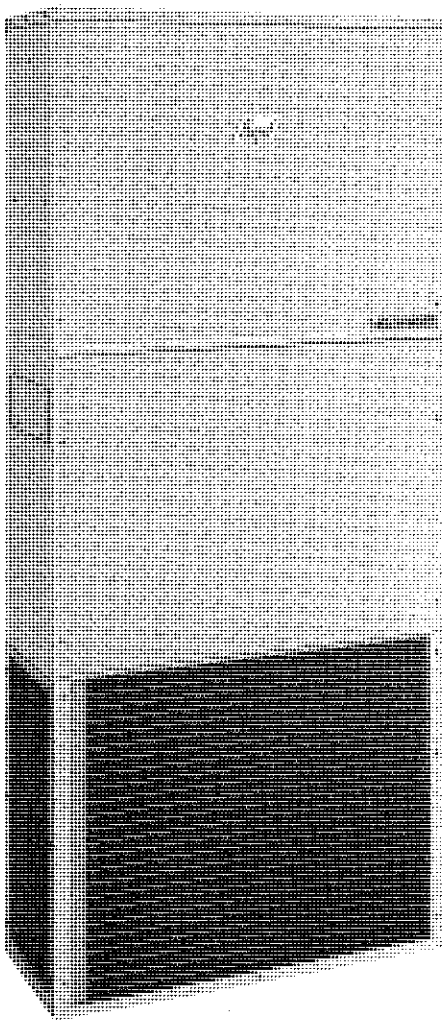
MODULAR MASTER™ WALL-MOUNT HEAT PUMPS

Heating Capacities: 30,600 to 35,600 BTUH
Cooling Capacities: 28,000 to 33,400 BTUH
COP: 2.74 to 2.78 SEER: 8.20 to 8.50



The Modular Master™ is a compact version of Bard's standard wall mount units. Even though it's physically smaller, its performance, versatility, price and ease of installation make these units ideal for mobile modular structures.

This practical, outside wall-mount heat pump was designed primarily for the mobile modular manufacturing industry. The streamlined construction reduces weight, size, and improves appearance. Leave it to Bard, the wall mount experts, to give mobile modular manufacturers what they asked for.

Aluminum finned copper coil surfaces provide maximum transfer.

Twin blowers designed with direct drive motor. Motor overload protection is standard on all models.

Heat Pump Compressor is totally enclosed for quieter operation. Is specially designed to withstand higher compression ratios and longer operation than ordinary air conditioner compressors. Equipped with crankcase heater which prevents dilution of oil by refrigerant during shutdown periods and internal overload.

Galvanneal steel cabinet passes through Bard's 10 stage paint process. The result is a handsomely finished air conditioner with baked-on polyester enamel to withstand the most difficult weather conditions.

Electrical components are easily accessible for routine inspection and maintenance through service panel opening on right side of unit.

Air filters are standard equipment. Filters are easy to replace.

Circuit breakers — Non-circuit breaker and circuit breaker models available. See specification sheet for electrical ratings.

Fresh air damper assembly — Available as field installed optional equipment.

Both models 30 & 36 are available in 0 - 5 - 10 KW single phase sizes.

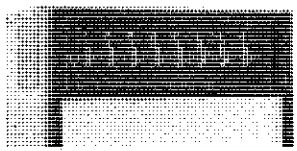
High Pressure Switch provides additional protection for the heat pump system.

Time-Temperature Defrost assures positive, quick removal of frost at all operating temperatures. Has 7-minute, time-safe override.

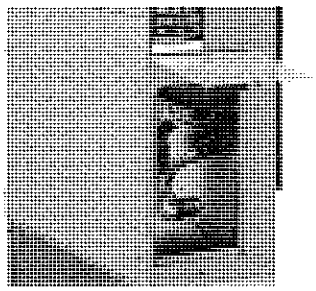
Suction Accumulator protects the compressor from refrigerant floodback and prevents damage to the compressor bearing surfaces.

LISTED CERTIFIED

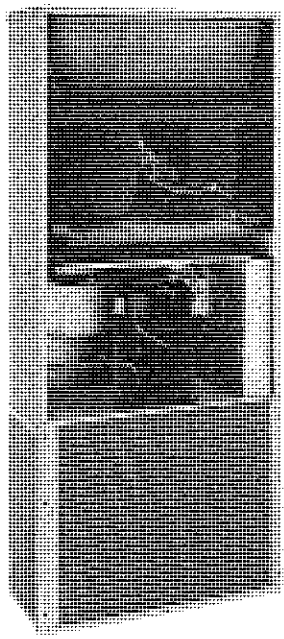
Underwriters Listed
for outdoor installation



Electric Heat Strips with automatic limit and thermo cut-off are available as a built-in option. Accessible from side outlet without removing unit from wall.



Electrical Components Accessible From Side



Capacity and Efficiency Ratings

Model	Phase	Cooling		Heating 47°	
		BTUH	SEER	BTUH	HSPF*
MHP30A	1	28,000	8.50	30,600	6.25
MHP36A	1	33,400	8.20	35,600	6.10

*Heating Seasonal Performance Factor at Region IV minimum design heating requirement per DOE test procedures in effect at time of printing.

All capacity, efficiency and cost of operation information is with fresh air cover plate, Model BOP20 installed. Cover plate is standard equipment and is recommended for use to obtain maximum energy efficiency where fresh air opening is not required.

The Modular Master's access doors can be easily removed to facilitate quick service and parts maintenance. (As shown at left.)

Specifications

Model	MHP30A-A00	MHP30A-A05	MHP30A-A10	MHP36A-A00	MHP36A-A05	MHP36A-A10
Cooling Capacity BTUH	28,000	28,000	28,000	33,400	33,400	33,400
Hi Temperature Htg. BTUH (47°)	30,600	30,600	30,600	35,600	35,600	35,600
Supplemental Heat Strip Kw	None	5	10	None	5	10
Supplemental Heat Strip BTUH	----	17065/12800	34130/25600	----	17065/12800	34130/25600
Electrical Rating — 60 Hz	230/208-1	230/208-1	230/208-1	230/208-1	230/208-1	230/208-1
Operating Voltage Range	197-253	197-253	197-253	197-253	197-253	197-253
Minimum Circuit Ampacity	25	51	77	31	57	83
No. Field Power Ckts.	1	1	1	1	1	1
**Field Wire Size	#10	#6	#3	#8	#4	#3
Ground Wire Size	#10	#10	#8	#10	#10	#8
***Req'd Max. External Fuses	40	60	80*	50	60	90*
Total Unit Amps 240/208	18.3/20.8	39.1/38.9	59.9/57.0	23.3/25.8	44.1/43.9	64.9/62
Internal Fuses (Standard)	None	None	60/30	None	None	60/30
Internal Circuit Breakers (Option C)	40	60	60, 30	50	60	60, 30
Compressor — Circuit A						
Volts	230/208			230/208		
Rated Load Amps 230/208	13/15.5			18/20.5		
Branch Circuit Selection Current	15.5			20.5		
Lock Rotor Amps	76/76			97/97		
Fan Motor & Condenser						
Fan Motor — HP/RPM	1/5/1050			1/5/1050		
Fan Motor — AMPS	1.4			1.4		
Fan Motor — DIA/CFM	20"/1800			20"/1800		
Face Area Sq. Ft./Row/Fins per in.	4.7/2/12			4.7/2/12		
Motor and Evaporator						
Blower Motor — HP/RPM	1/2/1600			1/2/1600		
Blower Motor — AMPS	3.9			3.9		
CFM Cooling & E.S.P. w/Filter (Rated) (Hi)	1000/.30			1060/.15		
Face Area Sq. Ft./Row/Fins per in.	2.7			2.7		
Filter Sizes (Inches)	14x25x1			14x25x1		
Refrigerant 22 — oz.	88			83		
Shipping Weight — lbs.	330			330		

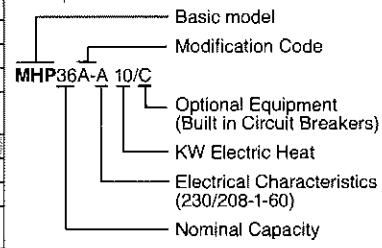
*Sizes 70A or greater are not HACR type.
**60°C copper wire size.
***Maximum time delay fuse or HACR type circuit breaker.

Important

While this electrical data is presented as a guide, it is important to electrically connect, properly sized fuses and conductor wires in accordance with the National Electrical Code and all existing local codes.

Nomenclature Explanation

Example:



① The supply duct requires a one inch clearance on all four sides from combustible materials. This is required for the first three feet of supply duct. Refer to the installation manual for more detailed information.

Indoor Blower Performance CFM — Dry Coil

E.S.P. In H_2O	MHP30A, MHP36A High
.0	1200
.10	1150
.20	1115
.30	1065
.40	1015
.50	965

Cooling Application Data

Below 65°F, unit requires Low Ambient Control, Part No. LAC-1.

Outdoor Model		70°	75°	80°	85°	90°	95°	100°	105°	110°	115°
MHP30A	Total BTUH	31,700	30,950	30,200	29,450	28,700	28,000	26,750	25,550	24,300	21,900
	Sensible BTUH	21,400	21,500	21,640	21,750	21,850	21,960	21,400	20,800	20,250	19,025
	Latent BTUH	10,300	9,450	8,560	7,700	6,850	6,040	5,350	4,750	4,050	2,875
MHP36A	Total BTUH	39,000	37,900	36,800	35,750	34,700	33,600	32,400	31,300	30,200	28,000
	Sensible BTUH	25,800	25,500	25,200	24,900	24,700	24,400	24,100	23,800	23,550	23,000
	Latent BTUH	13,200	12,400	11,600	10,850	10,000	9,200	8,300	7,500	6,650	5,000

Heating Application Data

Outdoor Temperature °F*

Outdoor Model		0°	5°	10°	15°	17°	20°	25°	30°	35°	40°	45°	47°	50°	55°	60°	65°
MHP30A	BTUH	13,000	14,300	15,400	16,650	17,100	17,800	19,000	20,150	21,300	25,150	29,100	30,600	31,900	33,950	36,000	38,150
	WATTS	2,450	2,515	2,575	2,635	2,665	2,700	2,755	2,820	2,880	3,020	3,165	3,225	3,280	3,375	3,470	3,570
	COP	1.55	1.66	1.75	1.85	1.88	1.93	2.02	2.09	2.17	2.44	2.69	2.78	2.85	2.95	3.04	3.13
MHP36A	BTUH	16,100	17,100	18,100	19,100	19,600	20,000	21,000	22,000	23,000	28,300	33,500	35,600	37,100	39,600	42,000	44,600
	WATTS	2,930	3,000	3,055	3,110	3,140	3,170	3,225	3,280	3,340	3,530	3,730	3,810	3,870	3,980	4,100	4,210
	COP	1.61	1.67	1.74	1.80	1.83	1.85	1.91	1.96	2.02	2.35	2.63	2.74	2.81	2.92	3.00	3.10

*70°F DB indoor return air at rated CFM includes defrost operation below 45°.

Indoor Thermostat Options

These Bard Systems feature the option of either using a thermostat with a non-cycling reversing valve or automatic changeover.

Manual Changeover

Thermostat - Part No.	Subbase - Part No.
8403-017	8404-009
(Honeywell T874R1129)	(Honeywell Q674L1181)

Automatic Changeover

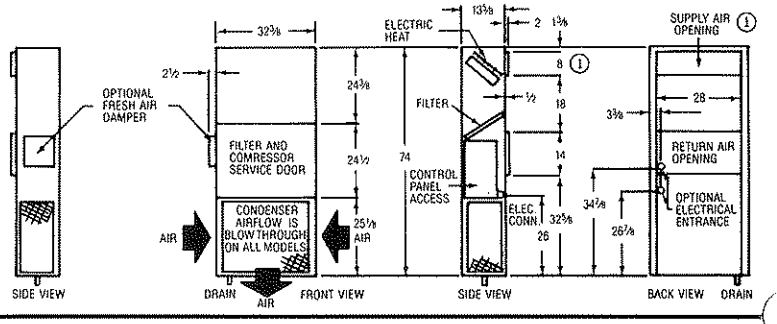
Thermostat - Part No.	Subbase - Part No.
8403-018	8404-010
(Honeywell T874N1024)	(Honeywell Q674F1261)

All specifications subject to change without notice.

If fresh air is required, an optional fresh air assembly (FAD 20) must be ordered separately.

Clearances Required For Service Access And Adequate Condenser Air Flow

Model	Left Side	Right Side
MHP30, MHP36	13"	30"



BARD MANUFACTURING CO.
BRYAN, OHIO 43506
Since 1914... Moving ahead, just as planned.

Specifications subject to change without notice.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

Form No. S3117 June, 1990

Supersedes S3117 October 1989

 MII-1M