	
	TAP 2 (COOL / HP)*	615	103	0.14	590	108	0.14	555	112	0.15	530	117	0.16	500	121	0.16	
	TAP 3 (COOL / HP)	700	135	0.18	670	141	0.19	640	146	0.20	615	151	0.20	590	157	0.21	
	3 kW	TAP 4 (HEAT)*	615	93	0.12	590	97	0.13	555	101	0.14	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	715	127	0.17	685	134	0.18	655	140	0.19	630	146	0.20	600	151	0.20
	5 kW	TAP 4 (HEAT)*	665	110	0.15	635	114	0.15	605	118	0.16	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	750	148	0.20	725	154	0.21	700	160	0.21	675	166	0.22	650	171	0.23
	7 kW	TAP 4 (HEAT)*	725	137	0.18	705	144	0.19	675	150	0.20	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	800	200	0.27	780	205	0.27	755	209	0.28	725	213	0.29
	10 kW	TAP 4 (HEAT)*	750	148	0.20	725	154	0.21	700	161	0.22	N/A	N/A	N/A	N/A	N/A	N/A
TAP 5 (HEAT)		N/A	N/A	N/A	N/A	N/A	N/A	805	224	0.30	780	228	0.31	750	232	0.31	
*MHP4-11-241*P	TAP 1 (FAN)	460	43	0.06	420	47	0.06	380	51	0.07	350	54	0.07	290	59	0.08	
	TAP 2 (COOL / HP)*	815	150	0.20	785	161	0.22	760	165	0.22	740	172	0.23	715	178	0.24	
	TAP 3 (COOL / HP)	885	201	0.27	860	208	0.28	835	213	0.29	805	217	0.29	785	220	0.30	
	5 kW	TAP 4 (HEAT)*	800	146	0.20	775	152	0.20	750	157	0.21	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	905	201	0.27	880	207	0.28	855	212	0.28	825	216	0.29	800	219	0.29
	7 kW	TAP 4 (HEAT)*	855	174	0.23	830	179	0.24	800	183	0.25	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	930	231	0.31	900	235	0.32	875	239	0.32	850	243	0.33
	10 kW	TAP 4 (HEAT)*	855	174	0.23	830	179	0.24	800	183	0.25	N/A	N/A	N/A	N/A	N/A	N/A
TAP 5 (HEAT)		N/A	N/A	N/A	930	231	0.31	900	235	0.32	875	239	0.32	850	243	0.33	

N/A: Do not operate unit using this blower speed at this external static pressure.

* As shipped speed for Cooling and Heat Pump operation. Blower speed must be field adjusted to Speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.

BLOWER PERFORMANCE CONTINUED

- Performance based on factory-provided washable filter installed in the unit.
- If a higher resistance filter is field installed in the unit, the added resistance must be included in the external static pressure and must not exceed 0.5 in. w.c. including ductwork
- Refer to Factory Filter Size and Pressure Drop table for additional details

SUPPLY AIRFLOW PERFORMANCE AS A FUNCTION OF EXTERNAL STATIC PRESSURE																	
Model	Indoor Blower Speed	0.1" w.c.			0.2" w.c.			0.3" w.c.			0.4 "w.c.			0.5" w.c.			
		SCFM	Watts	HP	SCFM	Watts	HP	SCFM	Watts	HP	SCFM	Watts	HP	SCFM	Watts	HP	
*MHP4-11-301*P	TAP 1 (FAN)	590	43	0.06	535	48	0.06	430	55	0.07	380	60	0.08	315	65	0.09	
	TAP 2 (COOL / HP) [†]	1040	161	0.22	1005	169	0.23	970	177	0.24	935	185	0.25	900	193	0.26	
	TAP 3 (COOL / HP)	N/A	N/A	N/A	1105	211	0.28	1070	220	0.30	1040	229	0.31	1010	237	0.32	
	5 kW	TAP 4 (HEAT)*	1075	151	0.20	1040	159	0.21	1005	168	0.23	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	1100	205	0.27	1065	216	0.29	1025	225	0.30
	7 kW	TAP 4 (HEAT)*	1075	151	0.20	1040	159	0.21	1005	168	0.23	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	1100	205	0.27	1065	216	0.29	1025	225	0.30
	10 kW	TAP 4 (HEAT)*	1075	151	0.20	1040	159	0.21	1005	168	0.23	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	1100	205	0.27	1065	216	0.29	1025	225	0.30
*MHP4-11-361*P	TAP 1 (FAN)	680	61	0.08	630	68	0.09	575	74	0.10	525	79	0.11	460	86	0.12	
	TAP 2 (COOL / HP) [†]	1235	260	0.35	1200	272	0.36	1165	284	0.38	1135	295	0.40	1100	305	0.41	
	TAP 3 (COOL / HP)	N/A	N/A	N/A	N/A	N/A	N/A	1250	330	0.44	1215	342	0.46	1180	354	0.47	
	5 kW	TAP 4 (HEAT)*	1240	232	0.31	1205	248	0.33	1170	262	0.35	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	1260	315	0.42	1230	328	0.44	1200	338	0.45
	7 kW	TAP 4 (HEAT)*	1240	232	0.31	1205	248	0.33	1170	262	0.35	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	1260	315	0.42	1230	328	0.44	1200	338	0.45
	10 kW	TAP 4 (HEAT)*	1240	232	0.31	1205	248	0.33	1170	262	0.35	N/A	N/A	N/A	N/A	N/A	N/A
		TAP 5 (HEAT)	N/A	N/A	N/A	N/A	N/A	N/A	1260	315	0.42	1230	328	0.44	1200	338	0.45

N/A: Do not operate unit using this blower speed at this external static pressure.

[†] As shipped speed for Cooling and Heat Pump operation. Blower speed must be field adjusted to Speed Tap 3 for higher duct static applications.

* As shipped speed for Heating operation. Blower speed must be field adjusted to Speed Tap 5 for higher duct static applications.



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All specifications and illustrations subject to change without notice and without incurring obligations.