



Heat Pumps 2HP13

TECHNICAL SPECIFICATIONS

- Quiet, durable scroll compressor with internal pressure relief valves and inherent thermal protection
- High-quality outdoor coils constructed of copper tubes with enhanced louvered fins for maximum heat transfer capability
- Special coil guard protects coils from fin damage
- Vertical air discharge sends hot air up and away from home and shrubbery
- All models ETL, ETLC, and AHRI listed
- Permanently lubricated outdoor fan motor needs no annual maintenance
- Designed with ease of service in mind featuring hinged control panel for simple access to internal components
- Angled service valves are positioned to allow easy access with low-loss fittings and are set for direct and straight line-set access to the home
- Factory-installed liquid line filter drier protects the compressor from contaminants
- Low pressure switch
- Accumulator furnished as standard
- Integrated control with LED diagnostics and adjustable time (30/60/90 minutes) and temperature defrost control furnished
- Short-cycle protection
- The corrosion-resistant cabinet is built from strong, heavy-gauge pre-painted steel and has drainage holes to quickly remove standing water from the base pan
- Every heat pump is tested at the factory before shipment to ensure dependable performance
- Charged for 15 feet of line-set

13 SEER
7.7 HSPF
1.5 to 5 Tons

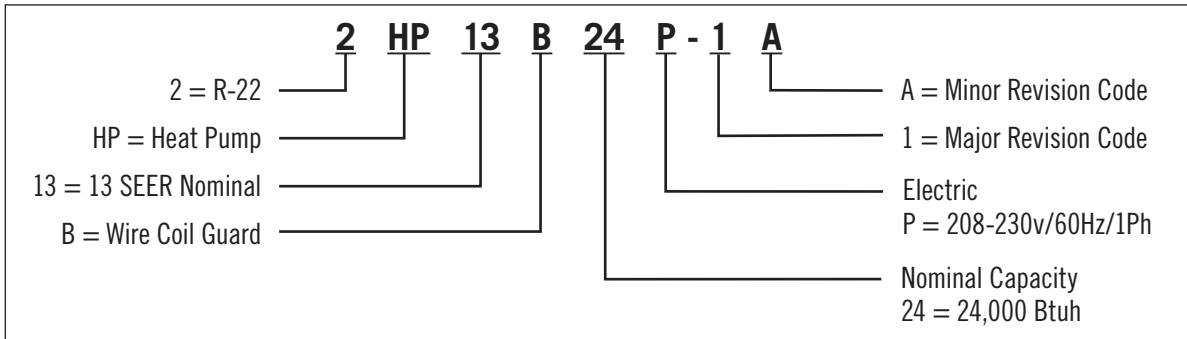


Warranty
Compressor - 5 Year Limited
Parts - 5 Year Limited

Heat Pumps

2HP13

Model Number Identification



Electrical Data / Specifications

Model No.	2HP13B18P-1A	2HP13B24P-1A	2HP13B30P-1A	2HP13B36P-1A	2HP13B42P-1A	2HP13B48P-1A	2HP13B60P-1A
Rated Voltage (Volts)	208-230	208-230	208-230	208-230	208-230	208-230	208-230
Phase	1	1	1	1	1	1	1
Frequency (Hz.)	60	60	60	60	60	60	60
Voltage Range	197-253	197-253	197-253	197-253	197-253	197-253	197-253
Maximum Overcurrent Protection	20	25	30	35	40	45	50
Minimum Circuit Ampacity	11.5	15.3	17.9	21.7	23.6	26.8	31.0
Compressor - Rated Load Amps	8.6	11.4	13.6	16.4	17.9	20	22.1
Compressor - Locked Rotor Amps	38	56	67	83	88	104	137
Fan Motor - Rated Load Amps	0.7	0.7	1.1	1.2	1.2	1.2	1.2
Fan Motor - HP	1/10	1/10	1/5	1/4	1/4	1/4	1/4
Fan Motor - Nominal RPM	1075	1075	1075	1075	1075	1075	1075
Refrigerant Charge (oz.)	130	130	144	148	206	306	284
Liquid Line Set	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line Set	3/4	3/4	3/4	3/4	7/8	7/8	1-1/8
Weight (lbs.)	183	188	196	205	215	227	245

Cooling Performance With RBC Air Handlers

Outdoor Model	Indoor Models	Cooling ¹			Heating ¹					CFM	Metering Device	
		Btuh	SEER	Rated Sensible Btuh	Btuh (47°F)	COP (47°F)	Btuh (17°F)	COP (17°F)	HSPF		Indoor Orifice (1P)	TXV (2X)
2HP13B18P-1A	RBCS2M18C00NA1P RBCS2M18C00NA2X	18,000	13.00	14,200	17,000	3.50	8,800	2.20	7.7	650	.055	Factory
2HP13B18P-1A	RBCS2M24C00NA1P+TXV RBCS2M24C00NA2X	19,000	13.00	15,000	17,000	3.50	9,700	1.86	7.7	650	---	Factory
2HP13B24P-1A	RBCS2M24C00NA1P RBCS2M24C00NA2X	24,000	13.00	19,700	21,400	3.20	13,400	2.20	7.7	850	.063	Factory
2HP13B30P-1A	RBCS2M30C00NA1P RBCS2M30C00NA2X	28,000	13.00	21,700	27,000	3.40	15,200	2.20	7.7	1050	.068	Factory
2HP13B36P-1A	RBCS2M36C00NA1P RBCS2M36C00NA2X	35,000	13.00	25,800	34,600	3.30	19,400	2.20	7.7	1250	.076	Factory
2HP13B42P-1A	RBCS2M42C00NA1P RBCS2M42C00NA2X	40,000	13.00	30,000	38,000	3.20	22,600	2.20	7.7	1450	.076	Factory
2HP13B48P-1A	RBCS2M48C00NA1P RBCS2M48C00NA2X	45,000	13.00	33,700	43,500	3.20	27,000	2.20	7.7	1650	.082	Factory
2HP13B60P-1A	RBCS2M60C00NA1P	55,500	13.00	40,500	53,500	3.20	31,000	2.20	7.7	1950	.098	Factory
	RBCS2M60C00NA1P+TXV	55,000	13.00	40,500	53,500	3.20	31,800	2.56	7.7	1950	---	Factory

¹ Certified in accordance with Unitary Air Conditioner Certification Program, which is based on ARI Standard 210/240.

NOTE - Blower control in air handler must be set for a time-off blower delay.

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Cooling Performance Extended Ratings

Outdoor Model	Indoor Models	Indoor Temp. DB/WB (°F)	Indoor Temperature - DB (°F)														
			65			82			95			105			115		
			Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW
2HP13B18P-1A	RBCS2M18C00NA1P RBCS2M18C00NA2X	85/72	20,700	0.65	1.23	19,800	.69	1.43	19,100	.72	1.51	18,300	.74	1.58	17,000	.75	1.64
		80/67	19,400	0.67	1.23	18,500	.72	1.37	18,000	.74	1.44	17,100	.77	1.50	15,800	.77	1.55
		75/63	18,100	0.69	1.16	17,200	.75	1.31	16,900	.76	1.37	15,900	.80	1.42	14,600	.79	1.47
2HP13B24P-1A	RBCS2M24C00NA1P RBCS2M24C00NA2X	85/72	20,400	0.65	1.80	26,100	.69	2.06	25,500	.72	2.17	24,200	.74	2.27	22,400	.75	2.35
		80/67	25,800	0.67	1.73	24,600	.72	1.98	24,000	.74	2.08	22,800	.77	2.17	21,200	.77	2.24
		75/63	24,200	0.70	1.65	23,100	.74	1.89	22,500	.76	1.99	21,400	.80	2.07	20,000	.80	2.14
2HP13B30P-1A	RBCS2M30C00NA1P RBCS2M30C00NA2X	85/72	32,000	0.68	2.20	30,500	.72	2.52	29,700	.75	2.65	28,200	.78	2.76	26,200	.78	2.86
		80/67	30,100	0.70	2.12	28,700	.75	2.43	28,000	.77	2.55	26,600	.80	2.66	24,600	.81	2.75
		75/63	28,200	0.72	2.05	26,900	.77	2.33	26,300	.79	2.45	25,000	.82	2.55	23,000	.83	2.64
2HP13B36P-1A	RBCS2M36C00NA1P RBCS2M36C00NA2X	85/72	39,900	0.65	2.75	38,100	.70	3.15	37,200	.72	3.31	35,300	.75	3.45	32,700	.75	3.57
		80/67	37,600	0.67	2.65	35,900	.72	3.03	35,000	.74	3.18	33,300	.77	3.31	30,800	.77	3.42
		75/63	35,300	0.70	2.56	33,700	.73	2.90	32,800	.76	3.05	31,300	.79	3.17	28,900	.80	3.28
2HP13B42P-1A	RBCS2M42C00NA1P RBCS2M42C00NA2X	85/72	45,600	0.66	3.20	43,500	.71	3.60	42,500	.73	3.77	40,300	.76	3.91	37,400	.76	4.03
		80/67	43,000	0.68	3.12	41,000	.73	3.49	40,000	.75	3.64	38,000	.78	3.77	35,200	.78	3.88
		75/63	40,400	0.71	3.04	38,500	.74	3.38	37,500	.77	3.51	35,700	.80	3.63	33,000	.81	3.73
2HP13B48P-1A	RBCS2M48C00NA1P RBCS2M48C00NA2X	85/72	51,400	0.66	3.56	49,000	.71	4.05	47,800	.73	4.25	45,400	.76	4.42	42,000	.76	4.57
		80/67	48,400	0.68	3.43	46,100	.73	3.90	45,000	.75	4.09	42,700	.78	4.25	39,600	.78	4.39
		75/63	45,400	0.71	3.31	43,200	.74	3.75	42,200	.77	3.93	40,000	.80	4.09	37,200	.81	4.22
2HP13B60P-1A	RBCS2M60C00NA1P RBCS2M60C00NA2X	85/72	63,300	0.65	4.41	60,400	.69	5.00	58,900	.71	5.24	56,000	.74	5.45	51,800	.74	5.63
		80/67	59,600	0.67	4.23	59,900	.72	4.78	55,500	.74	5.01	52,700	.77	5.20	48,800	.77	5.37
		75/63	55,900	0.70	4.05	53,400	.74	4.56	52,100	.77	4.78	49,400	.80	4.96	45,800	.81	5.11

Data is at nominal cfm.

Heating Performance Extended Ratings

Outdoor Model	Indoor Models		Outdoor Ambient Temperature (°F)													
			65	60	55	50	47	45	40	35	30	25	20	17	15	10
2HP13B18P-1A	RBCS2M18C00NA1P RBCS2M18C00NA2X	Btuh	21,100	20,200	19,300	18,400	17,000	16,200	15,200	14,100	13,150	12,142	11,133	10,500	9,242	8,248
		Kw	1.52	1.50	1.48	1.46	1.42	1.40	1.38	1.35	1.33	1.30	1.28	1.27	1.23	1.21
		COP	3.99	3.95	3.91	3.87	3.50	3.53	3.42	3.07	3.05	2.96	2.83	2.24	2.31	2.27
2HP13B24P-1A	RBCS2M24C00NA1P RBCS2M24C00NA2X	Btuh	26,800	25,500	24,200	22,900	21,400	20,140	18,800	17,800	16,290	14,978	13,667	12,700	11,158	9,860
		Kw	2.11	2.07	2.02	1.98	1.96	1.91	1.87	1.86	1.81	1.79	1.78	1.77	1.70	1.67
		COP	3.80	3.61	3.41	3.22	3.20	2.97	2.81	2.79	2.56	2.41	2.26	2.10	1.96	1.81
2HP13B30P-1A	RBCS2M30C00NA1P RBCS2M30C00NA2X	Btuh	33,900	32,100	30,300	28,500	27,000	25,140	23,400	22,400	20,290	18,612	16,933	15,400	13,625	11,952
		Kw	2.47	2.44	2.42	2.39	2.32	2.30	2.27	2.21	2.18	2.15	2.13	2.12	2.06	2.02
		COP	3.95	3.85	3.74	3.64	3.41	3.33	3.20	2.97	2.89	2.76	2.62	2.12	2.10	2.07
2HP13B36P-1A	RBCS2M36C00NA1P RBCS2M36C00NA2X	Btuh	43,900	41,100	38,300	35,500	34,600	31,420	29,000	28,700	25,220	22,977	20,733	19,800	16,683	14,490
		Kw	3.28	3.23	3.19	3.14	3.07	3.03	2.98	2.92	2.87	2.82	2.77	2.64	2.64	2.58
		COP	3.80	3.73	3.65	3.58	3.30	3.26	3.15	2.88	2.84	2.71	2.59	2.19	2.17	2.10
2HP13B42P-1A	RBCS2M42C00NA1P RBCS2M42C00NA2X	Btuh	47,000	45,200	43,400	41,600	38,000	36,560	34,400	31,500	29,710	27,488	25,267	22,700	20,708	18,473
		Kw	3.71	3.64	3.57	3.50	3.48	3.40	3.34	3.33	3.25	3.19	3.13	2.71	2.65	2.48
		COP	3.74	3.64	3.53	3.43	3.20	3.12	2.99	2.86	2.73	2.60	2.50	2.46	2.34	2.25
2HP13B48P-1A	RBCS2M48C00NA1P RBCS2M48C00NA2X	Btuh	55,200	51,800	48,400	45,000	43,500	39,720	36,700	36,100	31,870	29,052	28,200	27,400	22,491	19,888
		Kw	4.28	4.19	4.09	4.00	3.98	3.87	3.79	3.79	3.67	3.60	3.53	3.16	3.09	2.93
		COP	3.80	3.62	3.44	3.25	3.07	3.06	2.82	2.79	2.57	2.42	2.27	2.21	2.00	1.86
2HP13B60P-1A	RBCS2M60C00NA1P RBCS2M60C00NA2X	Btuh	66,200	63,600	61,000	58,400	53,500	51,360	48,300	44,400	41,760	38,630	35,500	31,900	29,083	25,935
		Kw	5.25	5.15	5.05	4.94	4.90	4.79	4.70	4.67	4.55	4.46	4.38	3.66	3.57	3.30
		COP	3.68	3.62	3.56	3.50	3.20	3.18	3.07	2.78	2.76	2.64	2.57	2.55	2.34	2.22

NOTE - Nominal cfm and 70°F indoor dry bulb.

Heat Pumps

2HP13

Sound Ratings

Model No.	Sound Rating dBA
2HP13B18P	79
2HP13B24P	80
2HP13B30P	76
2HP13B36P	78
2HP13B42P	76
2HP13B48P	77
2HP13B60P	76

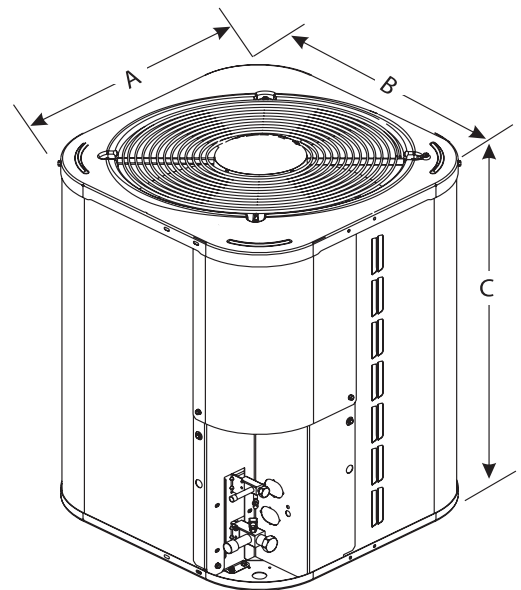
Accessories

Description	Catalog Number	Used With
Crankcase Heater	14W05	18, 24, 30, 36, 42, 48
Crankcase Heater	14W04	60
Fossil Fuel Kit	17W02	All Models
Hard Start Kit	12W59	All Models
High Pressure Kit	14W09	All Models
Outdoor Thermostat	17W03	All Models
Sound Blanket	14W02	18, 24, 30
Sound Blanket	14W00	36, 42, 48
Sound Blanket	14W01	60

Dimensions

Model No.	2HP13B18P-1A	2HP13B24P-1A	2HP13B30P-1A	2HP13B36P-1A
Cabinet Width (A) in	30"	30"	30"	30"
Cabinet Depth (B) in	30"	30"	30"	30"
Height (C) in	33-3/4"	33-3/4"	27-3/4"	25-3/4"

Model No.	2HP13B42P-1A	2HP13B48P-1A	2HP13B60P-1A
Cabinet Width (A) in	30"	30"	30"
Cabinet Depth (B) in	30"	30"	30"
Height (C) in	25-3/4"	27-3/4"	41-3/4"



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