



Heat Pumps 4HP13

TECHNICAL SPECIFICATIONS

- R-410A Refrigerant
- 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
- Naltex® Hail 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
- Discharge muffler for quiet operation
- 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

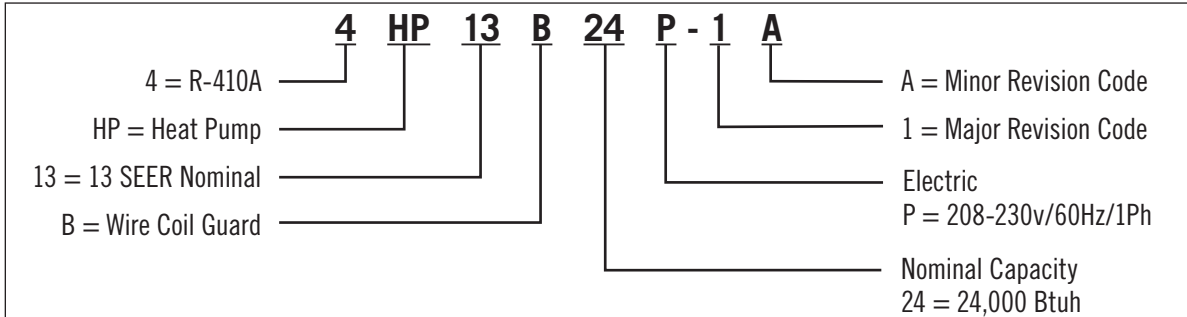


Warranty
Compressor - 5 Year Limited
Parts - 5 Year Limited

Heat Pumps

4HP13

Model Number Identification



Electrical Data / Specifications

Model No.	4HP13B18P-1A	4HP13B24P-1A	4HP13B30P-1A	4HP13B36P-1A	4HP13B42P-1A	4HP13B48P-1A	4HP13B60P-1A
Rated Voltage (Volts)	230	230	230	230	230	230	230
Phase	1	1	1	1	1	1	1
Frequency (Hz.)	60	60	60	60	60	60	60
Voltage Range	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Maximum Overcurrent Protection	20	15	20	30	30	35	40
Minimum Circuit Ampacity	11.9	11.1	14.4	19.6	20.2	25.1	26.7
Compressor - Rated Load Amps	9.0	8.3	10.6	14.7	15.2	19.1	20.4
Compressor - Locked Rotor Amps	48	43	54	74	84	102	105
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.)	117	130	159	151	170	267	251
Liquid Line Set (in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vapor Line Set (in.)	3/4	3/4	3/4	3/4	7/8	7/8	¹ 1-1/8
Weight (lbs.)	183	188	196	205	215	227	245

¹ Vapor line connection is 7/8 in., refrigerant line diameter is 1-1/8 in.

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 (2T)
4HP13B18P-1A	RBCS2M18C00NA1P RBCS2M18C00NA2T	18,000	13.00	13,100	16,800	3.30	10,500	2.18	7.70	650	0.051	Factory
4HP13B24P-1A	RBCS2M24C00NA1P RBCS2M24C00NA2T	24,000	13.00	18,200	21,400	3.34	11,800	2.18	7.70	900	0.055	Factory
4HP13B30P-1A	RBCS2M30C00NA1P RBCS2M30C00NA2T	28,000	13.00	20,700	27,000	3.34	15,400	2.26	7.70	1050	0.059	Factory
4HP13B36P-1A	RBCS2M36C00NA1P RBCS2M36C00NA2T	35,600	13.00	27,000	33,000	3.40	19,000	2.26	7.70	1250	0.070	Factory
4HP13B42P-1A	RBCS2M42C00NA1P RBCS2M42C00NA2T	42,500	13.00	30,600	38,000	3.52	20,600	2.62	7.70	1350	0.070	Factory
4HP13B48P-1A	RBCS2M48C00NA1P RBCS2M48C00NA2T	48,000	13.00	35,500	43,500	3.20	27,400	2.50	7.70	1600	0.082	Factory
4HP13B60P-1A	RBCS2M60C00NA1P RBCS2M60C00NA2T	54,500	13.00	40,900	52,000	3.74	30,400	2.58	7.70	1800	0.082	Factory

¹ Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI 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
4HP13B18P-1A	RBCS2M18C00NA1P RBCS2M18C00NA2T	85/72	20,000	0.59	1.24	19,500	0.64	1.46	19,100	0.68	1.64	18,000	0.71	1.83	16,900	0.74	2.03
		80/67	18,800	0.67	1.23	19,100	0.71	1.44	18,000	0.76	1.64	16,300	0.80	1.83	14,700	0.84	2.01
		75/63	18,200	0.72	1.23	17,100	0.77	1.45	16,300	0.80	1.63	15,000	0.84	1.82	13,700	0.88	2.01
		75/57	16,400	1.00	1.21	17,000	1.00	1.41	16,000	1.00	1.61	14,500	1.00	1.79	13,100	1.00	1.97
4HP13B24P-1A	RBCS2M24C00NA1P RBCS2M24C00NA2T	85/72	27,700	0.59	1.75	26,600	0.63	2.01	25,800	0.66	2.21	23,400	0.71	2.35	21,000	0.76	2.50
		80/67	26,600	0.66	1.74	25,700	0.70	1.98	24,000	0.74	2.18	21,100	0.80	2.30	18,300	0.86	2.41
		75/63	25,200	0.70	1.73	22,600	0.76	1.95	20,600	0.80	2.12	18,400	0.85	2.24	16,100	0.90	2.36
		75/57	23,100	1.00	1.71	22,900	1.00	1.94	21,400	1.00	2.14	18,800	1.00	2.25	16,300	1.00	2.36
4HP13B30P-1A	RBCS2M30C00NA1P RBCS2M30C00NA2T	85/72	33,500	0.60	2.05	31,900	0.65	2.37	30,700	0.68	2.61	28,000	0.73	2.78	25,400	0.77	2.95
		80/67	31,800	0.67	2.03	30,900	0.72	2.33	28,000	0.77	2.55	24,900	0.83	2.69	21,700	0.88	2.83
		75/63	30,200	0.72	2.02	27,300	0.77	2.28	25,000	0.81	2.48	22,400	0.85	2.62	19,800	0.89	2.76
		75/57	27,700	1.00	1.99	27,500	1.00	2.28	24,900	1.00	2.50	22,200	1.00	2.64	19,300	1.00	2.77
4HP13B36P-1A	RBCS2M36C00NA1P RBCS2M36C00NA2T	85/72	40,500	0.59	2.48	39,400	0.63	2.92	38,500	0.66	3.26	35,100	0.71	3.50	31,600	0.75	3.75
		80/67	38,900	0.66	2.48	39,700	0.69	2.93	35,600	0.75	3.24	31,000	0.81	3.44	26,400	0.87	3.65
		75/63	37,600	0.69	2.49	33,800	0.75	2.87	30,800	0.80	3.16	27,500	0.85	3.37	24,100	0.90	3.57
		75/57	33,800	1.00	2.43	35,300	1.00	2.87	31,700	1.00	3.18	27,600	1.00	3.37	23,500	1.00	3.58
4HP13B42P-1A	RBCS2M42C00NA1P RBCS2M42C00NA2T	85/72	51,700	0.57	3.02	49,500	0.61	3.52	47,800	0.64	3.90	43,400	0.68	4.16	39,100	0.71	4.43
		80/67	49,400	0.64	3.01	45,800	0.69	3.48	42,000	0.73	3.82	38,200	0.77	4.04	34,400	0.80	4.26
		75/63	47,100	0.67	2.98	42,500	0.69	3.40	39,100	0.71	3.73	34,800	0.78	3.94	30,400	0.84	4.16
		75/57	43,000	1.00	2.95	40,800	1.00	3.41	37,400	1.00	3.74	34,000	1.00	3.96	30,600	1.00	4.17
4HP13B48P-1A	RBCS2M48C00NA1P RBCS2M48C00NA2T	85/72	57,400	0.62	3.42	55,400	0.64	4.00	53,900	0.66	4.44	48,800	0.70	4.76	43,700	0.73	5.07
		80/67	55,300	0.67	3.39	53,100	0.70	3.96	48,000	0.74	4.36	43,000	0.79	4.65	38,100	0.84	4.94
		75/63	53,000	0.71	3.37	47,600	0.75	3.89	43,500	0.78	4.28	39,300	0.83	4.55	35,100	0.87	4.82
		75/57	48,100	1.00	3.32	47,300	1.00	3.88	42,700	1.00	4.27	38,300	1.00	4.56	33,900	1.00	4.84
4HP13B60P-1A	RBCS2M60C00NA1P RBCS2M60C00NA2T	85/72	62,700	0.59	3.86	61,000	0.63	4.55	59,800	0.66	5.08	55,000	0.70	5.44	50,200	0.74	5.80
		80/67	61,200	0.67	3.85	59,900	0.70	4.51	54,500	0.75	4.95	48,800	0.80	5.26	43,100	0.85	5.58
		75/63	59,100	0.71	3.84	53,200	0.76	4.43	48,700	0.80	4.88	43,700	0.84	5.14	38,600	0.88	5.41
		75/57	53,200	1.00	3.77	53,300	1.00	4.42	48,500	1.00	4.85	43,400	1.00	5.15	38,400	1.00	5.47

Data is at nominal cfm.

Heat Pumps

4HP13

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
4HP13B18P-1A	RBCS2M18C00NA1P RBCS2M18C00NA2T	Btuh	21,500	20,200	18,700	17,500	16,800	16,300	15,400	14,300	13,100	12,300	10,900	10,500	9,800	8,700
		Kw	1.58	1.55	1.53	1.50	1.49	1.480	1.47	1.46	1.44	1.43	1.42	1.41	1.40	1.39
		COP	3.98	3.82	3.58	3.42	3.30	3.22	3.06	2.86	2.66	2.52	2.24	2.18	2.04	1.84
4HP13B24P-1A	RBCS2M24C00NA1P RBCS2M24C00NA2T	Btuh	24,100	23,500	22,800	22,000	21,400	20,800	19,200	17600	16200	14700	13000	11800	11200	9200
		Kw	1.94	1.92	1.90	1.88	1.87	1.84	1.76	1.73	1.69	1.66	1.62	1.60	1.59	1.55
		COP	3.64	3.59	3.52	3.44	3.34	3.32	3.20	2.98	2.80	2.60	2.34	2.18	2.06	1.74
4HP13B30P-1A	RBCS2M30C00NA1P RBCS2M30C00NA2T	Btuh	30,200	29,500	28,500	27,600	27,000	25,700	23,500	22,300	20,600	18,400	16,500	15,400	14,700	12,100
		Kw	2.47	2.43	2.40	2.38	2.37	2.31	2.25	2.21	2.16	2.11	2.30	2.04	2.00	1.93
		COP	3.58	3.56	3.48	3.40	3.34	3.26	3.06	2.96	2.80	2.56	2.38	2.26	2.14	1.84
4HP13B36P-1A	RBCS2M36C00NA1P RBCS2M36C00NA2T	Btuh	37,600	36,300	35,200	34,000	33,000	31,300	29,300	27,500	25,300	22,800	20,500	19,000	17,900	15,100
		Kw	3.03	2.95	2.90	2.87	2.85	2.76	2.70	2.64	2.59	2.54	2.49	2.45	2.45	2.41
		COP	3.64	3.60	3.56	3.46	3.40	3.32	3.18	3.04	2.86	2.62	2.40	2.26	2.14	1.84
4HP13B42P-1A	RBCS2M42C00NA1P RBCS2M42C00NA2T	Btuh	43,500	42,400	41,000	39,200	38,500	36,100	32,800	30,900	28,300	25,200	22,400	21,200	18,700	13,300
		Kw	3.54	3.47	3.41	3.32	3.30	3.23	3.11	3.04	2.88	2.70	2.49	2.39	2.28	2.00
		COP	3.60	3.58	3.52	3.46	3.42	3.28	3.08	2.98	2.88	2.74	2.64	2.60	2.40	1.94
4HP13B48P-1A	RBCS2M48C00NA1P RBCS2M48C00NA2T	Btuh	51,800	49,100	46,200	44,200	43,500	41,900	41,300	37,400	34,900	32,500	29,700	27,400	26,600	24,200
		Kw	4.56	4.35	4.14	4.00	3.98	3.87	3.83	3.64	3.52	3.44	3.31	3.23	3.22	3.13
		COP	3.32	3.30	3.26	3.24	3.20	3.18	3.16	3.00	2.90	2.76	2.62	2.50	2.42	2.26
4HP13B60P-1A	RBCS2M60C00NA1P RBCS2M60C00NA2T	Btuh	58,700	56,300	54,200	52,900	52,000	49,600	46,600	42,400	39,300	36,100	32,600	30,400	29,000	25,500
		Kw	4.34	4.19	4.14	4.10	4.07	4.03	3.96	3.82	3.72	3.63	3.53	3.46	3.41	3.31
		COP	3.96	3.94	3.84	3.78	3.74	3.60	3.44	3.24	3.10	2.92	2.70	2.58	2.48	2.26

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

Heat Pumps 4HP13

Sound Ratings

Model No.	Sound Rating dBA
4HP13B18P-1A	77
4HP13B24P-1A	78
4HP13B30P-1A	78
4HP13B36P-1A	77
4HP13B42P-1A	77
4HP13B48P-1A	79
4HP13B60P-1A	79

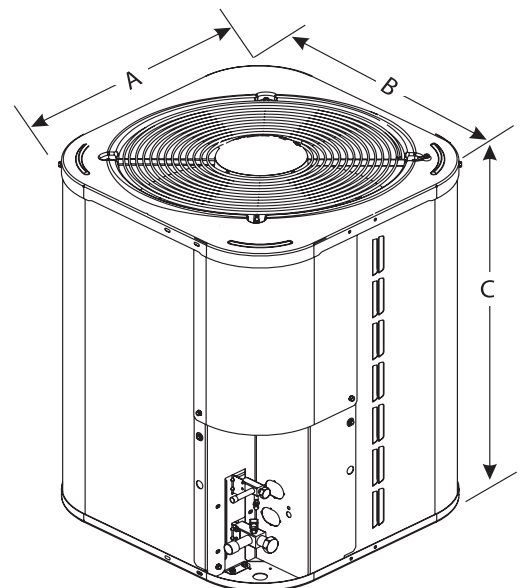
Accessories

Description	Catalog Number	Used With
Crankcase Heater	14W05	18
Hard Start Kit	12W59	18
Hard Start Kit	47W10	24
Hard Start Kit	47W09	30
Hard Start Kit	47W08	36
Hard Start Kit	47W06	42, 48
Hard Start Kit	47W05	60
Blower Off Delay Kit	40K58	All Model
Low Ambient Kit	34M72	All Models
Sound Blanket	14W00	18
Sound Blanket	47W03	24, 30, 36
Sound Blanket	47W04	42, 48, 60

Dimensions

Model No.	4HP13B18P-1A	4HP13B24P-1A	4HP13B30P-1A	4HP13B36P-1A
Cabinet Width (A) in	30"	30"	30"	30"
Cabinet Depth (B) in	30"	30"	30"	30"
Height (C) in	33.75"	33.75"	37.75"	25.75"

Model No.	4HP13B42P-1A	4HP13B48P-1A	4HP13B60P-1A
Cabinet Width (A) in	30"	30"	30"
Cabinet Depth (B) in	30"	30"	30"
Height (C) in	25.75"	37.75"	41.75"



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210542 4HP13 (10/09)

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