

ESA1BF Series

High Efficiency Air Conditioner

16 SEER Residential System 2 - 5 Ton Capacity

The ESA1BF Series of air conditioners offers exceptional performance. The unit, when combined with our engineered coils or air handlers, offers a line of quality, 16 SEER split system cooling equipment.



FEATURES and BENEFITS

- **Composite Base Pan:** Absorbs sound and corrosion resistant. Composite is also stronger and lighter than steel.
- **Durable, Attractive Cabinet:** Designed using galvanized steel with a polyester urethane finish. The finish passes 950 hours of salt spray per ASTM Std. B117.
- **Removable Top Grille Assembly:** Allows ease of service from the top without disconnecting fan motor leads.
- **High Pressure Switch:** Protects against abnormally high system pressures. Auto-reset feature prevents nuisance service visits.
- **Liquid Line Filter Drier:** Included with unit, field installed.
- **One Piece Top/Orifice:** Designed for maximum airflow 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.
- **Complete Metal Wrapper:** Durable metal guard protects the coil from yard hazards and extreme weather.
- **Anteater MC Micro-Channel:** All aluminum coils in all models which provides high corrosion resistance.
- **Servicer-Friendly Jacket:** Side panels can be easily removed and replaced without removing the top grill.

2 - 4 Ton Units

- **Copeland Scroll Compressor:** Copeland's proven and simple design equates to years of comfort and reliability for the homeowner with virtually silent operation.

5 Ton Units

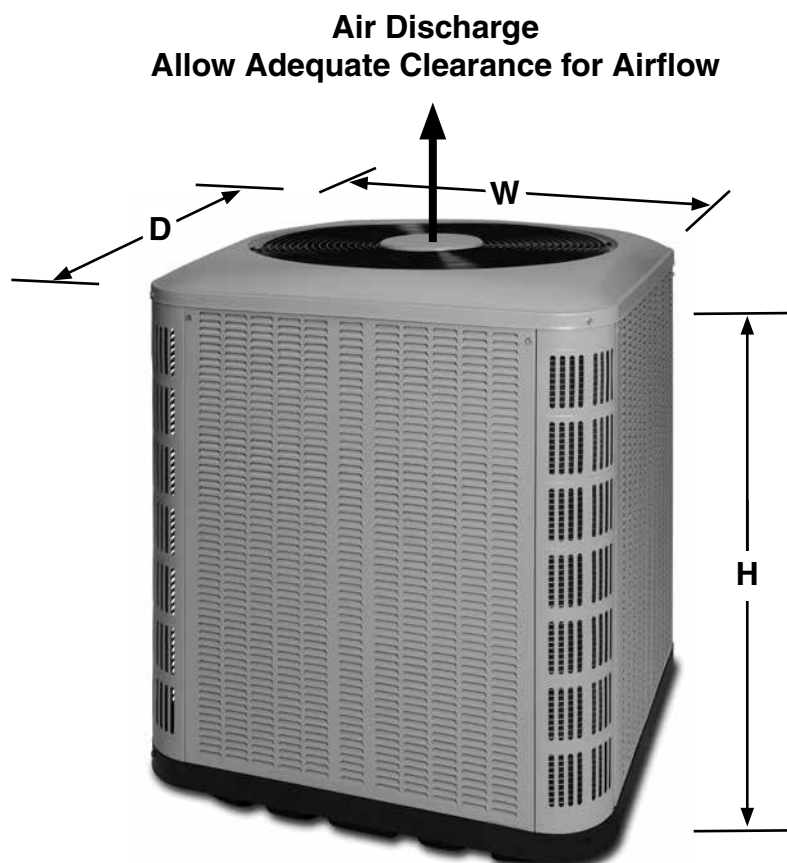
- **Copeland Scroll UltraTech™ Compressor:** The Ultra Tech Compressor operates with 2 stages of cooling capacity to provide superior comfort and efficiency. Copeland's proven and simple design equates to years of comfort and reliability for the homeowner with virtually silent operation.
- **Low Pressure Switch:** Loss of charge protection ensures long compressor life. Auto-reset feature prevents nuisance service visits.

The diagram illustrates the components of the HVAC unit model number **ESABF4M1SN18K**. Each letter or number in the model is connected by a line to its corresponding specification:

- E**: Jacket Style
- S**: Split System
- A**: Design Series (A - Air Conditioner, H - Heat Pump)
- 1**: Design Series
- B**: Design Series (B - Brazed, Q - Quick Connect)
- F**: Design Series (D - 13 SEER, E - 14 SEER, F - 16 SEER, G - 18-20 SEER, X - Export)
- 4**: Refrigerant (4 - R-410a)
- M**: Micro-Channel (C - Copper Coil)
- 1**: Stages (1 - Single, 2 - Two, V - Inverter)
- S**: Compressor (S - Scroll, R - Rotary, E - Recip)
- N**: Metering Device (N - None, X - TXV, P - Piston, E - EXV)
- 18**: Size (MBTU)
- K**: Voltages (C - 208/230-3-60, D - 460-3-60, E - 220/240-1-50, G - 380/420-3-50, K - 208/230-1-60)

AIR CONDITIONER OUTDOOR SECTION

ESA1BF	24K	30K	36K	42K	48K	60K
H	36.5	29.25	41.25	45.25	45.25	45.25
W	23.75	31.75	31.75	31.75	31.75	31.75
D	23.75	31.75	31.75	31.75	31.75	31.75



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

16 SEER — R-410A Extra High Efficiency — Single Phase

Model Number ESA1BF			24K	30K	36K	42K	48K	60K
Electrical Data	Volts-Cycles-Phase (1)		208/230-60-1					
	Total Amps		14.1	13.7	15.1	19.4	22.4	31.4
	Delay Fuse Max. (2)		30	25	30	40	45	60
	Min. Circuit Ampacity		17.5	16.9	18.6	23.9	27.4	38.6
	Fan Motor	Type	PSC				BLDC	
		Amps	0.7	0.9	1.0	1.5	2.6	2.6
		HP	0.10	0.13	0.20	0.25	0.33	0.33
	Compressor Data	RLA	13.4	12.8	14.1	17.9	19.8	28.8
		LRA	58.3	64.0	77.0	112.0	109.0	152.9
Refrigerant suction line O.D. NOTE: Liquid line is 3/8" O.D. for entire length.		0-24 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
		25-39 ft.	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (3)
		40-75 ft.	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (3)
Approximate Weight (lbs.)		Net	145	164	233	230	226	251
		Ship	153	174	245	243	239	264
Sound Rating db			74	79	79	79	75	77

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

(2) HACR Type Circuit Breakers may be used.

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

(4) Use of a 3/4" linset will result in approximately 2% loss in capacity.

(5) 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.

ACCESSORIES - Condensing Unit

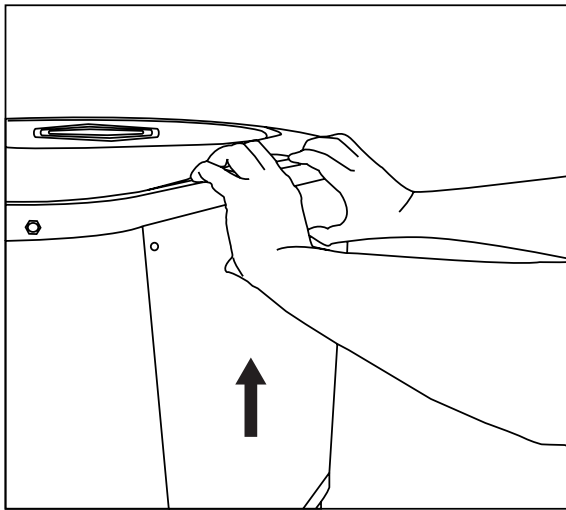
Start Assist Kit - 912933

Provides additional starting torque for the compressor motor when operating with low line voltage or high operating temperatures.

COPPER WIRE SIZE — AWG (1% Voltage Drop)				
Supply Wire Length-Feet				Supply Circuit Ampacity
200	150	100	50	
6	8	10	14	15
4	6	8	12	20
4	6	8	10	25
4	4	6	10	30
3	4	6	8	35
3	4	6	8	40
2	3	4	6	45
2	3	4	6	50

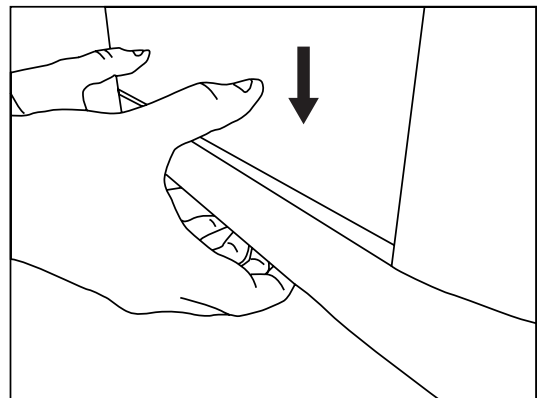
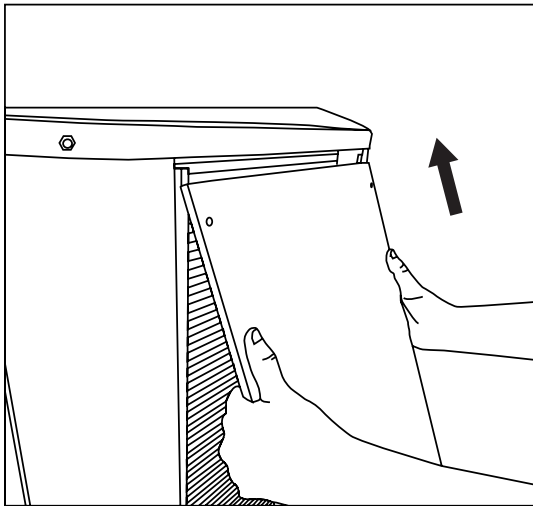
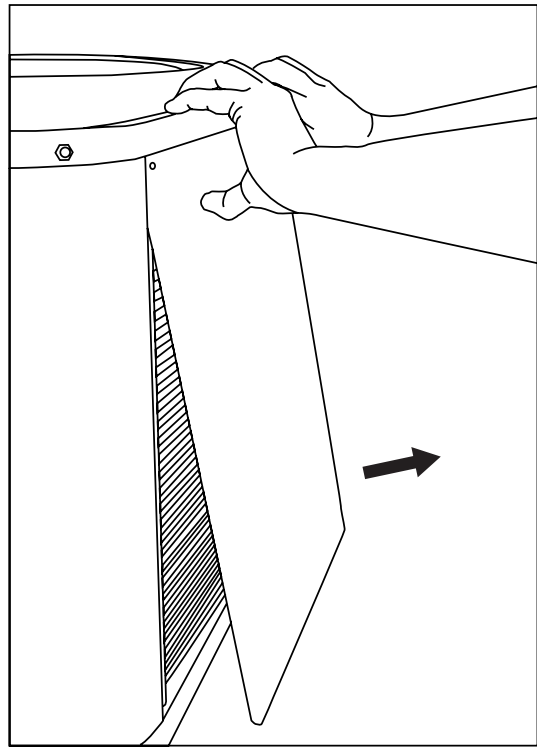
Wire Size based on N.E.C. for 60° type copper conductors.

PANEL REMOVAL AND REPLACEMENT INSTRUCTIONS



Removing Panels:

1. Remove screws.
2. Pull up on panel.
3. Rotate bottom of panel out.
4. Pull panel off.



Reinstalling Panels:

1. Place panel back in towards top of unit.
2. Rotate bottom of panel inwards.
3. Push panel down until it fills gap at bottom of unit.
4. Replace screws.

SYSTEM COOLING CAPACITIES

16 SEER — Extra High Efficiency — Single Phase

With this Air Handler						
Outdoor Unit	Indoor Unit	High Speed Capacity (BTU/h)	SEER	EER	Low Speed SCFM	High Speed SCFM
ESA1BF4M1SN24K	B6EMMX24K-A	24,000	16.0	13.0	N/A	835
ESA1BF4M1SN24K	B6EMMX24K-B	24,000	16.0	13.0	N/A	835
ESA1BF4M1SN30K	B6EMMX30K-A	29,000	16.0	13.0	N/A	995
ESA1BF4M1SN30K	B6EMMX30K-B	29,000	16.0	13.0	N/A	995
ESA1BF4M1SN36K	B6EMMX36K-B	34,200	16.0	13.0	N/A	1035
ESA1BF4M1SN42K	B6EMMX48K-C	40,000	16.0	13.0	N/A	1200
ESA1BF4M1SN48K	B6EMMX48K-C	46,000	16.0	13.0	N/A	1500
ESA1BF4M2SN60K	B6VMMX60K-C	56,000	16.0	12.5	1200	1700

With this Coil						
Outdoor Unit	Indoor Unit	High Speed Capacity (BTU/h)	SEER	EER	Low Speed SCFM	High Speed SCFM
ESA1BF4M1SN24K	C7B(A,H)MX24(C,U)-A	24,000	14.0	12.2	N/A	845
ESA1BF4M1SN24K	C7B(A,H)MX24(C,U)-B	24,000	14.0	12.2	N/A	845
ESA1BF4M1SN30K	C7B(A,H)MX30(C,U)-A	27,800	14.0	12.2	N/A	860
ESA1BF4M1SN30K	C7B(A,H)MX30(C,U)-B	27,800	14.0	12.2	N/A	860
ESA1BF4M1SN30K	C7B(A,H)MX30(C,U)-C	27,800	14.0	12.2	N/A	860
ESA1BF4M1SN36K	C7B(A,H)MX36(C,U)-B	35,000	14.0	12.2	N/A	1325
ESA1BF4M1SN36K	C7B(A,H)MX36(C,U)-C	35,000	14.0	12.2	N/A	1325
ESA1BF4M1SN42K	C7B(A,H)MX42(C,U)-C	40,000	14.0	12.2	N/A	1200
ESA1BF4M1SN48K	C7B(A,H)MX48(C,U)-C	46,000	14.5	12.0	N/A	1500
ESA1BF4M2SN60K	C7B(A,H)MX60(C,U)-C + MB7VM(*)C	56,000	16.0	12.5	1200	1700

Air handlers and coils used in tables are designed and manufactured by Nortek Global HVAC.

See current AHRI Directory for certified combinations and ratings.

www.ahridirectory.org

EXPANDED COOLING PERFORMANCE - LOOSE COIL

ESA1BF4M1SN24K with C7B(A,H)MX24(C,U)-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.
700	80	62	23.9	18.7	1.42	23.0	18.6	1.59	22.1	18.7	1.76	21.1	18.4	1.96	20.00	19.40	2.18	18.87	18.31	2.43
	80	67	26.1	15.0	1.43	25.1	14.9	1.60	24.0	15.1	1.77	22.9	14.8	1.97	21.71	14.57	2.19	20.42	13.64	2.44
	80	72	28.7	11.7	1.43	27.6	11.6	1.61	26.4	11.9	1.79	25.2	11.6	1.99	23.85	11.46	2.21	22.35	11.74	2.48
	75	62	23.7	15.2	1.42	22.8	15.1	1.59	21.9	15.2	1.76	20.9	14.9	1.96	19.75	13.74	2.18	18.57	14.74	2.43
800	80	62	24.5	20.2	1.46	23.6	20.6	1.63	22.6	20.1	1.80	21.6	20.0	2.00	20.62	19.82	2.22	19.65	19.49	2.47
	80	67	26.7	15.9	1.46	25.6	16.4	1.64	24.5	16.0	1.81	23.3	15.8	2.01	22.10	15.85	2.23	20.75	15.83	2.49
	80	72	29.3	12.3	1.47	28.2	12.8	1.65	26.9	12.5	1.83	25.6	12.4	2.03	24.20	12.46	2.26	22.62	12.53	2.52
	75	62	24.2	16.1	1.46	23.3	16.5	1.62	22.3	16.1	1.80	21.2	15.9	2.00	20.10	15.86	2.22	18.95	16.29	2.47
900	80	62	25.0	21.8	1.50	24.1	21.9	1.66	23.2	21.4	1.84	22.3	21.2	2.04	21.33	20.61	2.26	20.21	20.13	2.51
	80	67	27.1	17.1	1.50	26.1	17.3	1.67	24.9	16.9	1.85	23.7	16.8	2.05	22.39	16.71	2.27	21.00	16.78	2.53
	80	72	29.8	13.1	1.51	28.6	13.4	1.69	27.3	13.0	1.88	25.9	13.1	2.07	24.37	13.04	2.30	22.81	13.17	2.56
	75	62	24.7	17.3	1.50	23.7	17.4	1.66	22.7	17.0	1.84	21.6	16.9	2.04	20.43	17.31	2.26	19.20	17.34	2.50

ESA1BF4M1SN30K with C7B(A,H)MX36(C,U)-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.
875	80	62	29.5	22.0	1.67	28.3	21.8	1.84	27.4	23.3	2.03	26.1	23.0	2.25	24.78	24.27	2.50	23.30	22.82	2.79
	80	67	32.0	18.2	1.67	30.7	18.1	1.84	29.4	18.2	2.04	28.0	17.9	2.26	26.51	17.58	2.51	24.88	16.63	2.80
	80	72	35.0	14.1	1.67	33.6	14.1	1.84	32.2	14.4	2.04	30.6	14.1	2.26	29.01	13.87	2.52	27.19	14.23	2.82
	75	62	29.3	18.5	1.67	28.2	18.3	1.84	27.0	18.4	2.03	25.7	18.0	2.25	24.32	16.57	2.50	22.78	17.77	2.79
1000	80	62	30.5	25.2	1.72	29.3	25.7	1.89	28.0	25.2	2.08	26.8	25.0	2.30	25.69	24.74	2.55	24.41	24.21	2.85
	80	67	32.7	19.3	1.72	31.4	19.8	1.89	30.0	19.3	2.08	28.6	19.1	2.30	27.00	19.05	2.56	25.30	18.99	2.85
	80	72	35.7	14.8	1.72	34.2	15.5	1.89	32.7	15.0	2.09	31.0	14.9	2.31	29.25	15.08	2.57	27.27	15.15	2.86
	75	62	30.0	19.6	1.72	28.8	20.0	1.89	27.5	19.5	2.08	26.2	19.2	2.30	24.75	19.13	2.55	23.14	18.98	2.84
1125	80	62	31.1	27.3	1.76	29.9	27.5	1.94	28.9	26.8	2.13	27.9	26.5	2.35	26.53	25.64	2.60	25.04	24.94	2.90
	80	67	33.3	20.6	1.76	31.9	20.8	1.94	30.4	20.3	2.13	28.9	20.2	2.35	27.31	20.00	2.61	25.57	20.04	2.90
	80	72	36.2	15.9	1.76	34.6	16.2	1.93	32.9	15.8	2.13	31.1	15.8	2.35	29.42	15.68	2.61	27.57	15.81	2.91
	75	62	30.6	20.9	1.76	29.3	21.0	1.93	27.9	20.5	2.13	26.5	20.3	2.34	25.07	20.10	2.60	23.57	21.38	2.89

ESA1BF4M1SN36K with C7B(A,H)MX42(C,U)-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	35.8	28.0	2.01	34.5	27.8	2.23	33.0	27.9	2.46	31.5	27.4	2.73	29.79	28.60	3.04	28.05	26.93	3.37
	80	67	39.1	23.2	2.02	37.5	23.0	2.24	35.9	23.2	2.48	34.1	22.8	2.76	32.35	22.40	3.05	30.45	20.88	3.39
	80	72	43.0	18.0	2.05	41.3	17.9	2.27	39.4	18.3	2.52	37.4	17.9	2.78	35.19	17.65	3.07	33.06	18.04	3.41
	75	62	35.6	23.5	2.01	34.3	23.3	2.23	32.8	23.4	2.46	31.2	22.9	2.72	29.50	21.14	3.04	27.75	22.64	3.37
1200	80	62	36.7	30.0	2.07	35.2	30.5	2.29	33.7	29.8	2.52	32.1	29.3	2.79	30.40	29.00	3.10	28.72	28.48	3.43
	80	67	39.9	24.6	2.08	38.3	25.3	2.31	36.6	24.7	2.55	34.7	24.3	2.82	32.87	24.34	3.11	30.90	24.31	3.45
	80	72	43.7	19.0	2.11	41.7	19.8	2.33	39.6	19.2	2.58	37.7	19.0	2.84	35.67	19.07	3.14	33.53	19.14	3.47
	75	62	36.3	24.9	2.07	34.9	25.5	2.29	33.4	24.8	2.52	31.7	24.5	2.79	29.95	24.26	3.09	28.16	24.14	3.43
1350	80	62	37.3	32.1	2.12	35.8	32.2	2.35	34.3	31.3	2.58	32.7	30.8	2.86	31.09	30.04	3.16	29.49	29.37	3.50
	80	67	40.5	26.4	2.14	38.9	26.7	2.36	37.0	26.0	2.61	35.2	25.9	2.88	33.26	25.67	3.17	31.27	25.75	3.51
	80	72	44.0	20.3	2.16	42.1	20.6	2.39	40.2	20.0	2.64	38.2	20.0	2.90	36.07	19.84	3.20	33.85	20.03	3.53
	75	62	36.9	26.6	2.12	35.4	26.8	2.34	33.9	26.0	2.58	32.1	25.8	2.85	30.33	25.54	3.15	28.47	25.50	3.49

EXPANDED COOLING PERFORMANCE - LOOSE COIL (Continued)

ESA1BF4M1SN42K with C7B(A,H)MX48(C,U)-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.
1225	80	62	41.8	32.5	2.45	40.4	32.3	2.67	38.8	32.5	2.92	37.0	31.9	3.23	35.09	33.34	3.58	33.12	31.47	3.97
	80	67	45.9	26.9	2.45	44.2	26.8	2.67	42.4	27.1	2.94	40.4	26.6	3.25	38.31	26.19	3.59	36.12	24.36	3.98
	80	72	50.5	20.9	2.46	48.6	20.8	2.69	46.5	21.3	2.97	44.3	20.8	3.27	42.01	20.56	3.61	39.54	21.12	3.99
	75	62	41.7	27.2	2.45	40.2	27.0	2.66	38.6	27.3	2.92	36.8	26.7	3.22	34.87	24.79	3.58	32.87	26.54	3.97
1400	80	62	42.9	34.7	2.51	41.4	35.4	2.73	39.6	34.6	2.99	37.8	34.2	3.30	35.84	33.89	3.64	33.90	33.38	4.03
	80	67	46.9	28.6	2.52	45.2	29.5	2.74	43.2	28.7	3.01	41.1	28.4	3.32	38.94	28.48	3.66	36.66	28.51	4.05
	80	72	51.5	22.0	2.53	49.4	23.0	2.76	47.2	22.3	3.03	44.9	22.2	3.34	42.45	22.33	3.68	39.98	22.49	4.06
	75	62	42.6	28.9	2.51	41.1	29.6	2.73	39.4	28.9	2.99	37.4	28.6	3.30	35.44	28.52	3.64	33.37	28.30	4.03
1575	80	62	43.7	37.2	2.58	42.1	37.4	2.80	40.4	36.5	3.06	38.5	36.0	3.37	36.53	35.30	3.71	34.76	34.61	4.10
	80	67	47.6	30.6	2.58	45.8	31.0	2.81	43.8	30.3	3.08	41.7	30.2	3.38	39.41	30.04	3.73	37.09	30.22	4.12
	80	72	52.1	23.5	2.59	49.9	24.0	2.83	47.7	23.3	3.10	45.4	23.4	3.40	42.92	23.27	3.75	40.39	23.59	4.13
	75	62	43.3	30.9	2.58	41.7	31.2	2.80	39.9	30.5	3.06	37.9	30.2	3.37	35.92	29.89	3.71	33.75	29.91	4.10

ESA1BF4M1SN48K with C7B(A,H)MX48(C,U)-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	48.4	37.3	2.62	46.7	37.0	2.88	44.7	37.2	3.20	42.6	36.5	3.54	40.39	38.26	3.94	38.06	36.05	4.38
	80	67	52.9	30.9	2.64	50.8	30.7	2.91	48.7	31.0	3.21	46.5	30.4	3.56	44.03	29.96	3.95	41.58	27.82	4.39
	80	72	58.1	24.0	2.67	55.9	23.9	2.93	53.5	24.4	3.23	51.0	24.0	3.58	48.17	23.65	3.96	45.31	24.29	4.40
	75	62	48.2	31.3	2.62	46.5	31.0	2.88	44.4	31.2	3.20	42.3	30.6	3.54	40.12	28.32	3.94	37.80	30.33	4.37
1600	80	62	49.5	39.8	2.69	47.7	40.6	2.96	45.5	39.6	3.27	43.4	39.1	3.62	41.16	38.83	4.01	38.91	38.32	4.45
	80	67	54.0	32.8	2.72	51.8	33.7	2.99	49.6	32.9	3.29	47.3	32.5	3.64	44.77	32.55	4.03	42.19	32.57	4.47
	80	72	59.1	25.3	2.75	56.8	26.5	3.01	54.2	25.7	3.31	51.4	25.5	3.65	48.72	25.63	4.04	45.91	25.79	4.47
	75	62	49.2	33.2	2.69	47.4	34.0	2.96	45.3	33.1	3.27	43.1	32.7	3.62	40.81	32.59	4.01	38.39	32.48	4.45
1800	80	62	50.4	42.6	2.78	48.5	42.8	3.04	46.3	41.8	3.35	44.2	41.3	3.70	41.93	40.52	4.09	39.87	39.70	4.53
	80	67	54.9	35.1	2.80	52.7	35.5	3.07	50.4	34.6	3.37	47.9	34.5	3.71	45.38	34.30	4.10	42.71	34.49	4.54
	80	72	59.6	27.0	2.82	57.3	27.6	3.08	54.8	26.8	3.38	52.1	26.8	3.73	49.33	26.68	4.12	46.44	27.02	4.55
	75	62	50.1	35.5	2.77	48.2	35.8	3.04	46.0	34.9	3.35	43.7	34.7	3.70	41.31	34.13	4.09	38.82	34.16	4.53

EXPANDED COOLING PERFORMANCE - AIR HANDLER

ESA1BF4M1SN24K with B6EMMX24K-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.
700	80	62	24.4	19.1	1.27	23.6	19.0	1.43	22.6	19.2	1.61	21.6	18.9	1.80	20.52	19.91	2.03	19.40	18.82	2.28
	80	67	26.6	15.3	1.27	25.6	15.2	1.44	24.5	15.4	1.62	23.4	15.1	1.82	22.23	14.92	2.04	20.94	14.02	2.29
	80	72	29.2	11.9	1.28	28.1	11.8	1.45	27.0	12.1	1.64	25.7	11.9	1.84	24.37	11.71	2.06	22.87	12.01	2.33
	75	62	24.2	15.5	1.27	23.3	15.4	1.43	22.4	15.5	1.61	21.4	15.2	1.80	20.28	14.13	2.02	19.09	15.16	2.27
800	80	62	25.1	20.6	1.28	24.2	21.1	1.45	23.2	20.7	1.63	22.2	20.5	1.82	21.21	20.40	2.05	20.25	20.08	2.30
	80	67	27.3	16.3	1.29	26.2	16.8	1.46	25.1	16.4	1.64	23.9	16.2	1.84	22.70	16.27	2.06	21.35	16.29	2.31
	80	72	29.9	12.5	1.30	28.8	13.1	1.47	27.5	12.7	1.66	26.2	12.7	1.86	24.80	12.77	2.08	23.22	12.86	2.35
	75	62	24.8	16.5	1.28	23.9	16.9	1.45	22.9	16.5	1.63	21.8	16.4	1.82	20.70	16.33	2.04	19.55	16.81	2.29
900	80	62	25.7	22.4	1.30	24.8	22.6	1.47	23.8	22.1	1.65	23.0	21.8	1.84	22.00	21.26	2.07	20.89	20.80	2.32
	80	67	27.8	17.5	1.30	26.7	17.7	1.48	25.6	17.3	1.66	24.3	17.3	1.85	23.06	17.21	2.07	21.67	17.31	2.33
	80	72	30.5	13.4	1.31	29.2	13.7	1.49	27.9	13.4	1.68	26.6	13.4	1.87	25.04	13.40	2.10	23.48	13.56	2.37
	75	62	25.4	17.7	1.30	24.4	17.9	1.47	23.4	17.5	1.64	22.2	17.4	1.84	21.10	17.88	2.06	19.87	17.95	2.31

ESA1BF4M1SN30K with B6EMMX30K-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.
875	80	62	29.5	23.3	1.68	28.4	23.2	1.86	27.4	23.3	2.05	26.2	23.0	2.27	24.95	24.21	2.52	23.60	22.90	2.80
	80	67	32.1	18.7	1.69	30.9	18.6	1.86	29.7	18.8	2.05	28.4	18.5	2.27	27.06	18.27	2.52	25.54	17.12	2.82
	80	72	35.5	14.5	1.68	34.1	14.5	1.86	32.8	14.9	2.05	31.4	14.6	2.27	29.82	14.45	2.53	27.93	14.81	2.86
	75	62	29.2	18.9	1.68	28.1	18.8	1.86	27.1	18.9	2.05	25.9	18.6	2.26	24.61	17.25	2.52	23.20	18.47	2.80
1000	80	62	30.2	25.1	1.73	29.1	25.6	1.90	28.0	25.1	2.09	26.8	24.9	2.31	25.74	24.78	2.57	24.56	24.35	2.86
	80	67	32.8	19.9	1.73	31.6	20.5	1.90	30.3	20.0	2.10	29.0	19.8	2.32	27.56	19.85	2.57	25.97	19.85	2.87
	80	72	36.2	15.3	1.73	34.8	16.1	1.90	33.3	15.6	2.10	31.8	15.6	2.32	29.96	15.73	2.58	28.02	15.75	2.91
	75	62	29.9	20.1	1.73	28.8	20.6	1.90	27.6	20.1	2.09	26.4	19.9	2.31	25.06	19.85	2.56	23.60	19.78	2.85
1125	80	62	30.9	27.1	1.77	29.8	27.3	1.95	28.8	26.7	2.14	27.8	26.4	2.36	26.60	25.70	2.61	25.27	25.16	2.91
	80	67	33.4	21.3	1.78	32.1	21.6	1.95	30.8	21.1	2.14	29.4	21.0	2.36	27.94	20.92	2.62	26.28	21.01	2.92
	80	72	36.6	16.4	1.77	35.0	16.8	1.95	33.5	16.4	2.15	32.0	16.4	2.37	30.33	16.35	2.63	28.38	16.48	2.96
	75	62	30.4	21.5	1.78	29.3	21.7	1.95	28.1	21.2	2.14	26.8	21.1	2.36	25.44	20.93	2.61	23.99	21.61	2.90

ESA1BF4M1SN36K with 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	35.6	28.2	1.79	34.3	28.0	2.01	32.8	28.2	2.25	31.3	27.6	2.51	29.73	28.82	2.81	28.00	27.15	3.15
	80	67	38.9	23.3	1.80	37.3	23.2	2.03	35.7	23.4	2.27	34.0	23.0	2.53	32.20	22.62	2.83	30.28	21.18	3.17
	80	72	42.7	18.0	1.83	41.0	17.9	2.05	39.2	18.3	2.29	37.2	18.0	2.56	35.05	17.72	2.85	32.92	18.12	3.20
	75	62	35.4	23.6	1.79	34.0	23.4	2.01	32.6	23.6	2.25	31.0	23.1	2.51	29.35	21.30	2.81	27.60	22.82	3.15
1200	80	62	36.5	30.3	1.82	35.1	30.8	2.04	33.7	30.1	2.28	32.1	29.6	2.54	30.48	29.24	2.84	28.85	28.61	3.19
	80	67	39.7	24.8	1.83	38.2	25.5	2.06	36.5	24.9	2.30	34.7	24.7	2.56	32.79	24.67	2.86	30.80	24.66	3.20
	80	72	43.4	19.0	1.86	41.5	19.9	2.08	39.6	19.3	2.32	37.7	19.1	2.59	35.63	19.22	2.88	33.47	19.30	3.22
	75	62	36.2	25.2	1.82	34.8	25.7	2.04	33.2	25.0	2.28	31.6	24.7	2.54	29.90	24.62	2.84	28.10	24.51	3.18
1350	80	62	37.3	32.4	1.85	35.9	32.5	2.07	34.4	31.6	2.31	32.8	31.1	2.57	31.31	30.25	2.87	29.68	29.56	3.22
	80	67	40.4	26.7	1.86	38.7	27.0	2.09	37.0	26.4	2.33	35.2	26.3	2.59	33.26	25.99	2.89	31.22	26.10	3.23
	80	72	43.9	20.4	1.89	42.1	20.8	2.11	40.2	20.2	2.35	38.2	20.2	2.62	36.11	20.07	2.91	33.88	20.29	3.25
	75	62	36.8	26.9	1.84	35.4	27.1	2.07	33.8	26.4	2.30	32.1	26.3	2.57	30.36	26.01	2.87	28.52	25.98	3.21

EXPANDED COOLING PERFORMANCE - AIR HANDLER (Continued)

ESA1BF4M1SN42K with B6EMMX48K-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.
1225	80	62	42.3	33.0	2.24	40.9	32.8	2.46	39.3	33.1	2.71	37.6	32.5	3.02	35.66	33.99	3.38	33.67	32.08	3.76
	80	67	46.3	27.4	2.24	44.6	27.2	2.47	42.8	27.6	2.73	40.8	27.0	3.04	38.77	26.66	3.39	36.61	24.88	3.78
	80	72	51.0	21.3	2.25	49.1	21.2	2.48	47.0	21.7	2.76	44.7	21.3	3.06	42.28	21.01	3.41	39.68	21.54	3.79
	75	62	42.1	27.7	2.24	40.7	27.5	2.46	39.1	27.8	2.71	37.3	27.3	3.02	35.37	25.28	3.37	33.37	27.05	3.76
1400	80	62	43.4	35.4	2.27	41.9	36.1	2.49	40.3	35.4	2.75	38.4	34.9	3.06	36.48	34.60	3.41	34.49	34.19	3.80
	80	67	47.4	29.2	2.28	45.7	30.0	2.50	43.8	29.3	2.77	41.6	29.0	3.08	39.52	29.06	3.42	37.27	29.09	3.81
	80	72	52.0	22.4	2.29	49.8	23.5	2.52	47.5	22.8	2.80	45.2	22.6	3.10	42.88	22.78	3.44	40.40	22.91	3.83
	75	62	43.1	29.5	2.27	41.6	30.3	2.50	39.9	29.6	2.75	38.1	29.2	3.06	36.03	29.14	3.41	34.00	28.90	3.80
1575	80	62	44.4	38.0	2.31	42.8	38.2	2.53	41.1	37.3	2.79	39.2	36.8	3.11	37.34	36.08	3.45	35.53	35.38	3.84
	80	67	48.2	31.3	2.32	46.5	31.7	2.54	44.4	31.0	2.82	42.3	30.9	3.12	40.12	30.73	3.46	37.80	30.91	3.85
	80	72	52.4	24.1	2.32	50.4	24.6	2.56	48.2	23.8	2.83	45.9	23.9	3.14	43.49	23.76	3.48	40.96	24.05	3.87
	75	62	43.9	31.7	2.31	42.4	32.0	2.53	40.6	31.3	2.79	38.6	30.9	3.10	36.58	30.59	3.45	34.49	30.64	3.83

ESA1BF4M1SN48K with B6EMMX48K-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	48.7	37.9	2.48	46.9	37.6	2.75	44.9	37.8	3.07	42.9	37.1	3.43	40.68	38.77	3.83	38.43	36.63	4.26
	80	67	53.1	31.4	2.50	51.0	31.1	2.79	48.9	31.5	3.09	46.6	30.9	3.45	44.23	30.42	3.84	41.77	28.38	4.29
	80	72	58.4	24.4	2.54	56.2	24.3	2.81	53.7	24.8	3.12	50.9	24.4	3.47	47.95	24.01	3.86	45.25	24.58	4.30
	75	62	48.4	31.8	2.48	46.7	31.5	2.75	44.6	31.7	3.07	42.6	31.1	3.42	40.37	28.83	3.82	38.08	30.84	4.26
1600	80	62	49.9	40.6	2.53	48.1	41.4	2.80	46.0	40.4	3.12	43.9	39.9	3.48	41.64	39.51	3.88	39.35	39.02	4.31
	80	67	54.4	33.4	2.55	52.2	34.3	2.83	49.9	33.5	3.14	47.5	33.1	3.50	45.08	33.13	3.89	42.50	33.14	4.33
	80	72	59.3	25.8	2.59	56.6	26.9	2.85	54.1	26.1	3.17	51.5	25.8	3.51	48.85	25.98	3.91	46.05	26.11	4.35
	75	62	49.5	33.8	2.53	47.7	34.6	2.80	45.6	33.7	3.12	43.4	33.3	3.47	41.16	33.23	3.87	38.76	32.92	4.31
1800	80	62	51.0	43.6	2.58	49.0	43.8	2.86	46.9	42.6	3.17	44.8	42.1	3.53	42.61	41.17	3.92	40.52	40.34	4.37
	80	67	55.3	35.9	2.61	53.1	36.2	2.88	50.7	35.4	3.19	48.3	35.2	3.54	45.76	35.01	3.94	43.15	35.18	4.38
	80	72	60.0	27.5	2.64	57.6	28.1	2.90	55.0	27.2	3.21	52.3	27.2	3.56	49.53	27.06	3.96	46.63	27.36	4.39
	75	62	50.5	36.3	2.57	48.5	36.6	2.86	46.4	35.7	3.17	44.1	35.2	3.52	41.76	34.86	3.92	39.30	34.89	4.36

EXPANDED COOLING PERFORMANCE - AIR HANDLER (Continued)

ESA1BF4M2SN60K with B6VMMX60K-C High Speed

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.
1550	80	62	58.2	42.6	3.34	56.0	42.2	3.63	53.7	42.5	3.98	51.3	41.8	4.39	48.8	44.0	4.85	46.1	41.5	5.38
	80	67	63.9	35.5	3.36	61.3	35.2	3.66	58.8	35.7	4.01	56.0	35.1	4.42	53.2	34.6	4.89	50.4	32.1	5.44
	80	72	70.4	27.9	3.38	67.8	27.8	3.68	65.0	28.4	4.04	62.3	27.9	4.48	59.1	27.5	4.95	55.8	28.3	5.50
	75	62	58.0	36.0	3.34	55.7	35.7	3.63	53.4	35.9	3.98	51.0	35.2	4.38	48.5	32.7	4.85	45.8	35.0	5.38
1700	80	62	59.4	44.6	3.39	57.1	45.5	3.68	54.7	44.5	4.03	52.2	44.1	4.44	49.8	45.5	4.90	47.1	45.5	5.45
	80	67	64.9	37.0	3.41	62.3	38.2	3.71	59.7	37.2	4.06	57.0	36.8	4.47	54.2	37.0	4.96	51.2	37.0	5.50
	80	72	71.7	28.9	3.42	69.0	30.3	3.73	66.1	29.4	4.08	63.2	29.2	4.53	60.0	29.5	5.01	56.6	29.8	5.55
	75	62	59.0	37.5	3.39	56.7	38.4	3.68	54.4	37.4	4.03	51.9	37.0	4.43	49.3	36.9	4.90	46.6	36.9	5.44
1850	80	62	60.4	47.2	3.44	58.0	47.5	3.73	55.5	46.5	4.08	53.3	48.0	4.49	50.7	47.8	4.96	48.2	47.9	5.51
	80	67	65.8	39.1	3.46	63.3	39.6	3.75	60.6	38.6	4.11	57.8	38.5	4.52	55.0	38.4	5.01	51.9	38.6	5.55
	80	72	72.8	30.5	3.47	70.0	31.3	3.77	66.9	30.3	4.13	64.0	30.5	4.58	60.7	30.5	5.06	57.1	31.0	5.61
	75	62	60.0	39.5	3.44	57.7	39.9	3.73	55.3	38.9	4.08	52.7	38.7	4.48	50.0	38.4	4.95	47.2	38.5	5.50

ESA1BF4M2SN60K with B6VMMX60K-C Low Speed

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.
1045	80	62	41.9	30.9	2.06	40.4	30.7	2.34	38.4	30.7	2.64	36.2	30.0	2.99	34.0	32.5	3.37	31.5	30.1	3.80
	80	67	46.3	25.7	2.04	44.5	25.5	2.31	42.4	25.8	2.62	40.0	25.1	2.97	37.3	24.6	3.36	34.6	22.5	3.79
	80	72	51.1	20.3	2.01	49.2	20.2	2.29	46.9	20.5	2.60	44.3	20.0	2.95	41.5	19.5	3.34	38.5	19.8	3.77
	75	62	41.9	26.0	2.06	40.3	25.8	2.34	38.3	25.9	2.64	36.1	25.2	2.99	33.7	22.7	3.37	31.1	24.5	3.80
1195	80	62	43.3	33.2	2.08	41.6	33.9	2.35	39.8	33.9	2.66	37.5	33.5	3.01	35.1	33.2	3.39	32.9	32.6	3.82
	80	67	47.6	27.4	2.05	45.8	28.3	2.33	43.5	27.5	2.64	41.0	27.1	2.99	38.3	26.9	3.38	35.4	26.7	3.81
	80	72	52.6	21.4	2.02	50.5	22.4	2.30	48.1	21.6	2.62	45.4	21.3	2.97	42.5	21.3	3.36	39.4	21.3	3.79
	75	62	43.1	27.8	2.08	41.4	28.5	2.35	39.4	27.7	2.66	37.1	27.2	3.01	34.6	26.9	3.39	31.9	26.5	3.82
1345	80	62	44.6	36.9	2.09	42.9	37.2	2.37	40.8	36.4	2.68	38.6	36.2	3.02	36.5	35.2	3.41	34.1	34.0	3.83
	80	67	48.7	29.6	2.06	46.7	30.0	2.34	44.4	29.2	2.66	41.9	29.0	3.01	39.1	28.6	3.39	36.1	28.5	3.82
	80	72	53.8	22.9	2.03	51.6	23.5	2.31	49.1	22.7	2.63	46.3	22.6	2.98	43.3	22.4	3.38	40.0	22.6	3.81
	75	62	44.2	29.9	2.09	42.4	30.2	2.37	40.3	29.3	2.68	38.0	29.0	3.02	35.4	28.5	3.41	32.5	28.3	3.84



For current Energy
Star Information
please refer to
www.energystar.gov



We Encourage
Professionalism



Through Technician
Certification by NATE

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 (09/2017)