

Haier

Central Air Conditioning System



What The World Comes Home To™

HC13 Series 13 SEER Condensing Units



April 2006



Outdoor Condensing Unit

Quality Features:

- * High efficiency, high reliability compressors.
- * Totally enclosed, permanently lubricated fan motor.
- * Full ranges of 13 SEER products from 1.5 to 5 ton.
- * ARI certified and rated in accordance with DOE Standard.
- * Full metal jacket protects the coil from damage.
- * Liquid line filter drier.
- * High Pressure Control-Protects compressor.
- * Low Pressure Control-Prevents compressor operation if there is a loss of refrigerant.
- * Reduced annual electric consumption.

Quality Construction:

- * Heavy gauge galvanized steel construction.
- * Powder paint provides superior finish and rust/corrosion resistance.
- * Elevated base pan rails reduces rust and corrosion.
- * Drainage holes prevent standing water in base pan, further reducing corrosion.

Quality Coils:

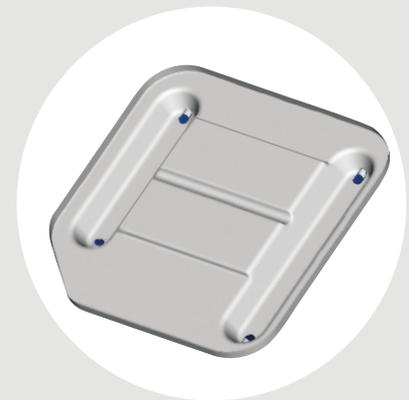
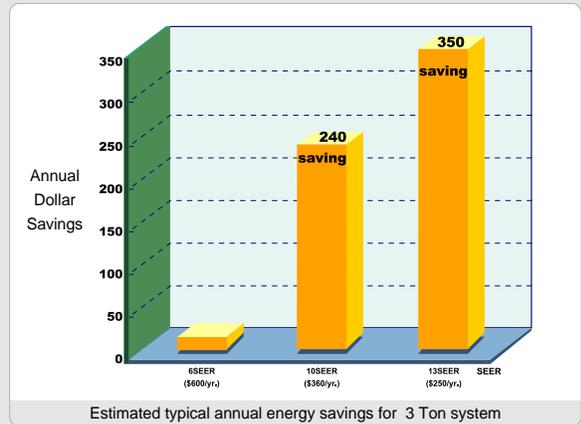
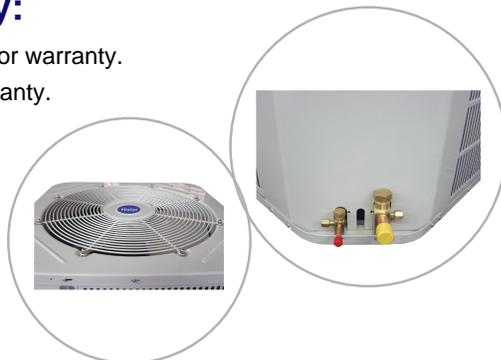
- * Haier "High Efficiency" coils.
- * Lanced/enhanced aluminum fins maximize heat transfer.
- * Internally grooved copper tubing for superior performance.

Quality Serviceability /Maintenance

- * Rigorous leak detection tests at the factory to ensure a leak-free construction.
- * Brass suction and liquid line service valves with sweat connections.
- * Removeable access panels for service and cleaning.
- * Controls and compressor are accessible by removal of the top and bottom service panels.
- * Top cover can be easily removed.

Quality Warranty:

- * 5-year limited compressor warranty.
- * 5-year limited parts warranty.



NOMENCLATURE FOR MODEL NUMBER

Outdoor unit

H	Brand symbol-H:Haier
C	System type-C:Air conditioner
24	Nominal capacity in (000) Btu/h
D	SEER designation. A=10, C=12, D=13, E=14
1	Design series.1-1st Generation
V	Electric: V;208-230-1-60
A	Body style
R	Reserved
Example:HC24D1VAR	



Indoor Air Handler

Quality Features:

- * Compact size for closet, utility room, attic, crawl space or basement installations.
- * Fully convertible-upflow, left or right horizontal and counterflow positions.
- * Direct drive multi-speed psc motor for higher efficiency and greater comfort.
- * Flowrater metering device to ensure optimum efficiency over a range of operating conditions.
- * Pre-wired for optional electric heater connection.

Quality Construction:

- * Rust resistant, galvanized steel cabinet.
- * Insulated cabinet lowers heating and cooling costs while reducing noise.

Quality Coils:

- * Haier high efficiency coils.
- * Lanced/enhanced aluminum fins maximize heat transfer.
- * Internally grooved copper tubing for superior performance.
- * Multi-position, corrosion resistant reinforced plastic drain pan for all airflow positions.

Quality Warranty:

- * 5-year limited parts warranty.

NOMENCLATURE FOR MODEL NUMBER

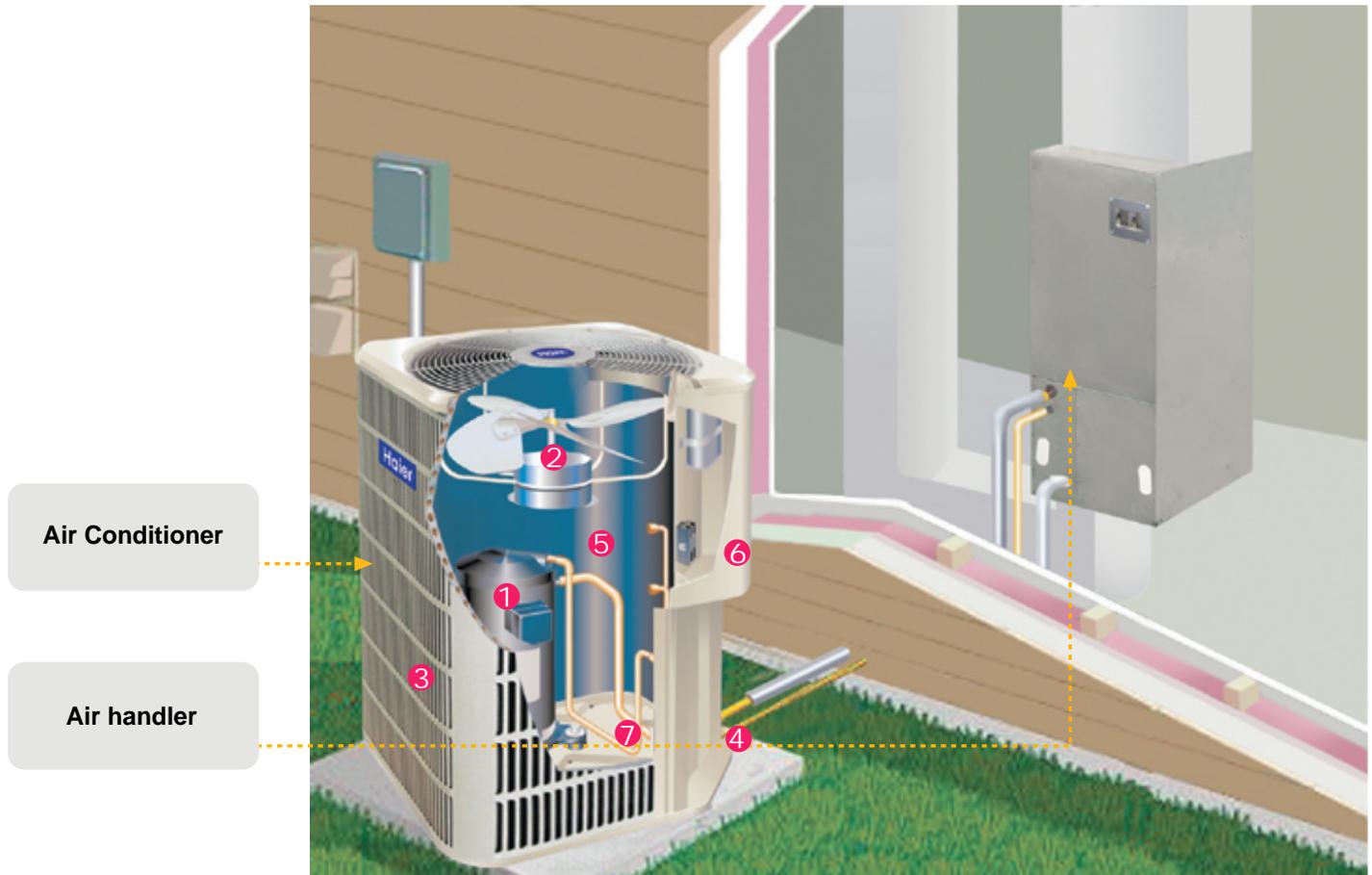
Indoor unit

H	Brand symbol-H:Haier
B	System type: B:Blower unit; C: coil unit; W:Wall mount blower unit
24	Nominal capacity in (000) Btu/h
00	Electric heater: 00:No,05:5Kw; 15:15Kw
V	Electric: V;208-230-1-60
D	SEER designation: A=10,B=11,C=12,D=13,E=14
1	Design series:1-1st Generation
M	Airflow configuration: M:Multi-direction;V:Vertical
20	Unit Width (In.):20:20", 22:22", 25:25"
	Example:HB2400VD1M20





Typical Installation



- 1 Hermetic compressor
- 2 Direct-drive fan
- 3 Enhanced coil guard
- 4 Reusable service valve
- 5 High efficiency outdoor coil
- 6 Corrosion-resistant cabinet
- 7 Drainage holes

Model Specifications

MODEL NUMBER		HC18D1VAR	HC24D1VAR	HC30D1VAR	HC36D1VAR	HC42D1VAR	HC48D1VAR	HC60D1VAR	
Rated cooling capacity	(BTU/h)	18,000	24,000	28,000	35,000	40,000	47,000	56,000	
Power supply	V/Ph/Hz	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60	
Voltage range	V	197-253	197-253	197-253	197-253	197-253	197-253	197-253	
Operating current amps.	A	7.5	9.7	11.1	13.8	15.0	19.6	21.6	
Min. Wire ampacity	A	8.6	11.6	12.4	15.9	17.7	21.8	33.7	
Max. Amps. of fuse or HACR Type Circuit Breaker	A	15	20	20	25	30	35	55	
Compressor	Type	Reciprocating	Reciprocating	Reciprocating	Reciprocating	Reciprocating	Reciprocating	Scroll	
	Rated Load Amps.	A	6.2	8.6	9.2	11.7	13.0	15.8	25.0
	Locked Running Amps.	A	41.0	60.0	60.0	73.0	85.0	90.0	150.0
Fan Motor	Type	psc	psc	psc	psc	psc	psc	psc	
	Rated Load Amps.	A	0.86	1.10	1.10	1.30	1.43	2.00	2.50
	Rated HP		1/8	1/6	1/6	1/4	1/3	1/3	1/2
	Nominal RPM		1000	840	840	850	1070	960	1000
Fan Blades	# blades-Dia.		3-18"	3-23"	3-23"	3-24"	3-23"	3-24"	3-24"
	Nominal CFM		1350	1800	2100	2700	3200	3600	4000
Outdoor coil	Type	Enhanced aluminum fins and grooved copper tubes							
	Are	Sq.Ft.	10.80	16.00	18.40	18.40	20.85	18.40	23.30
	ROWS-FPI		1--21	1--21	1--21	1--21	1--21	2--16	2--21
	Tube diameter	Inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Refrigerant line sizes	Liquid	Inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
	Vapor	Inch	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	7/8"
Refrigerant charge R22	Oz.	86.57	102.47	121.91	134.28	148.41	178.45	259.72	

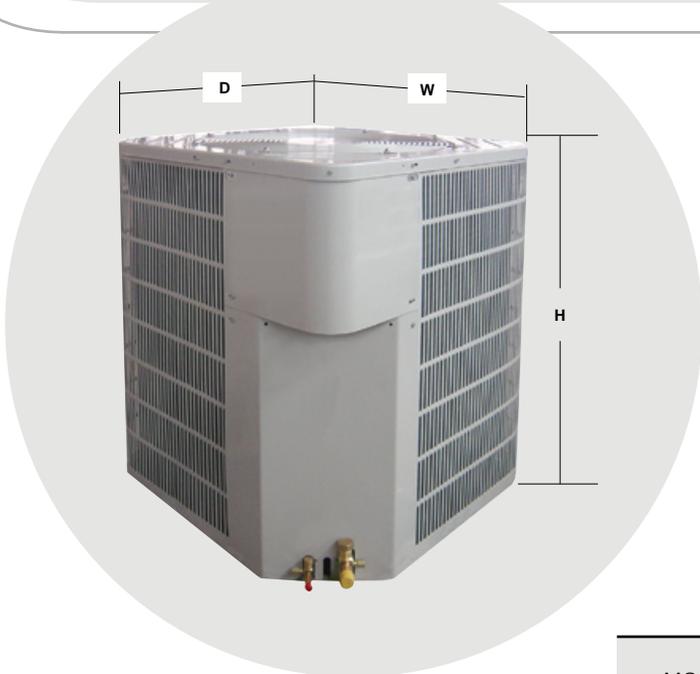
* Due to the constant product improvement, all specifications are subject to change without prior notice.

Cooling

Outdoor	Indoor	Indoor fan speed	ARI data of indoor			Cooling capacity with different outdoor temperature							
			Capacity	SEER	CFM	80	85	90	95	100	105	110	115
HC18D1VAR	HB2400VD1M20	M	18000	13	670	20340	19746	19080	18000	17730	17460	17190	16920
HC24D1VAR	HB2400VD1M20	H	24000	13	900	27120	26328	25440	24000	23640	23280	22920	22560
HC30D1VAR	HB3600VD1M22	L	28000	13	1125	31640	30716	29680	28000	27580	27160	26740	26320
HC36D1VAR	HB3600VD1M22	H	35000	13	1240	39550	38395	37100	35000	34475	33950	33425	32900
HC42D1VAR	HB4800VD1M22	L	40000	13	1480	45200	43880	42400	40000	39400	38800	38200	37600
HC48D1VAR	HB4800VD1M22	H	47000	13	1650	53110	51559	49820	47000	46295	45590	44885	44180
HC60D1VAR	HB6000VD1M22	H	56000	13	1800	63280	61432	59360	56000	55160	54320	53480	52640

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Dimensions and weights



The product should be installed by trained professionals with a knowledge of industry practices. Before proceeding with installation, please refer to installation instructions packaged with each shipped unit, It is the installers responsibility for compliance with all federal, state, provincial and local codes and regulations.

MODEL NUMBER		Dimensions			Weights
		W(inch)	D(inch)	H(inch)	Lbs.
HC18D1VAR	Unit	23 3/8	23 3/8	32 3/16	156
	Shipping	25	25	33 1/8	167
HC24D1VAR	Unit	30 5/8	30 5/8	28 1/4	194
	Shipping	32 1/2	32 1/2	29 1/2	209
HC30D1VAR	Unit	30 5/8	30 5/8	32 3/16	198
	Shipping	32 1/2	32 1/2	33 1/2	216
HC36D1VAR	Unit	30 5/8	30 5/8	32 3/16	203
	Shipping	32 1/2	32 1/2	33 1/2	220
HC42D1VAR	Unit	30 5/8	30 5/8	36 1/8	231
	Shipping	32 1/2	32 1/2	37 1/2	249
HC48D1VAR	Unit	30 5/8	30 5/8	32 3/16	244
	Shipping	32 1/2	32 1/2	33 1/2	262
HC60D1VAR	Unit	30 5/8	30 5/8	40	271
	Shipping	32 1/2	32 1/2	41 3/8	291

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