

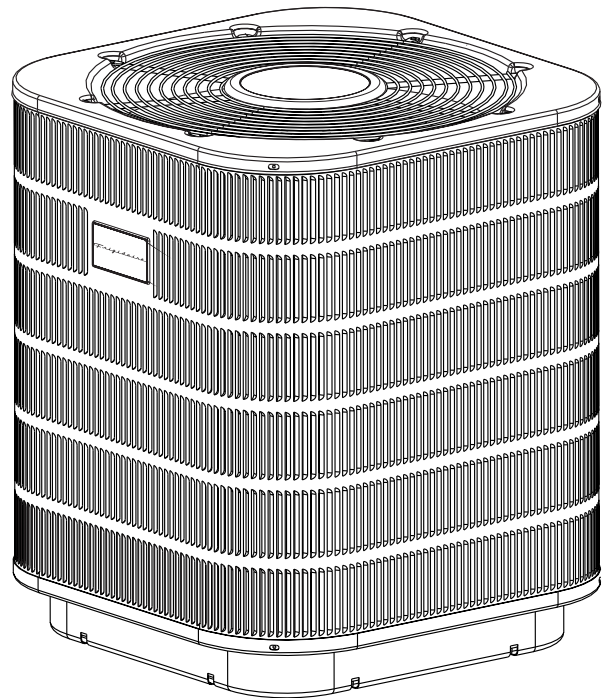
ES5BD-KA Series

High Efficiency Air Conditioner

13+ SEER Residential System

1.5 - 5 Ton Capacity

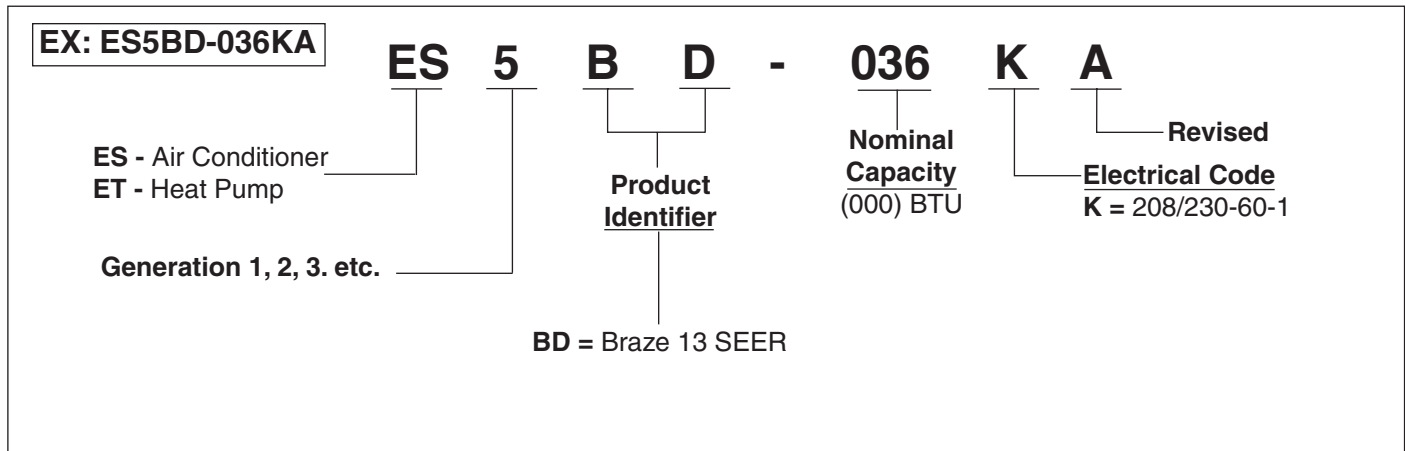
The ES5BD Series of air conditioners offers exceptional performance. The unit, when combined with our engineered coils or air handlers, offers a line of quality, split system cooling equipment. The ES5BD is rated at 13 SEER when matched with our B5BM air handler and C6BA coils. When matched with our variable speed air handler, or our variable speed blower kits, the ES5BD is rated up to 14 SEER.



FEATURES and BENEFITS

- **Warranty**
 - This product offers a 10-year all-parts warranty.
 - This product offers a 1-year Quality Pledge to replace the unit if the compressor fails within the first year of operation, to the original owner, when installed a matched indoor air handler or indoor coil.
 - Consumer product registration required to receive this extended warranty and Quality Pledge. See current warranty document or visit our consumer web site listed on the back of this document for warranty details.
- **Quality Compressor** - State of the art scroll compressor is standard equipment.
- **Durable, Attractive Cabinet** – Designed using galvanized steel with a polyester urethane finish. The 950 hour salt spray finish is 1.5 mil thick and resists corrosion 50% better than comparable units.
- **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.
- **Full Service Valves** – These brass valves are easily accessible and simplify servicing of the refrigeration system.
- **Louvered Condenser Guard** – Durable metal guard protects the coil from yard hazards and extreme weather.
- **Removable Top Grille Assembly** – Allows ease of service from the top without disconnecting fan motor leads.
- **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.

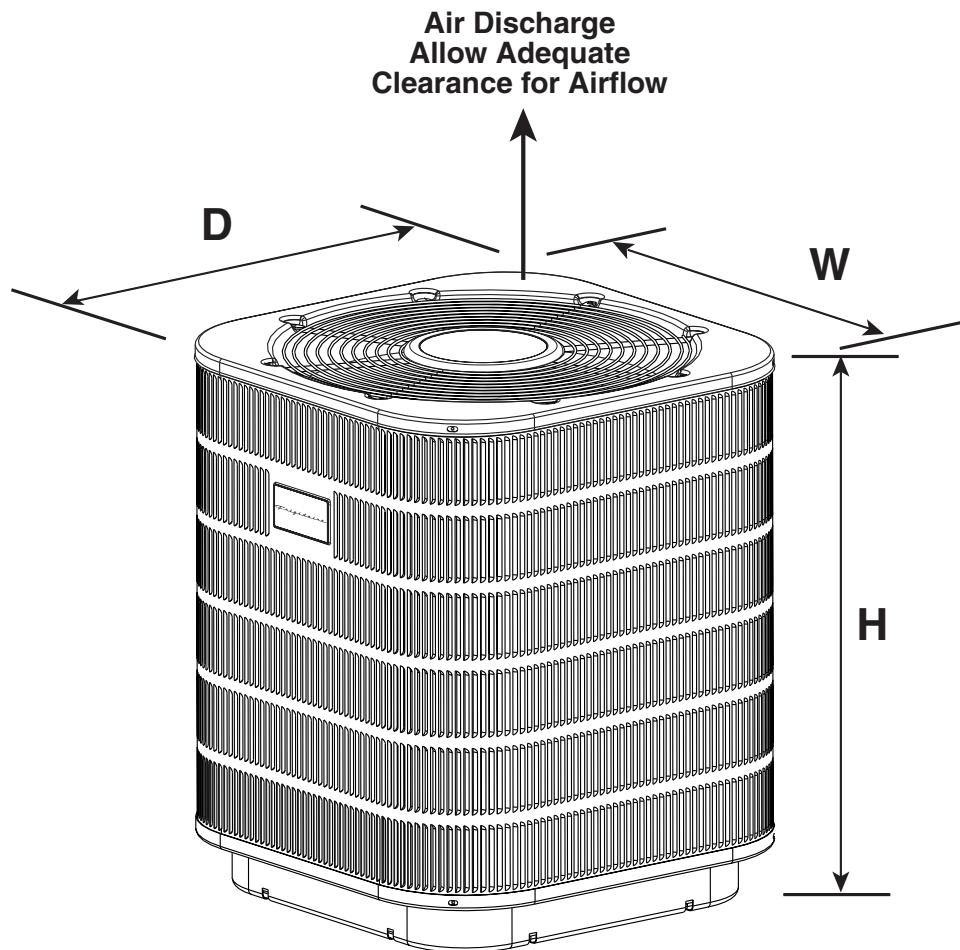
MODEL IDENTIFICATION CODES



DIMENSIONS

AIR CONDITIONER OUTDOOR SECTION

ES5BD-	018KA	024KA	030KA	030KB	036KA	036KB	042KA	048KA	060KA
H	22-1/2	26-1/2	34-1/2	26-1/2	34-1/2	26-1/2	30-1/2	30-1/2	42-1/2
W	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	30-1/2	30-1/2	30-1/2
D	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	30-1/2	30-1/2	30-1/2



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

13 SEER — High Efficiency — Single Phase

Model Number ES5BD-		018KA	024KA	030KA	030KB	036KA	036KB	042KA	048KA	060KA
Electrical Data	Volts-Cycles-Phase (1)	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
	Total Amps	8.0	11.1	14.8	14.8	15.6	15.6	16.1	20.6	26.7
	Delay Fuse Max. (2)	15	20	30	30	30	30	30	40	50
	Min. Circuit Ampacity	10.0	13.7	18.3	18.3	19.2	19.2	19.8	25.4	33.0
Component Data	Coil	Area	8.23	9.88	13.22	9.88	13.22	9.88	17.74	25.42
		Rows-FPI	1 - 22	1 - 22	1 - 22	1 - 18	1 - 22	1 - 18	1 - 22	1 - 22
		Tube Dia	3/8" O.D.	3/8" O.D.	3/8" O.D.	MC	3/8" O.D.	MC	3/8" O.D.	3/8" O.D.
	Fan Motor	Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC	PSC
		Amps	0.34	0.67	0.67	0.67	1.20	1.20	1.40	1.40
		HP	1/20	1/10	1/10	1/10	1/4	1/4	1/4	1/4
	Fan Blade	Dia-#	18" - 3	18" - 3	18" - 3	18" - 3	18" - 3	18" - 3	24" - 2	24" - 2
		Blades	18" - 3	18" - 3	18" - 3	18" - 3	18" - 3	18" - 3	24" - 2	24" - 2
		SCFM	1410	1985	3000	3000	3000	3000	4000	4000
	Compressor Data	RLA	7.7	10.4	14.1	14.1	14.4	14.4	14.7	19.2
		LRA	40	54	68	68	77	77	97	141
Refrigerant suction line- Length/O.D. (Liq. Line All Lengths - 3/8" O.D.)	0-24 ft.	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
	25-39 ft.	3/4"	3/4"	7/8" (3)	7/8" (3)	7/8" (3)	7/8" (3)	7/8"	7/8"	1-1/8" (4)
	40-75 ft.	3/4"	3/4"	7/8" (3)	7/8" (3)	7/8" (3)	7/8" (3)	7/8"	1-1/8" (4)	1-1/8" (4)
Refrigerant charge in Ounces (Outdoor unit, Indoor Unit 15' Line Set)		78	88	99	99	110	110	122	126	160
Weight	Net	103	112	124	105	124	105	156	176	229
	Approximate (lbs.)	Ship	107	117	129	109	129	109	162	183
	Ship	107	117	129	109	129	109	162	183	238

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

(2) HACR Type Circuit Breakers may be used.

(3) Requires 7/8" to 3/4" reducer from line to unit.

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

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.

Fan Delay Kit (TDR)

911758 - 80-second fan delay

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.

SYSTEM COOLING CAPACITIES

13 SEER — High Efficiency — Single Phase

Outdoor Unit	Indoor TXV Coil + TDR	Cooling Capacity BTUH	SEER	EER	SCFM
018KA	C6B(A,H)-T24(C,U)-A	17,800	13.0	11.9	550
018KA	C6B(A,H)-T24(C,U)-B	17,800	13.0	11.9	550
024KA	C6B(A,H)-T24(C,U)-A	23,800	13.0	11.5	700
024KA	C6B(A,H)-T24(C,U)-B	23,800	13.0	11.5	700
030KA	C6B(A,H)-T30(C,U)-A	29,000	13.0	11.5	900
030KA	C6B(A,H)-T30(C,U)-B	29,000	13.0	11.5	900
036KA	C6B(A,H)-T36(C,U)-B	36,000	13.0	11.4	1100
036KA	C6B(A,H)-T36(C,U)-C	36,000	13.0	11.4	1100
042KA	C6B(A,H)-T42(C,U)-B	39,500	13.0	11.9	1300
042KA	C6B(A,H)-T42(C,U)-C	39,500	13.0	11.9	1300
048KA	C6B(A,H)-T48(C,U)-C	46,500	13.0	11.3	1550
048KA	C6B(A,H)-T48(C,U)-D	46,500	13.0	11.3	1550
060KA	C6B(A,H)-T60(C,U)-C	58,500	13.0	11.7	1600
060KA	C6B(A,H)-T60(C,U)-D	58,500	13.0	11.7	1600

Outdoor Unit	Indoor TXV Coil + TDR	Cooling Capacity BTUH	SEER	EER	SCFM
018KA	C5B(A,H)-T25(C,U)-A	17,700	13.0	11.8	525
024KA	C5B(A,H)-T25(C,U)-A	24,000	13.0	11.8	700
024KA	C5B(A,H)-T25(C,U)-B	24,000	13.0	11.8	700
030KA	C5B(A,H)-T30(C,U)-A	28,600	13.0	11.3	890
030KA	C5B(A,H)-T30(C,U)-B	28,600	13.0	11.3	890
036KA	C5B(A,H)-T37(C,U)-B	35,800	13.0	11.4	1,080
042KA	C5B(A,H)-T42(C,U)-B	40,000	13.0	11.9	1,400
048KA	C5B(A,H)-T48(C,U)-B	45,500	13.0	11.5	1,400
048KA	C5B(A,H)-T49(C,U)-C	47,500	13.0	11.9	1,400
060KA	C5B(A,H)-T60(C,U)-C	57,000	13.0	11.2	1,600

Outdoor Unit	Indoor TXV Air Handler B5BM-	Cooling Capacity BTUH	SEER	EER	SCFM
018KA	T25K-A	17,700	13.0	11.8	525
024KA	T25K-A	24,000	13.0	11.8	700
024KA	T25K-B	24,000	13.0	11.8	700
030KA	T30K-A	28,600	13.0	11.3	890
030KA	T30K-B	28,600	13.0	11.3	890
036KA	T37K-B	35,800	13.0	11.4	1,080
042KA	T42K-B	40,000	13.0	11.9	1,400
048KA	T49K-C	47,500	13.0	11.9	1,400
060KA	T60K-C	57,000	13.0	11.2	1,600

(1) Field Supplied Piston
 LLS = Liquid Line Solenoid
 TDR = Time Delay Relay included with G6* furnace and air handler
 VSB = Variable Speed Blower

Air handlers and coils used in tables are designed and manufactured by NORDYNE.

See Current ARI Directory for certified combinations and ratings.

SYSTEM COOLING CAPACITIES (Continued)

14 SEER — High Efficiency — Single Phase

Outdoor Unit	Indoor TXV Coil + TDR	Cooling Capacity BTUH	SEER	EER	SCFM
018KA	C5B(A,H)-T25(U,C)-B+VSB-B	17,700	14.0	12.6	720
024KA	C5B(A,H)-T25(U,C)-B+VSB-B	24,000	14.0	13.2	720
030KA	C5B(A,H)-T30(U,C)-B+VSB-B	28,600	14.0	12.4	885
036KA	C5B(A,H)-T37(U,C)-B+VSB-B	35,800	14.0	12.2	1,060
042KA	C5B(A,H)-T48(U,C)-C+VSB-C	40,000	14.0	13.1	1,380
048KA	C5B(A,H)-T49(U,C)-C+VSB-C	47,500	14.0	12.8	1,380
060KA	C5B(A,H)-T60(U,C)-C+VSB-C	57,000	14.0	12.0	1,555

Outdoor Unit	Indoor TXV Air Handler B5VM-	Cooling Capacity BTUH	SEER	EER	SCFM
018KA	T25K-B	17,700	14.0	12.6	720
024KA	T25K-B	24,000	14.0	13.2	720
030KA	T30K-B	28,600	14.0	12.4	885
036KA	T37K-B	35,800	14.0	12.2	1,060
042KA	T49K-C	40,000	14.0	13.1	1,380
048KA	T49K-C	47,500	14.0	12.8	1,380
060KA	T60K-C	57,000	14.0	12.0	1,555

Outdoor Unit	Indoor TXV Air Handler B5BM-	Cooling Capacity BTUH	SEER	EER	SCFM
018KA	T25K-B+VSB-B	17,700	14.0	12.6	720
024KA	T25K-B+VSB-B	24,000	14.0	13.2	720
030KA	T30K-B+VSB-B	28,600	14.0	12.4	885
036KA	T37K-B+VSB-B	35,800	14.0	12.2	1,060
042KA	T49K-C+VSB-C	40,000	14.0	13.1	1,380
048KA	T49K-C+VSB-C	47,500	14.0	12.8	1,380
060KA	T60K-C+VSB-C	57,000	14.0	12.0	1,555

(1) Field Supplied Piston
 LLS = Liquid Line Solenoid
 TDR = Time Delay Relay included with G6* furnace and air handler
 VSB = Variable Speed Blower

Air handlers and coils used in tables are designed and manufactured by NORDYNE.

See Current ARI Directory for certified combinations and ratings.



www.frigidaire.net

O'Fallon, MO

NORDYNE

336C-0508 (Replaces 336C-0607)

Trademark Frigidaire used under license.

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. (05/08)