

**High-Efficiency 13 SEER**



## **CENTRAL AIR CONDITIONING AND HEAT PUMP SYSTEMS**

**13 SEER**

**1.5 - 5 TON**



### **PERFORMANCE**

Engineered to consume less energy and save money  
High-efficiency compressors and coils  
Copper condenser coils with aluminum fins for maximum heat transfer

### **QUALITY**

Heavy-gauge, corrosion-resistant steel cabinet  
Factory tested to ensure leak-free construction and proper operation  
Standard high and low refrigerant pressure safety switches prevent compressor damage  
Brass liquid lines and service valves  
Liquid line filter drier protects the unit

### **QUIET**

Top discharge  
Totally enclosed, permanently lubricated direct drive fan motor

### **DURABLE**

Superior paint finish and corrosion protection  
Compressor damage protection  
Elevated base pan with drain holes reduce rust and corrosion  
Full metal jacket protects coils from damage  
5-year limited warranty on all parts and compressor

### **SERVICE-FRIENDLY**

Removable access panels for service and cleaning  
Top cover is easily removed

*Keeping families cool  
for more than 60 years.*

# C13 CONDENSER

## Model Specifications

MODEL NUMBER			C13181VAR	C13241VAR	C13301VAR	C13361VAR	C13421VAR	C13481VAR	C13601VAR
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						
	Area	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
	Vapour	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 continuous product improvement, product specifications are subject to change without notice.

## Cooling

Outdoor	Indoor	Indoor fan speed	ARI data of indoor			Cooling capacity with different outdoor temperatures							
			Capacity	SEER	CFM	80	85	90	95	100	105	110	115
C13181VAR	AB132400V1M	M	18000	13	670	20340	19746	19080	18000	17730	17460	17190	16920
C13241VAR	AB132400V1M	H	24000	13	900	27120	26328	25440	24000	23640	23280	22920	22560
C13301VAR	AB133600V1M	L	28000	13	1125	31640	30716	29680	28000	27580	27160	26740	26320
C13361VAR	AB133600V1M	H	35000	13	1240	39550	38395	37100	35000	34475	33950	33425	32900
C13421VAR	AB134800V1M	L	40000	13	1480	45200	43880	42400	40000	39400	38800	38200	37600
C13481VAR	AB134800V1M	H	47000	13	1650	53110	51559	49820	47000	46295	45590	44885	44180
C13601VAR	AB136000V1M	H	56000	13	1800	63280	61432	59360	56000	55160	54320	53480	52640

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When the unit is installed on a cement pad, a gap must be left between the pad and the foundation wall.

Vibration isolation pads must be installed when the unit is mounted on wall brackets.

# H13 HEAT PUMP

## Model Specifications

MODEL NUMBER			H13181VAR	H13241VAR	H13301VAR	H13361VAR	H13421VAR	H13481VAR	H13601VAR
Rated cooling capacity		(BTU/h)	17,500	24,000	28,000	35,000	42,000	46,000	55,000
Rated heating capacity		(BTU/h)	16,500	22,500	25,500	32,000	41,000	44,000	55,000
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	9.8	11.2	13.6	17.0	19.2	21.6
Min. wire ampacity		A	8.6	11.6	12.8	16.1	20.6	21.7	33.7
Max. amps. of fuse or HACR type circuit breaker		A	15	20	20	25	35	35	55
Compressor	Type		Reciprocating	Reciprocating	Reciprocating	Reciprocating	Reciprocating	Reciprocating	Scroll
	Rated load amps.	A	6.2	8.6	9.2	11.7	14.9	15.8	25.0
	Locked running amps.	A	41	60	60	73	90	90	150
Fan motor	Type		psc	psc	psc	psc	psc	psc	psc
	Rated load amps.	A	0.86	1.10	1.30	1.43	2.00	2.00	2.50
	Rated HP		1/6	1/6	1/4	1/3	1/3	1/3	1/2
	Nominal RPM		840	840	850	1070	960	880	1000
Fan blades	# blades-dia.		3-23"	3-23"	3-24"	3-23"	3-24"	3-24"	3-24"
	Nominal CFM		1800	1800	2700	3200	3600	4000	4300
Outdoor coil	Type		Enhanced aluminum fins and grooved copper tubes						
	Area		16.00	16.00	18.40	18.40	18.40	20.85	25.75
	ROWS-FPI		1--21	1--21	1--21	1--21	2--17	2--17	2--17
Refrigerant line sizes	Tube diameter	Inch	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Liquid	Inch	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Refrigerant line sizes	Vapour	Inch	3/4	3/4	3/4	7/8	7/8	7/8	7/8
	Refrigerant charge R22	Oz.	125.44	116.61	136.04	130.74	185.51	196.11	314.49

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## Cooling

Outdoor	Indoor	Indoor fan speed	ARI data of indoor			Cooling capacity with different outdoor temperatures							
			Capacity	SEER	CFM	80	85	90	95	100	105	110	115
H13181VAR	AB132400V1M	M	17500	13	670	19775	19197	18550	17500	17237	16975	16712	16450
H13241VAR	AB132400V1M	H	24000	13	900	27120	26328	25440	24000	23640	23280	22920	22560
H13301VAR	AB133600V1M	L	28000	13	1125	31640	30716	29680	28000	27580	27160	26740	26320
H13361VAR	AB133600V1M	H	35000	13	1240	39550	38395	37100	35000	34475	33950	33425	32900
H13421VAR	AB134800V1M	L	42000	13	1480	47460	46074	44520	42000	41370	40740	40110	39480
H13481VAR	AB134800V1M	H	46000	13	1650	51980	50462	48760	46000	45310	44620	43930	43240
H13601VAR	AB136000V1M	H	55000	13	1850	62150	60335	58300	55000	54175	53350	52525	51700

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## Heating

Outdoor	Indoor	Indoor fan speed	ARI data of indoor			Heating capacity with different outdoor temperatures							
			Capacity	HSPF	CFM	-10	0	10	20	30	40	50	60
H13181VAR	AB132400V1M	M	16500	7.8	670	5250	7060	8840	10650	12400	14590	17190	19800
H13241VAR	AB132400V1M	H	22500	7.8	900	7159	9627	12055	14523	16909	19895	23441	27000
H13301VAR	AB133600V1M	L	25500	7.8	1125	8114	10911	13662	16459	19164	22548	26566	30600
H13361VAR	AB133600V1M	H	32000	7.8	1240	10182	13692	17144	20655	24048	28296	33338	38400
H13421VAR	AB134800V1M	L	41000	7.8	1480	13045	17543	21966	26464	30812	36254	42715	49200
H13481VAR	AB134800V1M	H	44000	7.8	1650	14000	18827	23573	28400	33067	38907	45840	52800
H13601VAR	AB136000V1M	H	55000	7.8	1850	17500	23533	29467	35500	41333	48633	57300	66000

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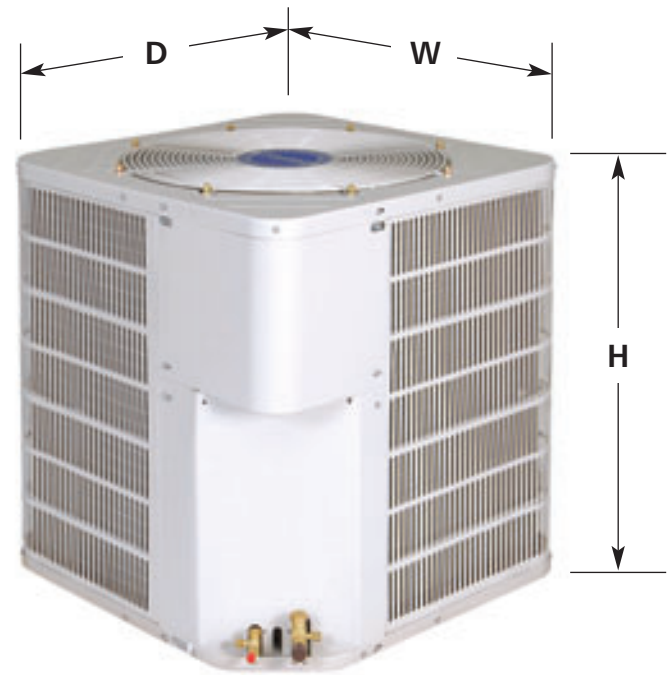
Vibration isolation pads must be installed when the unit is mounted on wall brackets.

When the unit is installed on a cement pad, a gap must be left between the pad and the foundation wall.

# DIMENSIONS AND WEIGHTS

## C13 Condenser

Model Number	Dimensions			Weights
	W(inch)	D(inch)	H(inch)	Lbs.
C13181VAR	23 3/8	23 3/8	32 3/16	156
C13241VAR	30 5/8	30 5/8	28 1/4	194
C13301VAR	30 5/8	30 5/8	32 3/16	198
C13361VAR	30 5/8	30 5/8	32 3/16	203
C13421VAR	30 5/8	30 5/8	32 3/16	231
C13481VAR	30 5/8	30 5/8	36 1/8	244
C13601VAR	30 5/8	30 5/8	40	271



## H13 Heat Pump

Model Number	Dimensions			Weights
	W(inch)	D(inch)	H(inch)	Lbs.
H13181VAR	23 3/8	23 3/8	32 3/16	167
H13241VAR	30 5/8	30 5/8	28 1/4	203
H13301VAR	30 5/8	30 5/8	32 3/16	207
H13361VAR	30 5/8	30 5/8	32 3/16	220
H13421VAR	30 5/8	30 5/8	32 3/16	258
H13481VAR	30 5/8	30 5/8	36 1/8	271
H13601VAR	30 5/8	30 5/8	44	315

## Air Handler

Model Number	Dimensions			Weights
	W(inch)	D(inch)	H(inch)	Lbs.
AB132400V1M	19 1/2	22	46 3/4	141
AB133600V1M	21 1/2	24	49 1/2	181
AB134800V1M	21 1/2	24	56	196
AB136000V1M	21 1/2	24	56	205

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The **Single Source SOLUTION**  
for HVAC Products



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All product specifications reflect available information at the time of printing. ECR reserves the right to revise or modify products without notice.

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