

Comfort-Aire[®]



***ductless
mini-split
air conditioning
& heat pump
systems***

ENERGY  KNIGHT

The Ductless, Single or Dual



SOLID, DURABLE CONCEPT

Energy Knight® Mini-Split Systems provide solid quiet cooling or heating and cooling. With designs that include outside compressor placement, sounds are kept outside and out of earshot. The outdoor unit features solid, pre-painted steel for years of corrosion-resistant operation. With the “split” outdoor unit, you now have the use and view from a window blocked by a traditional room air conditioner. Installation requires only a small 2-3/4 inch hole for connecting the

outdoor and indoor sections. And, the indoor section uses low-voltage wiring for faster installation. In the indoor unit there are “easy to see” self diagnostic lights and a test key allowing quick identification of any operating problems.

FLEXIBLE, ATTRACTIVE INSTALLATION

The Energy Knight® Mini-Split Systems feature an attractive design with rounded edges and stylish grill. They fit easily where other units won't...and they blend beautifully with any room decor. The outdoor unit can be placed anywhere. The indoor unit can be easily mounted on the indoor wall of your choice. Narrow indoor units extend only 7-1/4 inches into the room. The design allows a virtually endless array of installations. Literally wherever duct work isn't practical or economical. Possible locations include older homes, log homes, bedrooms, office space, computer rooms, sun rooms, offices contained in warehouses, sports arena skyboxes and building additions.

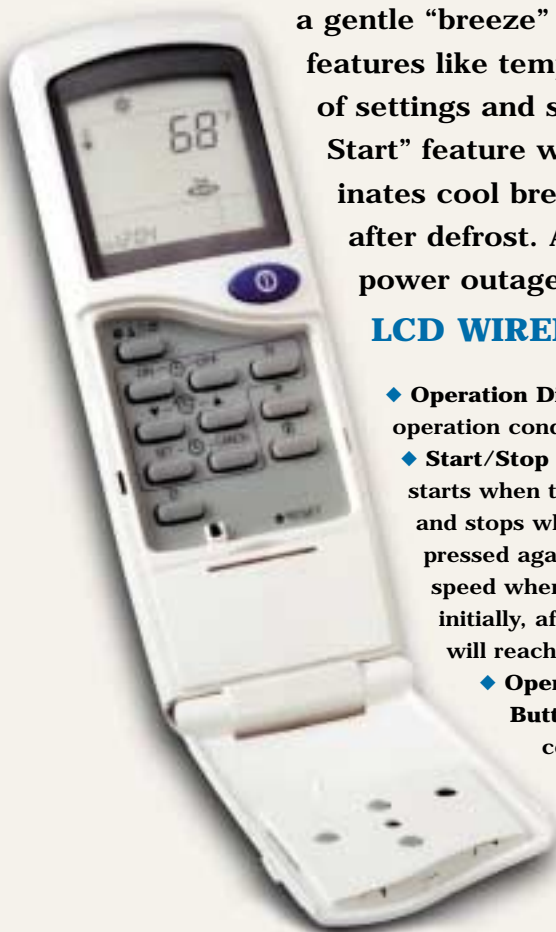


Wall-Mounted, Remote Control Zone Heating/Cooling

QUIET, EFFICIENT PERFORMANCE

Every Energy Knight® Mini-Split model, both heat pump and cooling, is engineered to be ultra-quiet. A “high-tech” designed fan creates a balanced and quiet

air flow. You will enjoy maximum comfort at economic costs with the automatic temperature and fan speed mode. A built-in microprocessor can continuously adjust fan speed providing a gentle “breeze” effect. Indoor electronic-based climate controls regulate features like temperature and dehumidification taking the guesswork out of settings and speeds. In addition, the Heat Pump models have a “Hot Start” feature which delays and/or reduces indoor fan speed. This eliminates cool breezes by ensuring a warm coil during initial start-up and after defrost. And, a “Auto Restart” feature restores set-points after power outage.



LCD WIRELESS REMOTE CONTROL

- ◆ **Operation Display** — Displays the operation conditions.
- ◆ **Start/Stop Button** — Operation starts when this button is pressed, and stops when the button is pressed again. The fan flows at low speed when start button is pressed initially, after a while fan speed will reach the desired speed.
- ◆ **Operation Mode Selection Button** — Used to select: cooling, auto, soft dry (dehumidification), heating (heat pump only).
- ◆ **On/Off Timer Buttons** — Used to select the time of start/stop operation.
- ◆ **Time Setting Button** — Used to adjust the time.
- ◆ **Nighttime/Sleep Button** — Used to set sleep mode.
- ◆ **Air Circulation Button** — Used to circulate room air without cooling.
- ◆ **Room Temperature Checking Button** — Used to check the room temperature.
- ◆ **Airflow Direction Control Button** — Used to set the desired vertical airflow direction.

Remote Controlled, Zoning Solution

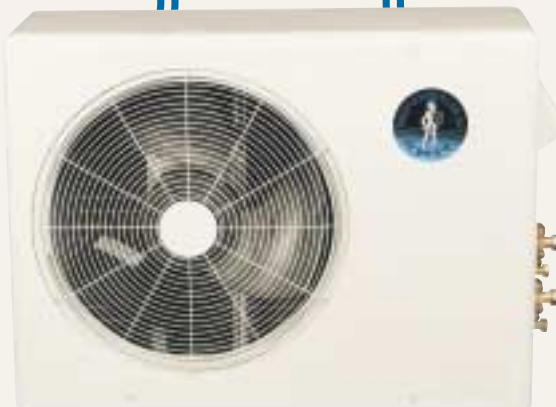


HMC24D-1 Cooling
HMH24D-1 Heat Pump
(2) 12,000 BTUH Air Handlers
(1) 24,000 BTUH Condenser

DUAL ZONE



HMC18AD-1 Cooling
HMH18AD-1 Heat Pump
(2) 9,000 BTUH Air Handlers
(1) 18,000 BTUH Condenser



- ◆ The Dual Zone design allows two air handlers to operate independently with one outdoor condensing unit
- ◆ Two fully-featured wireless remotes shipped with each system
- ◆ Heat Pump or Cooling only design
- ◆ Low Voltage Wiring between indoor and outdoor sections
- ◆ Cooling operation down to 32°F outdoor ambient temperature
- ◆ Cleanable filters with antibacterial features
- ◆ Automatic louvers for auto sweeping and stylish appearance
- ◆ Built-in self diagnostic technology simplifies troubleshooting
- ◆ Dehumidifying mode allows for better humidity control
- ◆ Auto restart restores set-points after power outage

FEATURES	AIR CONDITIONING MODELS				HEAT PUMP MODELS		
	HMC09AS-0	HMC12AS-0	HMC18AS-1	HMC24AS-1	HMH12AS-0	HMH18AS-1	HMH24AS-1
Power Supply	115/60	115/60	208/230/60	208/230/60	115/60	208/230/60	208/230/60
Air Filters (std.)	Cleanable/Anti-Bacterial Filter				Cleanable/Anti-Bacterial Filter		
Cooling Capacity (Btuh)	9,000	12,000	17,800/18,000	22,600/23,000	12,000	17,800/18,000	22,600/23,000
SEER	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Cooling Watts	940	1290	1870/1900	2500/2550	1290	1870/1900	2500/2550
Cooling AMPS	8.5	11.7	9.0/8.5	12.0/11.5	11.7	9.0/8.5	12/11.5
Dehumidification pts./hr.	2.6	3.0	5.3	6.6	3.0	5.3	6.6
Heating Capacity (Btuh)	N/A	N/A	N/A	N/A	12,000	18,700/19,000	22,600/23,000
COP	N/A	N/A	N/A	N/A	2.75	2.9	2.6
Heating Watts	N/A	N/A	N/A	N/A	1290	1870/1900	2500/2550
Heating Amps	N/A	N/A	N/A	N/A	11.7	9.0/8.5	12.0/11.5
HSPF	N/A	N/A	N/A	N/A	6.8	6.8	6.8
Indoor Unit							
CFM (max. per zone)	250	330	460	530	330	460	530
Fan Speeds (Cooling/Fan only)	3	3	3	3	3	3	3
Air Direction (4-way)							
Vertical (Up & Down)	Remote	Remote	Remote	Remote	Remote	Remote	Remote
Horizontal (Left & Right)	Manual	Manual	Manual	Manual	Manual	Manual	Manual
Indicator Lamps (Indoor Unit)							
ON/OFF	STD.	STD.	STD.	STD.	STD.	STD.	STD.
Sleep Mode	STD.	STD.	STD.	STD.	STD.	STD.	STD.
Timer	STD.	STD.	STD.	STD.	STD.	STD.	STD.
Defrost or Hot Start	N/A	N/A	N/A	N/A	STD.	STD.	STD.
Outdoor Unit "ON"	STD.	STD.	STD.	STD.	N/A	N/A	N/A
Indoor Unit Physical Dimensions							
Width (inches)	31-1/2	35	42-1/2	42-1/2	35	42-1/2	42-1/2
Height (inches)	10-3/8	11-3/8	12-1/2	12-1/2	11-3/8	12-1/2	12-1/2
Depth (inches)	6-1/2	6-7/8	7-1/4	7-1/4	6-7/8	7-1/4	7-1/4
Ship Weight (lbs.)	20	21	33	33	21	33	33
Outdoor Unit Physical Dimensions							
Width (inches)	30-3/8	30-3/8	34-3/8	34-3/8	30-3/8	34-3/8	34-3/8
Height (inches)	21-3/8	21-3/8	25-7/8	25-7/8	21-3/8	25-7/8	25-7/8
Depth (inches)	9-5/8	9-5/8	12-5/8	12-5/8	9-5/8	12-5/8	12-5/8
Weight (lbs.)	75	75	141	143	77-1/4	143	146
Electrical Data Outdoor Unit							
Main Power Connection Location	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit
Min. AWG. Wire Size	14-3	14-3	14-3	14-3	14-3	14-3	14-3
Fuse or Breaker Capacity	15	20	15	20	20	15	20
Recommended Indoor/Outdoor Connecting Cable Type (SJOWA)	18-4 (300v)	18-4 (300v)	18-4 (300v)	18-4 (300v)	18-4 (300v)	18-4 (300v)	18-4 (300v)
Line Sets O.D. (Inches)	0804F-25 or -50		1006F-25 or -50		0804F-25 or -50	1006F-25 or -50	
Liquid (Flare)	1/4	1/4	3/8	3/8	1/4	3/8	3/8
Suction (Flare)	1/2	1/2	5/8	5/8	1/2	5/8	5/8
Max. Length	50ft.	50ft.	50ft.	50ft.	50ft.	50ft.	50ft.
Max. Elevation	26ft.	26ft.	26ft.	26ft.	26ft.	26ft.	26ft.

Standard cooling unit operable down to 32°F outdoor temperature. Optional low ambient kit permits operation down to 0°F outdoor temperature.

Heat pump models lock-out below 26-29°F outdoor temperature. Field supplied auxiliary heat must be used below this outdoor temperature.

Accessories
Control Wire (30 or 55 ft.)
Deodorizing Filters
Low Ambient Kit
Line Sets (25 or 50 ft.)

	AIR CONDITIONING MODELS		HEAT PUMP MODELS	
FEATURES	HMC18AD-1	HMC24AD-1	HMH18AD-1	HMH24AD-1
Power Supply	208/230/60/1	208/230/60/1	208/230/60/1	208/230/60/1
Air Filters (std.)	Cleanable/Anti-Bacterial		Cleanable/Anti-Bacterial	
System Capacity	18,000	24,000	18,000	24,000
Cooling Capacity per Zone	9,000/8,500	12,000/11,800	9,000/8,500	12,000/11,800
SEER	10.0	10.0	10.0	10.0
Cooling Watts	1700/1680	2400/2400	1700/1680	2400/2400
Cooling Amps	7.5/8.2	10.0/11.0	7.8/8.2	13.0/14.0
Dehumidification pts./hr.	2.6/2.6	3.0	2.6/2.6	3.0/3.0
Heating Capacity (Btuh) per zone	N/A	N/A	9,000/8,500	12,000/11,800
COP	N/A	N/A	2.9/2.9	2.6/2.6
Heating Watts	N/A	N/A	1700/1680	2400/2400
Heating Amps	N/A	N/A	7.5/8.2	12.5/13.5
HSPF	N/A	N/A	6.8/6.8	6.8/6.8
Indoor Unit				
CFM (max. per zone)	280	350	280	350
Fan Speeds (Cooling/Fan only)	3	3	3	3
Air Direction (4-way)				
Vertical (Up & Down) modulating	Remote	Remote	Remote	Remote
Horizontal (Left & Right)	Manual	Manual	Manual	Manual
Indicator Lamps (Indoor Unit)				
ON/OFF	STD.	STD.	STD.	STD.
Sleep Mode	STD.	STD.	STD.	STD.
Timer	24 hr. on/off	24 hr. on/off	24 hr. on/off	24 hr. on/off
Defrost or Hot Start	N/A	N/A	STD.	STD.
Outdoor Unit "ON"	STD.	STD.	STD.	STD.
Indoor Unit Physical Dimensions				
Width (inches)	31-9/16	35	31-9/16	35
Height (inches)	10-5/16	11-3/8	10-5/16	11-3/8
Depth (inches)	6-1/2	6-3/4	6-1/2	6-3/4
Ship Weight (lbs.)	15-1/2	21	15-1/2	21
Outdoor Unit Physical Dimensions				
Width (inches)	34-1/4	34-1/4	34-1/4	34-1/4
Height (inches)	25-3/4	25-3/4	25-3/4	25-3/4
Depth (inches)	12-5/8	12-5/8	12-5/8	12-5/8
Ship Weight (lbs.)	136-3/4	141	142	145-1/2
Electrical Data Outdoor Unit				
Main Power Connection Location	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit
Min. AWG. Wire Size	14-3	14-3	14-3	14-3
Fuse or Breaker Size	15	20	15	20
Recommended Indoor/Outdoor Connecting Cable Type (SJOWA)	18-4 (300v)	18-4 (300v)	18-4 (300v)	18-4 (300v)
Line Sets O.D. (Inches)				
Liquid (Flare)	1/4	1/4	1/4	1/4
Suction (Flare)	3/8	1/2	3/8	1/2
Max. Length	50 ft.	50 ft.	50 ft.	50 ft.
Max. Elevation	26 ft.	26 ft.	26 ft.	26 ft.

Standard cooling unit operable down to 32°F outdoor temperature.

Heat pump models lock-out below 26-29°F outdoor temperature.

Field supplied auxiliary heat must be used below this outdoor temperature.

Specifications and performance data subject to change without notice.

HEAT CONTROLLER, INC.

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THE QUALITY LEADER IN CONDITIONING AIR

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