

4SHP20LX

PRODUCT SPECIFICATIONS

UP TO 20 SEER
VARIABLE CAPACITY HEAT PUMP

FORM NO. 4SHP20LX-100 (04/2017)



COMFORT SYNC

COMMUNICATING THERMOSTAT ENABLED

INSTALLED BY THE BEST

- Specialized training is required for dealers offering the 20LX
- Installer training available through authorized distributors

COMPRESSOR

- Inverter-driven Scroll Compressor for true variable capacity operation, precision environmental control, and exceptional energy savings
- R410A refrigerant
- Heavy-duty compressor sound blanket for quiet operation
- Internally protected against high temperature motor overload conditions

CABINET

- Individual metal louvered panels remove easily for coil cleaning and service
- Specialized corner-mounted controls for easy service
- Baked polyester paint finished over galvanized steel for maximum durability
- Removable PVC coated wire fan discharge grill
- Removable service panel for internal access

COILS

- Enhanced tube-and-fin coil design featuring MHT™ Technology
- Raised coil prevents debris from impeding airflow

DESIGN

- Designed to perform in temperatures up to 125°F
- Designed to perform in temperatures down to 0°F

COMPONENTS

- 45-degree offset gauge ports for easy service
- Service valves positioned for quick installation and service
- Variable speed condenser fan motor
- Swept wing fan blade for quiet operation
- Factory installed crankcase heater
- Factory installed TXV for excellent refrigeration control
- Factory installed high and low pressure switches
- Thread-on pressure switches for simple, quick service
- Fan orifice for smoother airflow and sound level reduction
- Specialized sensors monitor ambient, liquid line, and coil temperatures for precision system control
- Charged for 15 feet of line set
- Discharge muffler for quiet operation
- Demand defrost for increased energy efficiency
- Quiet Shift™ capable to reduce noise during defrost
- Requires Comfort Sync™ thermostat and a Comfort Sync enabled matching indoor unit

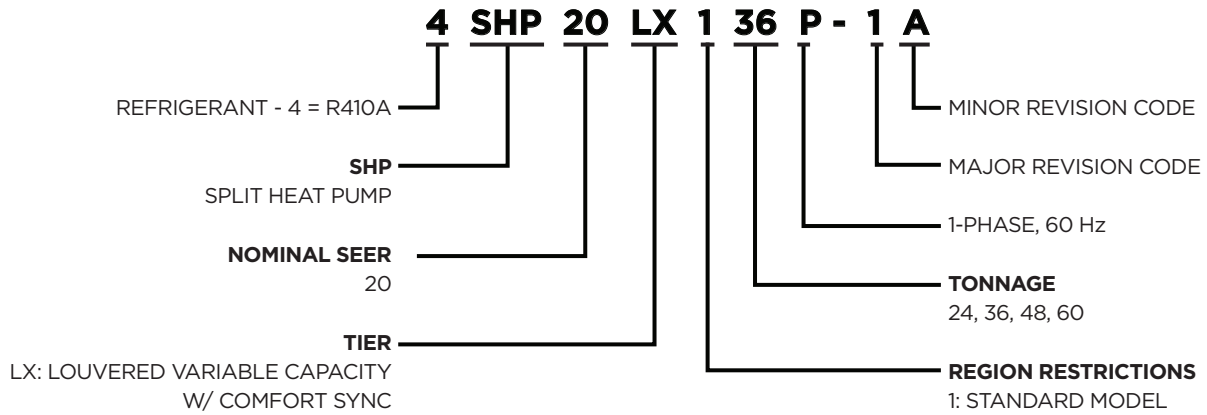
WARRANTY

- 10 year limited warranty on compressor
- 10 year limited warranty on all parts, extended warranty available

**Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty). Warranty must be registered online within 60 days of installation to qualify for 10-year coverage. Unregistered equipment defaults to 5-year coverage. Lifetime limited heat exchanger warranty applies to registered equipment only (Standard 20 years with no online registration). See full warranty at www.alliedair.com for terms, conditions and exclusions.*



MODEL NUMBER GUIDE



ELECTRICAL AND PHYSICAL DATA

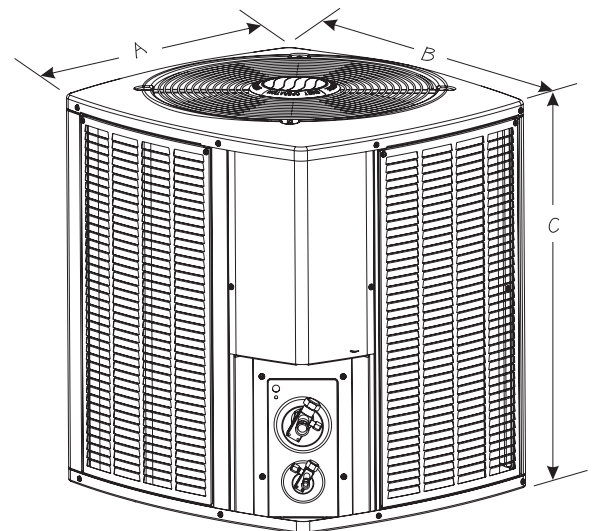
Model	Voltage/Hz/ Phase	Voltage Range	Min. Circuit Amp.	Max. Over Current Device (amps)	Compressor		Outdoor Fan Motor			Weight (lbs.)
					Rated Load (amps)	Locked Rotor (amps)	Rated Load (amps)	Rated HP	Nom. RPM	
4SHP20LX124P-1	208-230/60/1	197-253	19.1	30	13.0	13	2.8	1/3	VAR. SPD.	243
4SHP20LX136P-1	208-230/60/1	197-253	20.8	35	14.4	13	2.8	1/3	VAR. SPD.	245
4SHP20LX148P-1	208-230/60/1	197-253	29.3	50	21.2	20	2.8	1/3	VAR. SPD.	287
4SHP20LX160P-1	208-230/60/1	197-253	34.9	60	25.7	20	2.8	1/3	VAR. SPD.	321

Note:
Weights listed are unit weights with packaging

DIMENSIONS (IN.) AND SOUND RATINGS

Model No.	Dimensions (inch)			Sound Rating (dBA) low	Sound Rating (dBA) High
	A - Width	B - Depth	C - Height		
4SHP20LX124P-1	37.75	35.75	37.5	65	67
4SHP20LX136P-1	37.75	35.75	37.5	67	70
4SHP20LX148P-1	37.75	35.75	43.75	68	70
4SHP20LX160P-1	37.75	35.75	43.75	69	71

Note:
Dimensions listed are unit sizes w/o packaging



REFRIGERATION DATA

Model	Refrig. Charge (oz.) *	TXV	Refrigerant Line Size		Outdoor Unit Connection		Indoor Unit Connection	
			Suction	Liquid	Suction	Liquid	Suction	Liquid
4SHP20LX124P-1	123	H4TXV01	3/4	3/8	3/4	3/8	3/4	3/8
4SHP20LX136P-1	199	H4TXV02	7/8	3/8	7/8	3/8	7/8	3/8
4SHP20LX148P-1	203	H4TXV03	7/8	3/8	7/8	3/8	7/8	3/8
4SHP20LX160P-1	238	H4TXV03	1 1/8	3/8	7/8 **	3/8	7/8	3/8

* Factory charged for 15 feet of line set; adjust per installation instructions.

** Reducer fitting supplied with OD unit

COOLING PERFORMANCE WITH AIR HANDLERS AND FURNACES

Outdoor Model	Furnace	Indoor Model	Cooling				Heating						CFM High	CFM Med	CFM Low
			SEER	EER	AHR1 Rated Capacity ¹ BTUH	Sensible Rated Capacity	HSPF (1V)	HSPF (V)	47°		17°				
									Btuh	COP	Btuh	COP			
4SHP20LX124P-1		BCE4M30S*	20.00	14.00	23000	20800	10.00	8.20	21800	3.80	13000	2.40	825	500	450
		BCE4M24S*	19.0	13.5	22000	20000	9.50	7.90	21400	3.60	13000	2.40	800	530	450
	A80DS2V070A12	E*1P43B+TDR+TXV	19.0	13.5	22600	20600	9.50	7.90	21400	3.60	13000	2.40	800	530	450
	A80DS2V090B16	E*1P43B+TDR+TXV	19.0	13.5	22600	20600	9.50	7.90	21400	3.60	13000	2.40	800	530	450
	A80US2V070A12	E*1P36A+H4TXV01	18.50	13.50	23000	20800	9.50	7.90	21800	3.65	13000	2.35	800	530	450
	A80US2V090B12	E*1P36B+H4TXV01	19.00	13.50	23000	20800	9.60	7.95	21800	3.65	13000	2.35	800	530	450
	A96DS2V045B12	E*1P43B+H4TXV01	19.00	13.50	22600	20000	9.60	7.95	21800	3.65	13000	2.35	800	530	450
	A96US2V045B12	E*1P36B+H4TXV01	18.50	13.50	23000	20800	9.60	7.95	21800	3.65	13000	2.35	800	530	450
	A96US2V070B12	E*1P36B+H4TXV01	18.50	13.50	23000	20800	9.60	7.95	21800	3.65	13000	2.35	800	530	450
	A97DSMV070B12	E*1P43B+H4TXV01	19.00	13.50	22600	20000	9.60	7.95	21800	3.65	13000	2.35	800	530	450
A97USMV070B12	E*1P36B+H4TXV01	18.50	13.50	23000	20800	9.60	7.95	21800	3.65	13000	2.35	800	530	450	
4SHP20LX136P-1		BCE4M36S*	20.00	13.50	34000	27200	10.00	8.70	33000	3.25	21000	2.35	1200	630	450
	A80US2V070A12	E*1P36A+H4TXV02	18.00	12.50	33600	27200	9.00	8.15	32000	3.20	21000	2.20	1200	630	450
	A80US2V090B12	E*1P36B+H4TXV02	20.00	12.50	34000	27200	9.60	8.25	32400	3.20	21000	2.20	1200	630	450
	A96US2V045B12	E*1P36B+H4TXV02	20.00	12.50	34000	27200	9.00	8.15	33000	3.20	21000	2.20	1200	630	450
	A96US2V070B12	E*1P36B+H4TXV02	20.00	12.50	34000	27200	9.60	8.15	33000	3.20	21000	2.20	1200	630	450
	A97USMV070B12	E*1P36B+H4TXV02	20.00	12.50	34000	27200	9.60	8.15	33000	3.20	21000	2.20	1200	630	450
	A80US2V090B12	E*1P43B+H4TXV02	20.00	12.50	34000	27200	9.00	7.85	32400	3.20	21000	2.20	1200	630	450
	A96US2V045B12	E*1P43B+H4TXV02	20.00	12.50	34000	27200	9.00	7.80	32400	3.20	21000	2.20	1200	630	450
	A96US2V070B12	E*1P43B+H4TXV02	20.00	12.50	34000	27200	9.00	7.80	32400	3.20	21000	2.20	1200	630	450
	A96US2V090C12	E*1P43C+H4TXV02	20.00	12.50	34000	27200	9.00	7.85	32400	3.20	21000	2.20	1200	630	450
	A97USMV070B12	E*1P43B+H4TXV02	20.00	12.50	34000	27200	9.00	7.80	32400	3.20	21000	2.20	1200	630	450
	A97USMV090C12	E*1P43C+H4TXV02	20.00	12.50	34000	27200	9.00	7.85	32400	3.20	21000	2.20	1200	630	450
	A80US2V090B12	E*1P48B+H4TXV02	19.00	12.50	33600	27200	9.60	8.15	32400	3.20	21000	2.20	1200	630	450
	A96US2V045B12	E*1P48B+H4TXV02	19.00	12.50	33600	27200	9.60	8.15	33000	3.20	21000	2.20	1200	630	450
	A96US2V070B12	E*1P48B+H4TXV02	19.00	12.50	33600	27200	9.60	8.15	33000	3.20	21000	2.20	1200	630	450
	A96US2V090C12	E*1P48C+H4TXV02	19.00	12.50	33600	27200	9.60	8.15	32400	3.20	21000	2.20	1200	630	450
A97USMV070B12	E*1P48B+H4TXV02	19.00	12.50	33600	27200	9.60	8.15	33000	3.20	21000	2.20	1200	630	450	
A97USMV090C12	E*1P48C+H4TXV02	19.00	12.50	33600	27200	9.60	8.15	32400	3.20	21000	2.20	1200	630	450	

COOLING PERFORMANCE WITH AIR HANDLERS AND FURNACES

Outdoor Model	Furnace	Indoor Model	Cooling				Heating						CFM High	CFM Med	CFM Low
			SEER	EER	AHRI Rated Capacity ¹ BTUH	Sensible Rated Capacity	HSPF(IV)	HSPF(V)	47°		17°				
									Btuh	COP	Btuh	COP			
4SHP20LX148P-1		BCE4M48S*	19.50	12.50	48000	41700	9.60	8.85	45000	3.40	27000	2.40	1615	915	745
	A80DS2V110C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A80US2V090C20	E*1P49C+H4TXV03	18.50	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A80US2V110C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96DS2V090C20	E*1P49C+H4TXV03	17.5	12	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A96DS2V110C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A96US2V090C16	E*1P49C+H4TXV03	18.50	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V090C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A96US2V110C16	E*1P49C+H4TXV03	18.50	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V110C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A97DSMV090C16	E*1P49C+H4TXV03	18.00	12.00	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A97DSMV090C20	E*1P49C+H4TXV03	17.5	12	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A97DSMV110C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	8.50	7.80	43500	3.30	27000	2.30	1600	900	750
	A97USMV090C16	E*1P49C+H4TXV03	18.50	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A97USMV090C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A97USMV110C20	E*1P49C+H4TXV03	18.00	12.00	47000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A80US2V090C20	E*1P62C+H4TXV03	18.50	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A80US2V110C20	E*1P62C+H4TXV03	18.00	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V090C16	E*1P62C+H4TXV03	18.50	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V090C20	E*1P62C+H4TXV03	18.00	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V110C16	E*1P62C+H4TXV03	18.50	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V110C20	E*1P62C+H4TXV03	18.00	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A97USMV090C16	E*1P62C+H4TXV03	18.50	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A97USMV090C20	E*1P62C+H4TXV03	18.00	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A97USMV110C20	E*1P62C+H4TXV03	18.00	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A80US2V135D20	E*1P62D+H4TXV03	18.00	12.00	48000	41700	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A96US2V135D20	E*1P62D+H4TXV03	18.0	12	47000	41000	9.00	7.90	43500	3.30	27000	2.30	1600	900	750
	A97USMV135D20	E*1P62D+H4TXV03	18.0	12	47000	41000	9.00	7.90	43500	3.30	27000	2.30	1600	900	750

COOLING PERFORMANCE WITH AIR HANDLERS AND FURNACES

Outdoor Model	Furnace	Indoor Model	Cooling				Heating						CFM High	CFM Med	CFM Low
			SEER	EER	AHRI Rated Capacity ¹ BTUH	Sensible Rated Capacity	HSPF(IV)	HSPF(V)	47°		17°				
									Btuh	COP	Btuh	COP			
4SHP20LX160-1		BCE4M60S*	19.00	12.50	56500	42800	9.60	8.30	54500	3.20	34800	2.40	1800	1125	900
	A80DS2V110C20	E*1P49C+H4TXV03	18.00	11.50	56000	42800	9.00	8.15	54000	3.00	34000	2.20	1800	1125	900
	A96DS2V090C20	E*1P49C+H4TXV03	18.00	11.50	56000	42800	9.00	8.15	54000	3.20	34000	2.40	1800	1125	900
	A96DS2V110C20	E*1P49C+H4TXV03	18.00	11.50	56000	42800	9.00	8.15	54000	3.20	34000	2.40	1800	1125	900
	A97DSMV090C20	E*1P49C+H4TXV03	18.00	11.50	56000	42800	9.00	8.15	54000	3.20	34000	2.40	1800	1125	900
	A97DSMV110C20	E*1P49C+H4TXV03	18.00	11.50	56000	42800	9.00	8.15	54000	3.00	34000	2.20	1800	1125	900
	A80US2V110C20	E*1P49C+H4TXV03	18.00	11.50	56500	42800	9.00	8.15	54000	3.00	34800	2.20	1800	1125	900
	A96US2V090C20	E*1P49C+H4TXV03	18.00	11.50	56500	42800	9.00	8.15	54000	3.20	34800	2.40	1800	1125	900
	A96US2V110C20	E*1P49C+H4TXV03	18.00	11.50	56500	42800	9.00	8.15	54000	3.20	34800	2.40	1800	1125	900
	A97USMV090C20	E*1P49C+H4TXV03	18.00	11.50	56500	42800	9.00	8.15	54000	3.20	34800	2.40	1800	1125	900
	A97USMV110C20	E*1P49C+H4TXV03	18.00	11.50	56500	42800	9.00	8.15	54000	3.00	34800	2.20	1800	1125	900
	A80US2V090C20	E*1P62C+H4TXV03	18.50	12.00	57500	42800	9.60	8.35	54000	3.20	34800	2.20	1800	1125	900
	A80US2V110C20	E*1P62C+H4TXV03	18.50	12.00	57500	42800	9.60	8.30	54000	3.20	34800	2.40	1800	1125	900
	A96US2V090C20	E*1P62C+H4TXV03	18.50	12.00	57000	42800	9.60	8.30	54500	3.20	34800	2.40	1800	1125	900
	A96US2V110C20	E*1P62C+H4TXV03	18.50	12.00	57500	42800	9.60	8.30	54500	3.20	34800	2.40	1800	1125	900
	A97USMV090C20	E*1P62C+H4TXV03	18.50	12.00	57000	42800	9.60	8.30	54500	3.20	34800	2.40	1800	1125	900
	A97USMV110C20	E*1P62C+H4TXV03	18.50	12.00	57500	42800	9.60	8.30	54500	3.00	34800	2.20	1800	1125	900
	A80US2V135D20	E*1P62D+H4TXV03	19.00	12.50	58000	42800	9.60	8.45	53000	3.00	34800	2.20	1800	1125	900
	A96US2V135D20	E*1P62D+H4TXV03	18.50	12.50	58000	42800	9.60	8.50	53000	3.20	34800	2.40	1800	1125	900
	A97USMV135D20	E*1P62D+H4TXV03	18.50	12.50	58000	42800	9.60	8.50	53000	3.20	34800	2.40	1800	1125	900

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX124P-1 - BCE4M30S

COOLING MAXIMUM CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	560	20	1.25	0.9	1	1	19.3	1.43	0.92	1	1	18.4	1.63	0.94	1	1	17.4	1.87	0.98	1	1
	800	22.6	1.23	1	1	1	21.6	1.41	1	1	1	20.6	1.61	1	1	1	19.4	1.85	1	1	1
	860	23	1.23	1	1	1	22	1.41	1	1	1	21	1.61	1	1	1	19.7	1.85	1	1	1
63°F	560	21	1.24	0.73	0.86	0.99	20.2	1.42	0.74	0.88	1	19	1.63	0.76	0.91	1	17.8	1.86	0.78	0.94	1
	800	22.8	1.23	0.81	0.97	1	21.6	1.41	0.83	0.99	1	20.6	1.61	0.86	1	1	19.4	1.85	0.89	1	1
	860	23	1.23	0.83	0.99	1	22	1.41	0.85	1	1	21	1.61	0.88	1	1	19.7	1.85	0.92	1	1
67°F	560	22.4	1.23	0.58	0.7	0.83	21.4	1.41	0.59	0.72	0.85	20.2	1.62	0.6	0.74	0.87	18.9	1.86	0.61	0.76	0.91
	800	24.2	1.22	0.63	0.79	0.94	23	1.4	0.64	0.81	0.97	21.6	1.6	0.66	0.83	0.99	20.2	1.84	0.67	0.87	1
	860	24.4	1.22	0.64	0.81	0.97	23.2	1.4	0.65	0.83	0.99	21.8	1.6	0.67	0.86	1	20.4	1.84	0.69	0.89	1
71°F	560	23.6	1.22	0.44	0.56	0.68	22.6	1.4	0.44	0.57	0.69	21.4	1.61	0.45	0.58	0.71	20	1.84	0.45	0.6	0.73
	800	25.4	1.21	0.46	0.62	0.76	24.2	1.39	0.47	0.63	0.78	23	1.59	0.47	0.64	0.81	21.4	1.83	0.48	0.66	0.84
	860	25.8	1.21	0.47	0.63	0.78	24.6	1.38	0.48	0.64	0.81	23.2	1.59	0.48	0.66	0.83	21.6	1.83	0.49	0.68	0.87

COOLING INTERMEDIATE CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	350	13.7	0.68	0.87	1	1	13.2	0.8	0.89	1	1	12.6	0.92	0.91	1	1	12	1.06	0.94	1	1
	530	15.8	0.66	0.99	1	1	15.2	0.78	1	1	1	14.5	0.9	1	1	1	13.8	1.05	1	1	1
	550	16	0.66	1	1	1	15.4	0.78	1	1	1	14.7	0.9	1	1	1	14	1.05	1	1	1
63°F	350	14.5	0.68	0.71	0.84	0.96	13.9	0.8	0.72	0.85	0.98	13.2	0.92	0.74	0.87	1	12.5	1.06	0.76	0.9	1
	530	16	0.66	0.8	0.96	1	15.3	0.78	0.82	0.99	1	14.5	0.9	0.84	1	1	13.8	1.05	0.87	1	1
	550	16.1	0.66	0.81	0.98	1	15.4	0.78	0.83	1	1	14.7	0.9	0.86	1	1	14	1.05	0.88	1	1
67°F	350	15.4	0.67	0.57	0.69	0.8	14.7	0.79	0.57	0.7	0.82	14	0.91	0.58	0.71	0.84	13.3	1.06	0.59	0.73	0.86
	530	16.9	0.65	0.62	0.78	0.93	16.2	0.77	0.63	0.8	0.95	15.3	0.9	0.65	0.82	0.98	14.5	1.05	0.66	0.84	1
	550	17	0.65	0.63	0.79	0.94	16.3	0.77	0.64	0.81	0.97	15.5	0.9	0.65	0.83	0.99	14.6	1.05	0.67	0.86	1
71°F	350	16.2	0.66	0.44	0.55	0.66	15.6	0.78	0.44	0.56	0.67	14.9	0.9	0.44	0.57	0.68	14.1	1.05	0.45	0.58	0.7
	530	17.8	0.64	0.46	0.61	0.76	17.1	0.76	0.47	0.62	0.77	16.2	0.89	0.47	0.63	0.79	15.4	1.04	0.48	0.65	0.82
	550	17.9	0.64	0.47	0.62	0.76	17.2	0.76	0.47	0.63	0.78	16.3	0.89	0.47	0.64	0.8	15.5	1.04	0.48	0.66	0.83

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX124P-1 - BCE4M30S

COOLING MINIMUM CAPACITY

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
59°F	315	11.2	0.49	0.91	1	1	10.7	0.59	0.93	1	1	10.3	0.68	0.96	1	1	9.8	0.8	0.99	1	1
	450	12.7	0.47	1	1	1	12.2	0.57	1	1	1	11.6	0.67	1	1	1	11	0.79	1	1	1
	490	13	0.46	1	1	1	12.5	0.56	1	1	1	11.9	0.66	1	1	1	11.3	0.78	1	1	1
63°F	315	11.7	0.48	0.74	0.87	1	11.1	0.58	0.75	0.9	1	10.6	0.68	0.77	0.92	1	9.9	0.8	0.79	0.95	1
	450	12.7	0.47	0.83	0.99	1	12.1	0.57	0.84	1	1	11.6	0.66	0.87	1	1	11	0.78	0.9	1	1
	490	13	0.46	0.85	1	1	12.5	0.56	0.87	1	1	11.9	0.66	0.9	1	1	11.3	0.78	0.94	1	1
67°F	315	12.4	0.47	0.58	0.71	0.84	11.9	0.57	0.59	0.73	0.86	11.3	0.67	0.6	0.74	0.88	10.6	0.79	0.61	0.76	0.91
	450	13.5	0.46	0.63	0.8	0.96	12.8	0.56	0.65	0.82	0.98	12.2	0.66	0.66	0.84	1	11.4	0.78	0.68	0.88	1
	490	13.7	0.45	0.65	0.82	0.99	13	0.55	0.66	0.85	1	12.3	0.66	0.68	0.88	1	11.6	0.78	0.7	0.91	1
71°F	315	13.2	0.46	0.44	0.56	0.68	12.6	0.56	0.45	0.57	0.7	12	0.66	0.45	0.58	0.71	11.3	0.78	0.45	0.6	0.74
	450	14.3	0.45	0.47	0.62	0.78	13.6	0.55	0.47	0.63	0.79	12.9	0.65	0.47	0.65	0.82	12.1	0.77	0.48	0.67	0.85
	490	14.5	0.44	0.47	0.63	0.8	13.9	0.54	0.48	0.66	0.82	13.1	0.65	0.48	0.67	0.85	12.3	0.77	0.49	0.69	0.88

HEATING EXTENDED RATING PERFORMANCE

HEATING MINIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	Air Temperature Entering Outdoor Coil							
	65°F		60°F		55°F		50°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
	cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh
350	11	0.59	10.5	0.58	9.9	0.58	9.3	0.57
400	11.2	0.56	10.6	0.55	10	0.55	9.5	0.54
450	11.3	0.54	10.7	0.53	10.1	0.53	9.6	0.52

HEATING MAXIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
700	25.6	1.61	20.8	1.62	16	1.62	11.1	1.52	5.5	1.1
800	25.9	1.56	21.1	1.56	16.3	1.56	11.4	1.46	5.7	1.04
900	26.1	1.51	21.3	1.51	16.5	1.51	11.6	1.41	6	0.99

HEATING PERFORMANCE AT 800 CFM INDOOR COIL AIR VOLUME

Outdoor Temperature	Compressor Motor Input	Total Output
°F	kW	kBtuh
65	1.56	25.9
60	1.56	24.7
55	1.56	23.5
50	1.56	22.3
47	1.56	21.6
45	1.56	21.1
40	1.56	19.8
35	1.55	18.5
30	1.56	17.4
25	1.56	16.3
20	1.56	15.1
17	1.56	14.4
15	1.56	14
10	1.56	12.8
5	1.46	11.4
0	1.35	10
-5	1.25	8.6
-10	1.14	7.1
-15	1.04	5.7
-20	0.94	4.3

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX136P-1 - BCE4M36S

COOLING MAXIMUM CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	840	30.8	1.91	0.89	1	1	29.6	2.18	0.91	1	1	28.4	2.51	0.93	1	1	27	2.85	0.96	1	1
	1200	34.4	1.89	0.99	1	1	33.2	2.17	1	1	1	31.6	2.47	1	1	1	30	2.82	1	1	1
	1300	35.2	1.88	1	1	1	33.8	2.16	1	1	1	32.4	2.47	1	1	1	30.6	2.81	1	1	1
63°F	840	32.4	1.9	0.72	0.85	0.98	31	2.18	0.74	0.87	0.99	29.4	2.49	0.75	0.89	1	27.8	2.85	0.77	0.92	1
	1200	34.8	1.88	0.8	0.96	1	33.4	2.17	0.82	0.98	1	31.8	2.47	0.84	1	1	30	2.8	0.87	1	1
	1300	35.4	1.88	0.82	0.98	1	34	2.16	0.84	1	1	32.4	2.47	0.87	1	1	30.6	2.81	0.89	1	1
67°F	840	34.2	1.89	0.58	0.7	0.82	32.8	2.17	0.58	0.71	0.84	31.2	2.48	0.59	0.73	0.86	29.4	2.82	0.6	0.74	0.88
	1200	36.8	1.87	0.62	0.78	0.93	35.2	2.15	0.63	0.8	0.95	33.4	2.46	0.65	0.82	0.97	31.4	2.8	0.66	0.85	1
	1300	37.2	1.87	0.64	0.8	0.96	35.6	2.15	0.65	0.82	0.97	33.8	2.45	0.66	0.84	0.99	31.8	2.79	0.68	0.87	1
71°F	840	36	1.88	0.44	0.56	0.68	34.6	2.16	0.45	0.57	0.69	33	2.46	0.45	0.58	0.7	31	2.8	0.45	0.59	0.72
	1200	38.5	1.86	0.46	0.61	0.76	37	2.14	0.47	0.63	0.77	35.2	2.44	0.47	0.64	0.8	33.2	2.78	0.48	0.65	0.82
	1300	39	1.86	0.47	0.63	0.78	37.6	2.13	0.48	0.64	0.8	35.6	2.44	0.48	0.65	0.82	33.6	2.77	0.49	0.67	0.85

COOLING INTERMEDIATE CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	440	17.8	0.78	0.86	0.99	1	17	0.94	0.88	1	1	16.3	1.12	0.9	1	1	15.6	1.3	0.92	1	1
	630	20.2	0.74	0.96	1	1	19.4	0.9	0.99	1	1	18.6	1.08	1	1	1	17.7	1.26	1	1	1
	770	21.4	0.71	1	1	1	20.6	0.88	1	1	1	19.7	1.05	1	1	1	18.8	1.24	1	1	1
63°F	440	18.9	0.76	0.71	0.83	0.94	18.1	0.92	0.72	0.84	0.96	17.2	1.1	0.73	0.86	0.99	16.3	1.29	0.74	0.88	1
	630	20.6	0.73	0.78	0.93	1	19.7	0.89	0.79	0.95	1	18.8	1.07	0.81	0.98	1	17.7	1.26	0.84	1	1
	770	21.4	0.71	0.83	0.99	1	20.6	0.88	0.85	1	1	19.7	1.05	0.88	1	1	18.8	1.24	0.9	1	1
67°F	440	20	0.74	0.56	0.68	0.79	19.2	0.9	0.57	0.69	0.81	18.3	1.08	0.58	0.7	0.82	17.3	1.27	0.59	0.72	0.85
	630	21.8	0.7	0.61	0.76	0.89	20.8	0.87	0.62	0.77	0.92	19.9	1.05	0.63	0.79	0.94	18.8	1.24	0.64	0.81	0.97
	770	22.6	0.69	0.64	0.81	0.97	21.6	0.86	0.65	0.83	0.99	20.6	1.04	0.67	0.85	1	19.5	1.23	0.68	0.88	1
71°F	440	21.2	0.72	0.43	0.55	0.65	20.2	0.89	0.44	0.55	0.66	19.4	1.06	0.44	0.56	0.68	18.4	1.25	0.44	0.57	0.69
	630	23	0.68	0.45	0.59	0.73	22	0.85	0.46	0.6	0.75	21	1.03	0.46	0.62	0.76	19.9	1.22	0.47	0.63	0.79
	770	23.8	0.66	0.47	0.63	0.78	22.8	0.83	0.47	0.64	0.8	21.8	1.01	0.48	0.65	0.83	20.6	1.2	0.49	0.67	0.85

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX136P-1 - BCE4M36S

COOLING MINIMUM CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
59°F	315	10.8	0.42	0.95	1	1	10	0.52	0.99	1	1	9.3	0.63	1	1	1	8.7	0.77	1	1	1
	450	12.4	0.38	1	1	1	11.4	0.48	1	1	1	10.6	0.6	1	1	1	9.8	0.75	1	1	1
	465	12.5	0.37	1	1	1	11.5	0.48	1	1	1	10.7	0.6	1	1	1	9.9	0.74	1	1	1
63°F	315	11.2	0.41	0.76	0.9	1	10.2	0.51	0.79	0.95	1	9.3	0.64	0.83	1	1	8.6	0.77	0.87	1	1
	450	12.4	0.38	0.86	1	1	11.4	0.48	0.9	1	1	10.6	0.6	0.96	1	1	9.8	0.75	1	1	1
	465	12.5	0.38	0.87	1	1	11.6	0.48	0.92	1	1	10.7	0.6	0.97	1	1	9.9	0.74	1	1	1
67°F	315	12	0.39	0.59	0.73	0.87	10.9	0.49	0.61	0.76	0.91	10	0.62	0.63	0.8	0.96	9.2	0.76	0.65	0.83	1
	450	13	0.36	0.65	0.83	0.99	11.9	0.46	0.68	0.87	1	10.8	0.59	0.71	0.92	1	9.9	0.74	0.74	0.97	1
	465	13.1	0.36	0.66	0.84	1	11.9	0.46	0.68	0.89	1	10.9	0.59	0.72	0.94	1	9.9	0.74	0.75	0.99	1
71°F	315	12.7	0.37	0.45	0.58	0.7	11.7	0.48	0.46	0.6	0.73	10.7	0.6	0.46	0.62	0.77	9.8	0.74	0.47	0.64	0.8
	450	13.9	0.34	0.47	0.64	0.8	12.7	0.44	0.48	0.66	0.84	11.6	0.57	0.49	0.69	0.89	10.6	0.72	0.51	0.73	0.94
	465	14	0.34	0.48	0.65	0.81	12.8	0.44	0.48	0.67	0.86	11.7	0.56	0.5	0.71	0.91	10.7	0.72	0.51	0.74	0.95

HEATING EXTENDED RATING PERFORMANCE

HEATING MINIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	Air Temperature Entering Outdoor Coil							
	65°F		60°F		55°F		50°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
	cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh
455	13	0.61	12.2	0.61	11.3	0.62	10.5	0.62
650	13.4	0.54	12.6	0.54	11.8	0.54	10.9	0.54
700	13.6	0.53	12.8	0.53	11.9	0.53	11.1	0.53

HEATING MAXIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	65°F		45°F		25°F		5°F		-15°F		
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	
	cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
	1050	39.4	2.88	31.8	2.62	24.2	2.31	16.6	2.17	8.2	1.61
1200	39.9	2.79	32.3	2.53	24.7	2.22	17	2.08	8.6	1.52	
1355	40.3	2.71	32.7	2.44	25	2.14	17.4	1.99	9	1.43	

HEATING PERFORMANCE AT 1200 CFM INDOOR COIL AIR VOLUME

Outdoor Temperature	Compressor Motor Input	Total Output
°F	kW	kBtuh
65	2.79	39.9
60	2.74	38
55	2.69	36.1
50	2.64	34.2
47	2.6	33.1
45	2.53	32.3
40	2.33	30.3
35	2.14	28.3
30	2.18	26.5
25	2.22	24.7
20	2.26	22.9
17	2.29	21.8
15	2.27	21
10	2.22	19.1
5	2.08	17
0	1.94	14.9
-5	1.8	12.8
-10	1.66	10.7
-15	1.52	8.6
-20	1.38	6.5

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX148P-1 - BCE4M48S

COOLING MAXIMUM CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	955	42	2.91	0.83	0.95	1	40.5	3.29	0.85	0.97	1	38.5	3.71	0.87	0.99	1	35.8	4.19	0.9	1	1
	1600	49	2.91	0.97	1	1	47.5	3.29	0.98	1	1	45	3.71	1	1	1	42	4.18	1	1	1
	1800	51	2.91	0.99	1	1	49	3.29	1	1	1	46.5	3.71	1	1	1	43.5	4.18	1	1	1
63°F	955	44.5	2.91	0.69	0.8	0.91	42.5	3.29	0.7	0.81	0.92	40.5	3.71	0.71	0.83	0.95	37.6	4.18	0.73	0.86	0.98
	1600	50.5	2.91	0.78	0.93	1	48.5	3.29	0.8	0.96	1	45.5	3.71	0.82	0.98	1	42.5	4.18	0.85	1	1
	1800	51.5	2.91	0.81	0.97	1	49.5	3.29	0.83	0.99	1	46.5	3.71	0.85	1	1	43.5	4.18	0.89	1	1
67°F	955	47	2.91	0.56	0.66	0.77	45.5	3.29	0.56	0.67	0.78	43	3.7	0.57	0.68	0.8	40	4.19	0.58	0.7	0.82
	1600	53	2.91	0.61	0.76	0.9	51	3.29	0.62	0.78	0.92	48	3.71	0.63	0.8	0.95	44.5	4.17	0.65	0.83	0.99
	1800	54	2.91	0.63	0.79	0.94	52	3.29	0.64	0.81	0.96	49	3.71	0.66	0.83	0.99	45.5	4.17	0.68	0.87	1
71°F	955	49.5	2.91	0.44	0.54	0.64	47.5	3.29	0.44	0.54	0.65	45.5	3.7	0.44	0.55	0.66	42	4.17	0.44	0.56	0.68
	1600	56	2.91	0.46	0.6	0.74	53.5	3.29	0.46	0.61	0.75	50.5	3.71	0.47	0.62	0.77	47	4.18	0.48	0.64	0.81
	1800	57	2.91	0.47	0.62	0.77	54.5	3.29	0.47	0.63	0.79	51.5	3.7	0.48	0.65	0.81	48	4.18	0.49	0.67	0.85

COOLING INTERMEDIATE CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																				
	Total Air Volume	85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	610	27.6	1.39	0.82	0.93	1	26.6	1.63	0.84	0.95	1	25.2	1.88	0.85	0.97	1	24	2.15	0.87	0.99	1
	900	31.4	1.37	0.92	1	1	30.2	1.61	0.93	1	1	29	1.86	0.96	1	1	27.6	2.13	0.98	1	1
	1220	34.6	1.35	1	1	1	33.2	1.59	1	1	1	31.8	1.85	1	1	1	30.2	2.13	1	1	1
63°F	610	29.2	1.38	0.68	0.79	0.89	28	1.62	0.69	0.8	0.91	26.8	1.87	0.7	0.82	0.93	25.4	2.15	0.71	0.84	0.95
	900	32.6	1.36	0.74	0.88	1	31.2	1.6	0.76	0.9	1	29.6	1.86	0.77	0.92	1	28	2.13	0.79	0.95	1
	1220	34.8	1.35	0.82	0.98	1	33.4	1.59	0.83	1	1	31.8	1.85	0.86	1	1	30.2	2.13	0.88	1	1
67°F	610	31	1.37	0.55	0.65	0.75	29.8	1.61	0.56	0.66	0.77	28.4	1.86	0.56	0.67	0.78	27	2.14	0.57	0.68	0.8
	900	34.4	1.35	0.59	0.72	0.85	33	1.59	0.6	0.73	0.86	31.4	1.85	0.6	0.75	0.89	29.8	2.13	0.62	0.77	0.91
	1220	36.6	1.34	0.63	0.79	0.95	35.2	1.58	0.64	0.81	0.97	33.4	1.84	0.66	0.83	0.99	31.6	2.12	0.67	0.86	1
71°F	610	32.6	1.36	0.43	0.53	0.63	31.4	1.6	0.43	0.54	0.64	30	1.86	0.43	0.54	0.65	28.6	2.13	0.44	0.55	0.66
	900	36.2	1.34	0.45	0.57	0.7	34.8	1.58	0.45	0.58	0.71	33.2	1.84	0.45	0.59	0.72	31.4	2.12	0.46	0.6	0.74
	1220	38.5	1.32	0.47	0.62	0.77	37	1.57	0.47	0.63	0.79	35.2	1.82	0.48	0.65	0.81	33.2	2.11	0.48	0.66	0.84

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX148P-1 - BCE4M48S

COOLING MINIMUM CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																					
	Total Air Volume		85°F					95°F					105°F					115°F				
			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
	Dry Bulb				Dry Bulb					Dry Bulb					Dry Bulb							
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	430	19.1	0.84	0.83	0.95	1	18.2	1.02	0.85	0.97	1	17.3	1.2	0.87	0.99	1	16.5	1.39	0.89	1	1	
	750	23	0.79	0.99	1	1	22	0.98	1	1	1	21	1.16	1	1	1	20	1.37	1	1	1	
	900	24.4	0.77	1	1	1	23.4	0.96	1	1	1	22.2	1.15	1	1	1	21.2	1.35	1	1	1	
63°F	430	20.2	0.83	0.69	0.8	0.91	19.3	1.01	0.7	0.81	0.93	18.3	1.19	0.71	0.83	0.95	17.3	1.39	0.72	0.85	0.97	
	750	23.4	0.79	0.8	0.95	1	22.2	0.97	0.82	0.98	1	21.2	1.16	0.84	1	1	20	1.36	0.86	1	1	
	900	24.4	0.77	0.85	1	1	23.4	0.96	0.87	1	1	22.2	1.15	0.9	1	1	21	1.35	0.93	1	1	
67°F	430	21.4	0.81	0.55	0.66	0.76	20.4	0.99	0.56	0.67	0.78	19.5	1.18	0.57	0.68	0.8	18.5	1.38	0.57	0.7	0.82	
	750	24.6	0.77	0.62	0.77	0.92	23.4	0.96	0.63	0.79	0.95	22.2	1.15	0.64	0.81	0.97	21	1.35	0.66	0.84	1	
	900	25.6	0.75	0.65	0.83	0.99	24.4	0.94	0.66	0.85	1	23	1.14	0.68	0.87	1	21.6	1.35	0.7	0.91	1	
71°F	430	22.6	0.8	0.43	0.54	0.63	21.6	0.98	0.43	0.54	0.64	20.6	1.17	0.44	0.55	0.66	19.5	1.37	0.44	0.56	0.67	
	750	26	0.74	0.46	0.61	0.75	24.8	0.94	0.46	0.62	0.76	23.6	1.13	0.47	0.63	0.79	22.2	1.34	0.47	0.65	0.82	
	900	27	0.73	0.47	0.64	0.8	25.6	0.92	0.48	0.66	0.82	24.2	1.12	0.49	0.67	0.85	22.8	1.33	0.49	0.69	0.88	

HEATING EXTENDED RATING PERFORMANCE

HEATING MINIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	Air Temperature Entering Outdoor Coil							
	65°F		60°F		55°F		50°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
585	22.2	1.48	21.1	1.44	20	1.39	18.8	1.35
950	23.2	1.24	22.1	1.19	20.9	1.15	19.8	1.1
1275	23.9	1.14	22.8	1.09	21.6	1.05	20.5	1

HEATING MAXIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	Air Temperature Entering Outdoor Coil									
	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
1600	55.2	3.84	43.6	3.35	31.9	2.78	21	2.6	11	1.92
1600	54.8	3.84	43.2	3.35	31.5	2.78	20.6	2.6	10.6	1.92
2000	56.6	3.68	45	3.18	33.3	2.62	22.4	2.44	12.4	1.75

HEATING PERFORMANCE AT 1600 CFM INDOOR COIL AIR VOLUME

Outdoor Temperature	Compressor Motor Input	Total Output
°F	kW	kBtuh
65	3.84	54.8
60	3.74	51.9
55	3.65	49
50	3.55	46.2
47	3.49	44.4
45	3.35	43.2
40	2.98	40.1
35	2.62	37
30	2.7	34.2
25	2.78	31.5
20	2.86	28.8
17	2.91	27.1
15	2.87	26
10	2.77	23.1
5	2.6	20.6
0	2.43	18.1
-5	2.26	15.6
-10	2.09	13.1
-15	1.92	10.6
-20	1.75	8.1

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX160P-1 - BCE4M60S

COOLING MAXIMUM CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																					
	Total Air Volume		85°F					95°F					105°F					115°F				
			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
	Dry Bulb				Dry Bulb					Dry Bulb					Dry Bulb							
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	1260	51	3.31	0.86	0.98	1	49	3.74	0.87	0.99	1	46.5	4.26	0.89	1	1	44.5	4.88	0.91	1	1	
	1805	56.5	3.33	0.95	1	1	54.5	3.77	0.97	1	1	52.5	4.3	0.99	1	1	50	4.96	1	1	1	
	2100	59	3.34	0.99	1	1	57	3.78	1	1	1	54.5	4.32	1	1	1	52	4.98	1	1	1	
63°F	1260	53.5	3.32	0.71	0.82	0.94	51.5	3.75	0.72	0.84	0.96	49	4.28	0.73	0.86	0.98	46.5	4.91	0.74	0.88	0.99	
	1805	58	3.34	0.77	0.92	1	55.5	3.78	0.79	0.94	1	53	4.31	0.8	0.96	1	50.5	4.96	0.83	0.98	1	
	2100	60	3.34	0.81	0.96	1	57.5	3.79	0.82	0.98	1	55	4.32	0.84	1	1	52	4.98	0.87	1	1	
67°F	1260	56.5	3.33	0.57	0.68	0.79	54.5	3.77	0.57	0.69	0.8	52	4.3	0.58	0.7	0.82	49.5	4.95	0.59	0.72	0.84	
	1805	61.5	3.35	0.6	0.75	0.89	59	3.79	0.61	0.76	0.91	56	4.33	0.63	0.78	0.93	53	4.99	0.64	0.8	0.96	
	2100	63	3.35	0.63	0.79	0.93	60.5	3.8	0.64	0.8	0.96	57.5	4.35	0.65	0.82	0.98	54.5	5.01	0.66	0.85	1	
71°F	1260	59.5	3.34	0.44	0.55	0.65	57.5	3.79	0.44	0.56	0.66	55	4.33	0.44	0.56	0.68	52	4.98	0.45	0.57	0.69	
	1805	64.5	3.35	0.46	0.59	0.72	62	3.81	0.46	0.6	0.74	59.5	4.36	0.46	0.61	0.76	56	5.03	0.47	0.62	0.78	
	2100	66.5	3.36	0.47	0.62	0.76	63.5	3.81	0.47	0.63	0.78	60.5	4.37	0.47	0.64	0.8	57.5	5.05	0.48	0.65	0.82	

COOLING INTERMEDIATE CAPACITY

Entering Wet Bulb Temperature	Outdoor Air Temperature Entering Outdoor Coil																					
	Total Air Volume		85°F					95°F					105°F					115°F				
			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
	Dry Bulb				Dry Bulb					Dry Bulb					Dry Bulb							
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
59°F	800	32.8	1.6	0.85	0.97	1	31.2	1.87	0.87	0.99	1	30	2.16	0.88	1	1	28.8	2.49	0.9	1	1	
	1130	36.4	1.58	0.94	1	1	35	1.86	0.96	1	1	33.6	2.15	0.98	1	1	32.4	2.48	1	1	1	
	1405	39	1.56	1	1	1	37.2	1.84	1	1	1	35.8	2.13	1	1	1	34.4	2.46	1	1	1	
63°F	800	34.6	1.59	0.7	0.82	0.93	33	1.87	0.71	0.83	0.95	31.6	2.16	0.72	0.85	0.97	30.2	2.48	0.73	0.87	0.99	
	1130	37.6	1.57	0.76	0.91	1	35.8	1.85	0.78	0.93	1	34.2	2.14	0.8	0.95	1	32.6	2.47	0.82	0.98	1	
	1405	39	1.55	0.82	0.98	1	37.4	1.84	0.84	1	1	35.8	2.13	0.86	1	1	34.4	2.46	0.88	1	1	
67°F	800	36.4	1.58	0.56	0.67	0.78	35	1.86	0.57	0.69	0.8	33.4	2.15	0.57	0.7	0.82	32	2.48	0.58	0.71	0.83	
	1130	39.5	1.55	0.6	0.74	0.88	37.6	1.83	0.61	0.76	0.9	36	2.13	0.62	0.77	0.92	34.2	2.46	0.63	0.79	0.95	
	1405	41	1.53	0.64	0.8	0.95	39	1.82	0.65	0.82	0.98	37.4	2.12	0.66	0.84	0.99	35.6	2.45	0.67	0.86	1	
71°F	800	38	1.56	0.44	0.55	0.65	36.6	1.84	0.44	0.55	0.66	35.2	2.14	0.44	0.56	0.67	33.6	2.47	0.44	0.57	0.68	
	1130	41.5	1.53	0.45	0.59	0.72	39.5	1.82	0.46	0.6	0.74	37.8	2.11	0.46	0.61	0.75	36.2	2.44	0.46	0.62	0.77	
	1405	43	1.51	0.47	0.63	0.78	41	1.8	0.48	0.64	0.8	39.5	2.1	0.48	0.65	0.82	37.6	2.43	0.48	0.66	0.84	

COOLING EXTENDED RATING PERFORMANCE - 4SHP20LX160P-1 - BCE4M60S

COOLING MINIMUM CAPACITY

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)			Total Cool Cap.	Comp Motor Input	Sensible to Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
59°F	630	24	1.03	0.88	1	1	22.8	1.25	0.91	1	1	21.8	1.46	0.94	1	1	20.8	1.69	0.96	1	1
	920	27.4	1	1	1	1	26.2	1.22	1	1	1	25	1.44	1	1	1	23.6	1.67	1	1	1
	1090	29	0.98	1	1	1	27.6	1.2	1	1	1	26.2	1.42	1	1	1	24.8	1.66	1	1	1
63°F	630	25.2	1.02	0.72	0.85	0.97	24	1.24	0.74	0.87	0.99	22.6	1.45	0.75	0.89	1	21.2	1.69	0.77	0.92	1
	920	27.8	0.99	0.8	0.96	1	26.4	1.22	0.83	0.99	1	25	1.44	0.85	1	1	23.6	1.67	0.88	1	1
	1090	29	0.98	0.85	1	1	27.6	1.2	0.88	1	1	26.2	1.42	0.91	1	1	24.8	1.66	0.94	1	1
67°F	630	26.8	1	0.57	0.69	0.81	25.6	1.22	0.58	0.71	0.83	24.2	1.44	0.59	0.72	0.86	22.8	1.68	0.6	0.74	0.88
	920	29.4	0.98	0.62	0.78	0.93	27.8	1.2	0.64	0.8	0.96	26.2	1.42	0.65	0.83	0.99	24.6	1.66	0.67	0.86	1
	1090	30.4	0.96	0.65	0.83	0.99	28.8	1.19	0.67	0.85	1	27	1.41	0.69	0.88	1	25.2	1.65	0.71	0.92	1
71°F	630	28.4	0.99	0.44	0.56	0.67	27	1.21	0.44	0.56	0.68	25.6	1.43	0.45	0.57	0.7	24.2	1.66	0.45	0.59	0.72
	920	31.2	0.95	0.46	0.61	0.75	29.4	1.18	0.47	0.62	0.78	27.8	1.4	0.47	0.64	0.8	26.2	1.64	0.48	0.66	0.83
	1090	32.2	0.94	0.47	0.64	0.8	30.4	1.17	0.48	0.66	0.83	28.8	1.39	0.49	0.68	0.86	26.8	1.63	0.5	0.7	0.89

HEATING EXTENDED RATING PERFORMANCE

HEATING MINIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	Air Temperature Entering Outdoor Coil							
	65°F		60°F		55°F		50°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
690	25.8	1.58	24.1	1.56	22.5	1.55	20.8	1.53
1100	26.9	1.28	25.2	1.27	23.6	1.25	21.9	1.24
1275	27.3	1.22	25.7	1.2	24	1.19	22.4	1.17

HEATING MAXIMUM CAPACITY

Indoor Coil Air Volume 70°F Dry Bulb	Air Temperature Entering Outdoor Coil									
	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
1600	64.7	4.52	52.1	4.16	39.3	3.75	27.8	3.52	13.7	2.6
1800	65.4	4.35	52.8	3.99	40	3.58	28.5	3.35	14.4	2.43
2000	66.1	4.24	53.6	3.88	40.8	3.47	29.3	3.23	15.2	2.32

HEATING PERFORMANCE AT 1800 CFM INDOOR COIL AIR VOLUME

Outdoor Temperature	Compressor Motor Input	Total Output
°F	kW	kBtuh
65	4.35	65.4
60	4.28	62.3
55	4.21	59.3
50	4.14	56.3
47	4.1	54.5
45	3.99	52.8
40	3.73	48.7
35	3.46	44.7
30	3.52	42.3
25	3.58	40
20	3.64	37.7
17	3.68	36.3
15	3.65	35.1
10	3.58	32
5	3.35	28.5
0	3.12	25
-5	2.89	21.5
-10	2.66	17.9
-15	2.43	14.4
-20	2.21	10.9

ACCESSORIES

Description	Where Used	Kit Number
H4TXV01 (TXV KIT)	24	1.851363
H4TXV02 (TXV KIT)	36	1.851364
H4TXV03 (TXV KIT)	48, 60	1.851365
Freezestat	3/8 tubing	93G35
Crankcase Heater	All models	Factory Installed
Sound Cover	All models	Factory Installed
Loss of Charge Kit	All models	Factory Installed
Comfort Sync™ Wi-Fi Thermostat	All models	1.841197
Comfort Sync™ Zoning Controller	All models	1.851399
Comfort Sync™ In-Zone Sensor	All models	1.851400
Discharge Temperature Sensor	All models	88K38



1-800-448-5872

All specifications and illustrations subject to change without notice and without incurring obligations.