
TECHNICAL SPECIFICATIONS

S3BA Series High Efficiency Air Conditioner 10 SEER 1-1/2 – 5 Ton Capacity

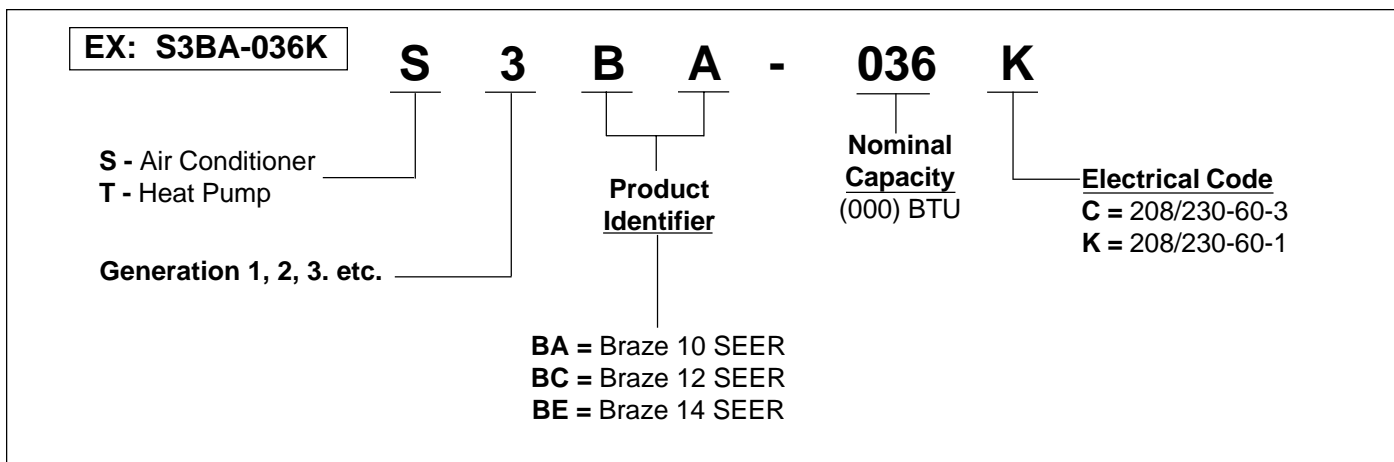
The S3BA Series of air conditioners offers exceptional performance from a small, compact package. The unit, when combined with our engineered coils or air handlers, offers a full line of quality, split system cooling equipment. Units are ideally sized for slab or rooftop mounting in single, multifamily, and light commercial applications.



FEATURES and BENEFITS

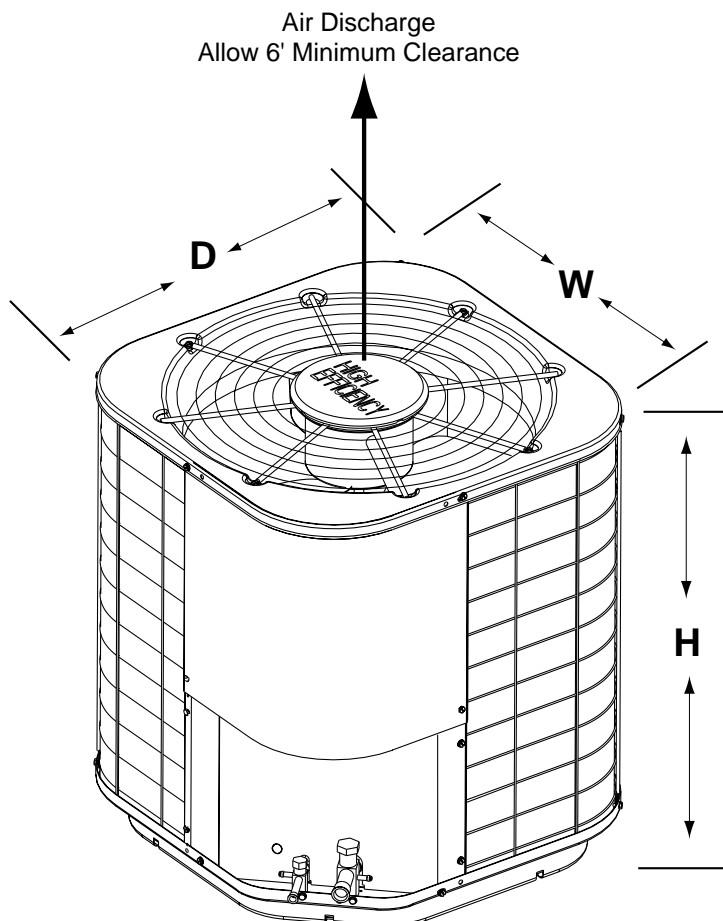
- **Durable, Attractive Cabinet** – Designed using galvanized steel with a high gloss polyester urethane powder coat finish. The 750 hour salt spray finish is 1.5 mil thick and resists corrosion 50% better than comparable units.
- **Copper Tube / Aluminum Fin Coils** – Both indoor and outdoor coils are designed to optimize heat transfer, minimize size and cost, and increase durability and reliability.
- **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.
- **Plastic Coated Coil Guard** – A wire guard that will never rust and protects the units coil from being damaged by balls, lawnmowers, etc.
- **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.
- **2-1/2" Pedestal Base** – The sturdy base keeps the bottom of the coil out of harms way. Secondly, the base has weep holes along the edge to allow the water from rain to flow away from the unit.
- **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.
- **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.
- **6 Year Limited All Parts Warranty** – The best in the industry and has proven to be a major benefit to the consumer.

MODEL IDENTIFICATION CODES



DIMENSIONS OUTDOOR SECTION

S3BA-	018	024	030	036	042	048	060
H	22-1/2	22-1/2	26-1/2	30-1/2	34-1/2	26-1/2	34-1/2
W	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	30-1/2	30-1/2
D	22-1/2	22-1/2	22-1/2	22-1/2	22-1/2	30-1/2	30-1/2



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

10 SEER — High Efficiency — Single Phase

Model No. S3BA-		018K	024K	030K	036K	042K	048K	060K	
Electrical Data	Volts-Cycles-Phase	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	9.2	10.5	14.9	15.7	18.3	19.6	26.5	
	Delay Fuse Max.	20	20	30	30	40	40	50	
	Min. Circuit Ampacity	11.4	12.9	18.4	19.3	22.5	24.2	32.7	
Component Data	Coil	Area	8.3	8.3	10.0	11.7	13.3	15.3	20.4
		Rows-FPI	1-16	1-18	1-20	1-20	1-22	1-18	1-22
		Tube Dia.	3/8 O.D.	3/8 O.D.	3/8 O.D.	3/8 O.D.	3/8 O.D.	3/8 O.D.	3/8 O.D.
	Fan Motor	Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
		Amps	0.67	0.67	1.25	1.25	1.25	1.4	1.5
		Watts-HP	145-1/10	145-1/10	210-1/8	210-1/8	210-1/8	245-1/4	300-1/4
	Fan Blade	Di.-#Blades	18 in. - 3	18 in. - 3	18 in. - 3	18 in. - 3	18 in. - 3	24 in. - 2	24 in. - 3
		SCFM	2100	2100	2500	2500	2500	3300	4000
	Compress	RLA	8.6	9.8	13.7	14.4	17.0	18.2	25.0
		LRA	49	56	75	82	105	102	170
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8"O.D.)	15 ft.	5/8"	5/8"	3/4"	3/4"	3/4"	7/8"	7/8"	
	25 ft.	5/8"	3/4"	3/4"	3/4"	7/8"	7/8"	1-1/8"	
	40 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	1-1/8"	
Refrigerant Charge R-22 Ounces	(Outdoor unit, Indoor Unit 15' Line Set)	62	72	76	90	102	105	130	
Weight Approximate (lbs.)	Net	140	142	148	154	160	166	178	
	Ship	152	154	160	166	172	178	190	

10 SEER — High Efficiency — Three Phase

Model No. S3BA-		036C	048C	060C	
Electrical Data	Volts-Cycles-Phase (1)	208/230-60-3	208/230-60-3	208/230-60-3	
	Total Amps	10.2	14	16.9	
	Delay Fuse Max. (2)	20	30	35	
	Min. Circuit Ampacity	12.5	17.2	20.8	
Component Data	Coil	Area	11.7	15.3	20.4
		Rows-FPI	1-20	1-18	1-22
		Tube Dia.	3/8 O.D.	3/8 O.D.	3/8 O.D.
	Fan Motor	Type	PSC	PSC	PSC
		Amps	1.25	1.4	1.5
		Watts-HP	210-1/8	245-1/4	300-1/4
	Fan Blade	Di.-#Blades	18 in. - 3	24 in. - 2	24 in. - 3
		SCFM	2500	3000	3600
	Compress	RLA	9.0	12.6	15.4
		LRA	70	91	124
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8"O.D.)	15 ft.	3/4"	7/8"	7/8"	
	25 ft.	3/4"	7/8"	1-1/8" (5)	
	40 ft.	7/8" (4)	7/8"	1-1/8" (5)	
Refrigerant Charge R-22 Ounces	(Outdoor unit, Indoor Unit 15' Line Set)	90	105	130	
Weight Approximate (lbs.)	Net	154	166	178	
	Ship	166	178	190	

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.

* Values shown are most severe and may vary slightly depending on the make of the compressor supplied.

- (1) Operating Voltage Range: 198v min. — 253v max.
- (2) HACR Type Circuit Breakers may be used.
- (3) Requires 3/4" to 5/8" reducer from unit to line.
- (4) Requires 7/8" to 3/4" reducer from line to unit.
- (5) Requires 7/8" to 1-1/8" reducer from line to unit.

SYSTEM HEATING & COOLING CAPACITIES

10 SEER — High Efficiency — Single Phase

Outdoor Unit	With This Coil				
Model Number	Model Number	Cooling Btuh	SEER	Nominal cfm	Required Orifice Size
S3BA-018K	C3BL-018C/U-A	17,800	10.0	675	.051
S3BA-024K	C3BA-024C/U-B	23,600	10.0	800	.060
S3BA-024K	C3BL-023C/U-A	22,800	10.0	800	.060
S3BA-030K	C3BA-030C/U-B	29,600	10.0	1100	.067
S3BA-030K	C3BL-028C-A	28,200	10.0	1100	.067
S3BA-036K	C3BA-036C/U-B	34,600	10.0	1250	.073
S3BA-042K	C3BA-042C/U-C	40,000	10.0	1400	.077
S3BA-048K	C3BA-048C/U-C	45,500	10.0	1600	.082
S3BA-048K	C3BA-048C/U-B	45,000	10.0	1500	.082
S3BA-060K	C3BA-060C/U-C	56,500	10.0	1800	.096

Outdoor Unit	With This Air Handler				
Model Number	Model Number	Cooling Btuh	SEER	Nominal cfm	Required Orifice Size
S3BA-018K	B2B(M,V)-018K-A	17,800	10.0	675	.051
S3BA-024K	B2B(M,V)-024K-A	22,800	10.0	800	.060
S3BA-030K	B2B(M,V)-030K-B	29,600	10.0	1100	.067
S3BA-036K	B2B(M,V)-036K-B	34,600	10.0	1250	.073
S3BA-042K	B2B(M,V)-042K-C	40,000	10.0	1400	.077
S3BA-048K	B2B(M,V)-048K-C	45,500	10.0	1600	.082
S3BA-060K	B2B(M,V)-060K-C	56,500	10.0	1800	.096

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.

Thermostat

Two thermostats are available.

911096 - Single-Stage

911100 - Two-Stage Heat / One-Stage Cool

St. Louis, MO **NORDYNE**



CERTIFICATION APPLIES ONLY
WHEN THE COMPLETE
SYSTEM IS LISTED
WITH ARI

325A-0497 (Replaces 325A-1296)

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. (5/97)