

TECHNICAL SPECIFICATIONS

WSH2BE Series

Up to 15 SEER, 8.2 HSPF 3-Phase Light Commercial High Efficiency Heat Pump

3, 4, 5 Ton Capacities

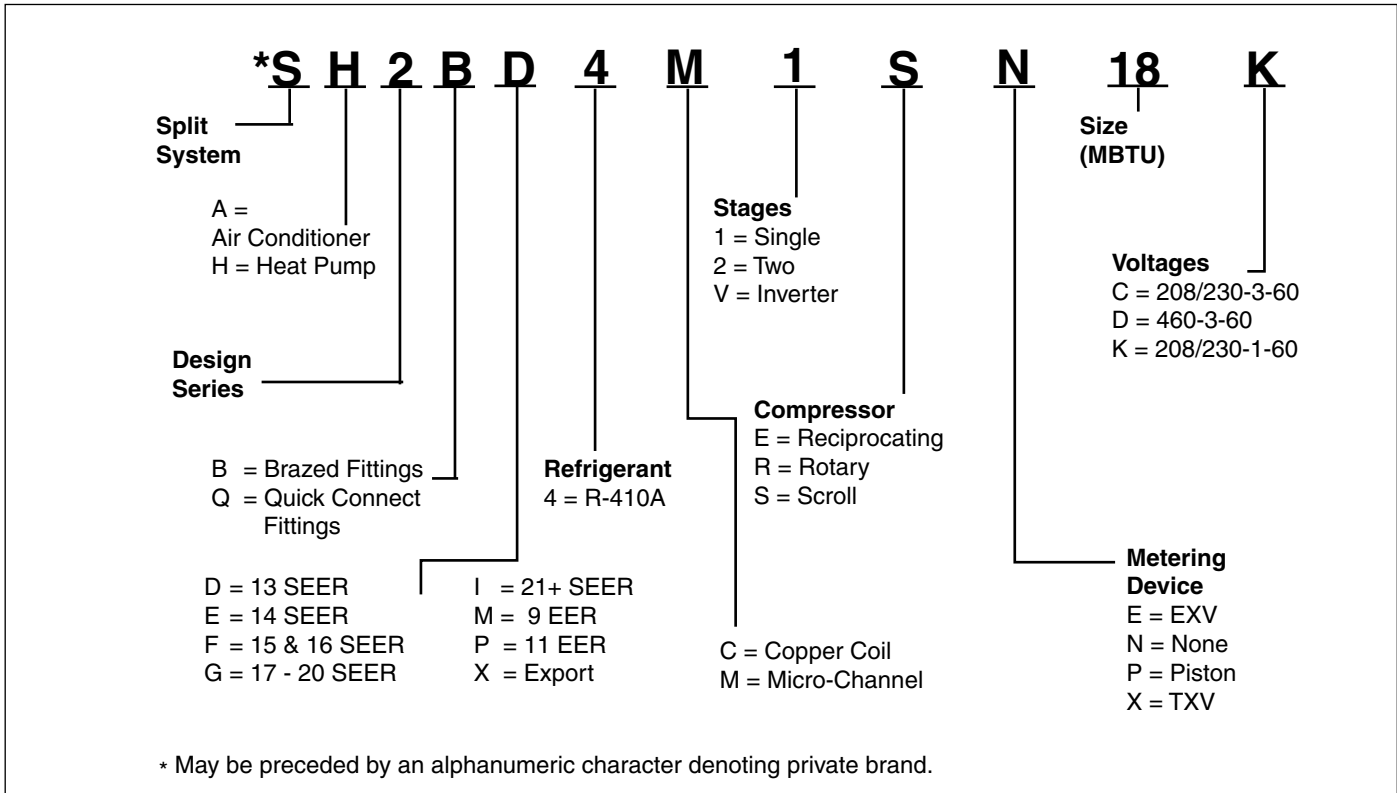
The WSH2BE Series heat pump, when combined with our engineered coils or air handlers, offers a full line of quality, split system heating and cooling equipment. Units are ideally sized for slab or rooftop mounting in light commercial applications.



FEATURES and BENEFITS

- **Quality Compressor** – State-of-the-art Copeland Scroll™ compressor is standard equipment.
- **Patented Hot Gas Bypass Defrost** – Ensures that outdoor coil defrosts every time and only when necessary.
- **Full Service Valves** – Brass valves that are easily accessible and simplify servicing of the refrigeration system.
- **Galvanized Steel Design** – Polyester urethane coat finish passes 950 hours of salt spray per ASTM Std. 8117.
- **Composite Base Pan** – Absorbs sound and is corrosion resistant. Composite is also stronger and lighter than steel.
- **Permanently Lubricated Motor** – A heavy duty PSC motor for long lasting reliability and quiet operation. Requires no maintenance and is completely protected from rain and snow.
- **Removable Top Grille Assembly** – Allows ease of service from the top without disconnecting fan motor leads.
- **Suction Accumulator and Crankcase Heater** – Protection from liquid flood back and future compressor failures.
- **Hot Gas Muffler** – Reduces compressor noise and vibration.
- **Low Pressure Switch** – Loss of charge protection ensures long compressor life. Auto-reset feature prevents nuisance service visits.
- **High Pressure Switch** – Protects against abnormally high system pressures. Auto-reset feature prevents nuisance service visits.
- **Liquid Line Filter Drier** – Included with unit and field installed.
- **One-Piece Top/Orifice** – Designed for maximum air-flow and quiet operation.
- **Easy Compressor and Control Access** – Designed to make servicing easier for the contractor, access panels are provided to all controls and the compressor from the side of the unit.
- **All-Aluminum Coils** – Aluminum coils in all models which provides high corrosion resistance.
- **Powder Coated Wire Guard and Mesh Hail Guard** – Will never rust and protects the coil from being damaged.
- **Common Suction Service Port** – This port allows the contractor to read the suction pressure in all modes of operation without removing any panels, saving time and increasing serviceability.
- **Five Minute Restart Time Delay** – When the unit shuts down, a five minute delay keeps the unit from restarting, eliminating the highest cause for compressor failure.

MODEL IDENTIFICATION CODES

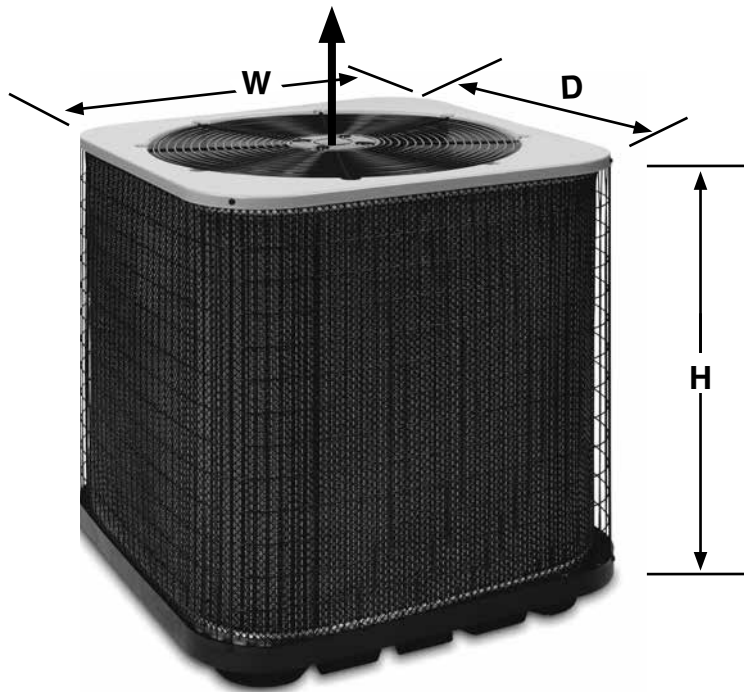


DIMENSIONS

HEAT PUMP OUTDOOR SECTION

WSH2BE	24	30	36	42	48	60
H	37 1/4"	37 1/4"	45 1/4"	45 1/4"	45 1/4"	45 1/4"
W	30 3/4"	30 3/4"	30 3/4"	30 3/4"	30 3/4"	30 3/4"
D	30 3/4"	30 3/4"	30 3/4"	30 3/4"	30 3/4"	30 3/4"

Air Discharge
Allow Adequate Clearance for Airflow



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

14 SEER — High Efficiency — Three Phase

Model No. WSA2BE4M1		036C	048C	060C	036D	048D	060D
Electrical Data	Volts-Cycles-Phase	208/230-60-3 (1)			460-60-3		
	Total Amps	10.0	14.6	17.4	6.2	6.8	8.4
	Delay Fuse Max. (2)	20	30	35	15	15	15
	Min. Circuit Ampacity	12.2	17.9	21.4	7.6	8.3	10.4
	Fan Motor	HP	0.20	0.25	0.25	0.20	0.25
Refrigerant Suction Line O.D.* NOTE: Liquid line is 3/8" O.D. for entire length.	0-24 ft.	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"
	25-39 ft.	7/8"	7/8"	1-1/8" (3)	7/8"	7/8"	1-1/8" (3)
	40-75 ft.	7/8"	7/8"	1-1/8" (3)	7/8"	7/8"	1-1/8" (3)
Approximate Weight (lbs.)	Net	182	204	206	182	204	206
	Ship	191	213	215	191	213	215
Approximate Weight (lbs.)	Net	182	204	206	182	204	206
	Ship	191	213	215	191	213	215

(1) Operating Voltage Range: 187v min. - 253v max.

(2) HACR Type Circuit Breakers may be used.

(3) Requires 7/8" to 1-1/8" reducer from line to unit.

(4) Additional charge for line sets above 15 feet.

Values based on suction line as follows with 3/8" liquid line.

a) 3/4" = 0.6 oz. per additional foot.

b) 7/8" = 0.7 oz. per additional foot.

c) 1-1/8" = 0.8 oz. per additional foot.

*For other line set dimensions, refer to the Application Guidelines for Refrigerant Lines Addendum

ACCESSORIES

Low Ambient Kit	918837
High Wind Kit	920900
Cantilever Kit	1018671

SYSTEM HEATING & COOLING CAPACITIES

14 SEER — High Efficiency — Three Phase

Outdoor Unit WSH2BE	Indoor Unit	Cooling Capacity Btuh	SEER	EER	Heating Capacity Btuh @ 47°F	HSPF	Nominal SCFM
036	B6EMMX36K-B	34,200	14	11.5	34,000	8.2	1,270
048	B6BMMX60K-C	45,500	14	11.5	46,500	8.2	1,600
060	B6BMMX60K-C	54,500	14	11	57,000	8.2	1,600

Outdoor Unit WSH2BE	Indoor Coil + TDR	Furnace	Cooling Capacity Btuh	SEER	EER	Heating Capacity BTUH @47°F	HSPF	Nominal SCFM
036	C7B(A,H)MX36(C,U)-B		34,200	14	11.5	34,200	8.2	1,140
048	C7B(A,H)MX48(C,U)-C	FG7(S,T)*-C	45,500	14	11.5	46,000	8.2	1,600
048	C7B(A,H)MX48(C,U)-D	FG7(S,T)*-D	45,000	14	11.5	46,000	8.2	1,600
060	C7B(A,H)MX60(C,U)-C	FG7(S,T)*-C	55,000	14	11.5	57,000	8.2	1,600

Outdoor Unit WSH2BE	Indoor Coil + TDR	Furnace	Cooling Capacity Btuh	SEER	EER	Heating Capacity BTUH @47°F	HSPF	Nominal SCFM
036	C7B(A,H)MX36(C,U)-C	MB7EM-2000DC	34,200	15	12.5	32,200	8.2	1,270
048	C7B(A,H)MX48(C,U)-C	MB7EM-2000DC	46,000	15	12.5	46,000	8.2	1,600
060	C7B(A,H)MX60(C,U)-C	MB7EM-2000DC	55,500	14	11.5	57,000	8.2	1,600

See current AHRI Directory for certified combinations and ratings
www.ahridirectory.org

COOLING EXPANDED RATINGS

WSH2BE036(C,D) B6EMMX36K-B

O.D.T			65°F			75°F			85°F			95°F			105°F			115°F		
CFM	E.D.B.	E.W.B.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.
1050	80	62	35.7	28.8	1.96	34.4	28.6	2.17	32.9	28.7	2.40	31.4	28.3	2.66	29.79	29.29	2.97	28.37	27.89	3.32
	80	67	38.8	23.1	1.97	37.3	22.9	2.18	35.7	23.1	2.42	34.0	22.7	2.68	32.21	22.38	2.98	30.29	21.22	3.33
	80	72	42.7	17.8	2.00	41.0	17.7	2.21	39.2	18.1	2.44	37.3	17.7	2.70	35.34	17.51	3.00	33.17	17.98	3.35
	75	62	35.4	23.3	1.96	34.0	23.1	2.17	32.5	23.3	2.40	31.0	22.8	2.66	29.34	21.12	2.97	27.59	22.64	3.32
1200	80	62	36.7	31.1	2.00	35.2	31.7	2.21	33.8	31.1	2.44	32.4	30.6	2.70	31.01	29.96	3.01	29.44	29.19	3.36
	80	67	39.7	24.6	2.01	38.1	25.3	2.22	36.4	24.6	2.46	34.6	24.4	2.72	32.79	24.40	3.02	30.83	24.40	3.37
	80	72	43.6	18.8	2.03	41.8	19.6	2.25	39.9	19.1	2.48	37.8	19.0	2.74	35.57	19.09	3.04	33.41	19.16	3.38
	75	62	36.2	24.9	1.99	34.7	25.4	2.20	33.2	24.8	2.44	31.6	24.5	2.70	29.89	24.46	3.00	28.17	24.96	3.35
1350	80	62	37.5	33.7	2.03	36.3	33.8	2.25	35.0	32.6	2.48	33.5	31.8	2.75	31.98	30.90	3.05	30.32	30.19	3.40
	80	67	40.4	26.4	2.05	38.7	26.7	2.26	37.0	26.1	2.49	35.2	26.0	2.76	33.28	25.83	3.06	31.26	25.95	3.40
	80	72	44.1	20.2	2.07	42.0	20.6	2.28	40.1	20.0	2.52	38.1	20.0	2.78	36.05	19.92	3.08	33.88	20.13	3.42
	75	62	36.9	26.7	2.03	35.4	26.9	2.24	33.8	26.3	2.47	32.2	26.8	2.74	30.45	26.62	3.04	28.64	26.66	3.39

WSH2BE048(C,D) B6BMMX60K-C

O.D.T			65°F			75°F			85°F			95°F			105°F			115°F		
CFM	E.D.B.	E.W.B.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.
1400	80	62	47.2	37.1	2.73	45.5	37.8	2.97	43.5	38.0	3.25	41.3	37.4	3.57	39.13	38.47	3.95	37.29	36.66	4.39
	80	67	51.5	30.5	2.75	49.4	30.3	2.99	47.1	30.5	3.27	44.8	29.9	3.59	42.35	29.48	3.96	39.80	27.96	4.40
	80	72	56.8	23.5	2.77	54.3	23.4	3.01	51.9	23.8	3.29	49.2	23.3	3.61	46.46	22.97	3.98	43.65	23.56	4.41
	75	62	47.0	30.9	2.72	45.1	30.6	2.97	43.0	30.8	3.25	40.8	30.1	3.57	38.61	27.77	3.95	36.24	29.81	4.39
1600	80	62	48.6	41.2	2.79	46.6	41.9	3.03	44.5	41.1	3.31	42.8	40.4	3.63	40.78	39.40	4.01	38.65	38.32	4.45
	80	67	52.7	32.5	2.81	50.4	33.4	3.05	48.1	32.5	3.32	45.6	32.2	3.65	43.07	32.13	4.02	40.40	32.10	4.46
	80	72	57.9	24.8	2.83	55.4	25.9	3.07	52.8	25.1	3.35	50.0	24.9	3.67	47.10	25.08	4.04	43.88	25.24	4.47
	75	62	48.1	32.9	2.78	46.0	33.6	3.03	43.9	32.8	3.30	41.7	32.3	3.63	39.29	32.21	4.01	36.82	32.06	4.44
1800	80	62	49.7	44.7	2.85	48.0	44.7	3.09	46.2	43.1	3.37	44.2	41.9	3.69	42.02	40.60	4.07	39.76	39.59	4.51
	80	67	53.6	35.0	2.87	51.3	35.3	3.11	48.8	34.4	3.38	46.3	34.3	3.70	43.67	34.01	4.08	40.92	34.14	4.51
	80	72	58.8	26.6	2.89	56.1	27.2	3.13	53.3	26.4	3.40	50.2	26.4	3.72	47.31	26.25	4.09	44.39	26.52	4.52
	75	62	49.0	35.3	2.84	46.9	35.6	3.08	44.6	34.7	3.36	42.3	34.4	3.68	39.99	35.08	4.06	37.50	35.13	4.50

WSH2BE060(C,D) B6BMMX60K-C

O.D.T			65°F			75°F			85°F			95°F			105°F			115°F		
CFM	E.D.B.	E.W.B.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.	T.C.	S.C.	K.W.
1495	80	62	56.1	45.2	3.33	54.2	44.3	3.69	52.1	43.2	4.09	50.0	42.0	4.56	47.6	40.9	5.12	45.0	39.7	5.79
	80	67	60.8	38.6	3.40	58.5	37.5	3.76	56.1	36.4	4.16	53.8	35.3	4.62	51.4	34.3	5.16	48.8	33.1	5.78
	80	72	65.6	31.5	3.48	62.7	30.2	3.84	59.8	29.2	4.23	57.1	28.1	4.69	54.4	27.0	5.21	51.6	25.9	5.81
	75	62	54.7	38.3	3.31	54.0	37.8	3.68	52.0	36.9	4.09	49.9	35.8	4.55	47.5	34.6	5.12	44.8	33.3	5.78
	75	67	60.7	32.1	3.40	58.3	31.0	3.76	56.0	29.9	4.16	53.6	28.9	4.62	51.2	27.8	5.15	48.6	26.8	5.78
1645	80	62	57.2	47.1	3.36	55.1	46.0	3.72	53.1	44.9	4.12	50.9	43.9	4.59	48.4	42.8	5.15	45.7	41.5	5.81
	80	67	62.0	40.0	3.43	59.5	38.9	3.79	57.1	37.8	4.19	54.7	36.7	4.65	52.2	35.6	5.19	49.5	34.4	5.81
	80	72	66.9	32.5	3.50	63.7	31.3	3.87	60.8	30.0	4.27	58.0	28.9	4.72	55.1	27.8	5.25	52.3	26.7	5.84
	75	62	55.8	39.7	3.34	55.0	39.3	3.71	52.9	38.3	4.11	50.7	37.1	4.58	48.3	36.0	5.14	45.5	34.7	5.81
	75	67	61.8	33.0	3.43	59.3	31.9	3.79	56.9	30.8	4.19	54.5	29.9	4.65	52.0	28.8	5.18	49.4	27.6	5.81
1795	80	62	58.1	48.9	3.39	56.0	47.8	3.74	53.8	46.7	4.15	51.6	45.6	4.62	49.1	44.6	5.17	46.3	43.3	5.83
	80	67	62.9	41.3	3.46	60.4	40.2	3.82	57.9	39.1	4.22	55.4	38.0	4.69	52.9	36.9	5.22	50.1	35.6	5.84
	80	72	68.0	33.4	3.52	64.8	32.1	3.88	61.6	30.8	4.30	58.7	29.7	4.76	55.8	28.6	5.28	52.9	27.5	5.88
	75	62	56.7	41.1	3.37	55.8	40.6	3.74	53.7	39.6	4.14	51.5	38.5	4.61	49.0	37.3	5.17	46.1	35.9	5.83
	75	67	62.8	33.9	3.46	60.2	32.8	3.82	57.7	31.7	4.22	55.3	30.7	4.68	52.7	29.5	5.22	50.0	28.3	5.84

HEATING EXPANDED RATINGS

WSH2BE036(C,D) / B6EMMX36K-B, MB7EM-2000D-C

CFM	Indoor T. Deg.F	OUTDOOR TEMPERATURE (Deg. F)																							
		10			17			20			30			40			47			50			60		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
1120	60	18.0	2.55	2.07	21.3	2.96	2.11	22.7	3.13	2.13	27.5	3.68	2.19	32.3	4.20	2.25	35.6	4.54	2.30	37.0	4.69	2.32	41.8	5.15	2.38
	70	17.3	2.42	2.10	20.5	2.79	2.16	21.9	2.94	2.18	26.4	3.43	2.26	30.9	3.88	2.34	34.1	4.19	2.39	35.5	4.31	2.42	40.0	4.71	2.49
	80	16.7	2.28	2.15	19.8	2.62	2.21	21.1	2.76	2.24	25.4	3.20	2.33	29.7	3.61	2.41	32.7	3.88	2.47	34.0	3.99	2.50	38.3	4.35	2.59
1270	60	18.1	2.50	2.12	21.5	2.92	2.16	23.0	3.09	2.18	27.8	3.65	2.24	32.7	4.17	2.29	36.1	4.53	2.34	37.5	4.67	2.35	42.4	5.15	2.41
	70	17.5	2.38	2.16	20.7	2.75	2.21	22.1	2.91	2.23	26.7	3.40	2.31	31.4	3.86	2.38	34.6	4.17	2.43	36.0	4.30	2.45	40.6	4.71	2.53
	80	16.9	2.24	2.21	20.0	2.58	2.27	21.3	2.72	2.29	25.7	3.17	2.38	30.1	3.59	2.46	33.2	3.87	2.52	34.5	3.98	2.54	38.9	4.34	2.63
1420	60	18.2	2.46	2.17	21.7	2.88	2.21	23.2	3.05	2.23	28.1	3.61	2.28	33.0	4.15	2.33	36.5	4.51	2.37	37.9	4.66	2.39	42.9	5.15	2.44
	70	17.7	2.35	2.21	21.0	2.73	2.26	22.4	2.88	2.28	27.1	3.38	2.35	31.8	3.85	2.42	35.0	4.16	2.47	36.4	4.29	2.49	41.1	4.71	2.56
	80	17.1	2.22	2.26	20.2	2.56	2.32	21.6	2.70	2.34	26.0	3.15	2.42	30.5	3.57	2.51	33.6	3.84	2.56	34.9	3.96	2.59	39.4	4.33	2.67

WSH2BE048(C,D) / B6BMMX60K-C, MB7EM-2000D-C

CFM	Indoor T. Deg.F	OUTDOOR TEMPERATURE (Deg. F)																							
		10			17			20			30			40			47			50			60		
		MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW	MBH	COP	kW
1405	60	23.4	2.54	2.70	27.9	2.93	2.79	29.9	3.09	2.83	36.4	3.60	2.96	42.8	4.06	3.09	47.4	4.36	3.19	49.3	4.48	3.23	55.8	4.87	3.36
	70	22.6	2.34	2.83	27.0	2.70	2.93	28.9	2.85	2.98	35.2	3.31	3.12	41.5	3.73	3.26	45.9	4.01	3.36	47.8	4.12	3.40	54.1	4.47	3.55
	80	22.1	2.17	2.99	26.3	2.50	3.09	28.2	2.63	3.14	34.2	3.05	3.29	40.3	3.43	3.44	44.6	3.68	3.55	46.4	3.78	3.60	52.5	4.11	3.75
1605	60	23.6	2.51	2.76	28.3	2.91	2.84	30.2	3.08	2.88	36.8	3.60	3.00	43.4	4.08	3.12	48.0	4.39	3.21	50.0	4.52	3.25	56.6	4.93	3.37
	70	22.9	2.32	2.89	27.4	2.69	2.98	29.3	2.84	3.02	35.7	3.32	3.16	42.1	3.75	3.29	46.5	4.04	3.38	48.5	4.15	3.42	54.9	4.53	3.55
	80	22.3	2.15	3.05	26.6	2.48	3.15	28.5	2.62	3.19	34.7	3.06	3.33	40.9	3.45	3.47	45.2	3.72	3.57	47.1	3.82	3.61	53.3	4.16	3.75
1805	60	23.7	2.48	2.81	28.4	2.89	2.89	30.5	3.05	2.93	37.2	3.58	3.04	43.9	4.07	3.16	48.6	4.40	3.24	50.6	4.53	3.28	57.3	4.95	3.39
	70	23.2	2.31	2.95	27.7	2.68	3.04	29.7	2.83	3.07	36.2	3.32	3.20	42.6	3.76	3.32	47.1	4.05	3.41	49.1	4.17	3.45	55.6	4.56	3.57
	80	22.6	2.13	3.10	27.0	2.47	3.20	28.8	2.61	3.24	35.1	3.06	3.37	41.4	3.46	3.50	45.7	3.73	3.59	47.6	3.84	3.63	53.9	4.20	3.77



GENERAL TERMS OF LIMITED WARRANTY

Nortek Global HVAC, LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the Nortek Global HVAC, LLC warranty department for a copy.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (08/2019)