

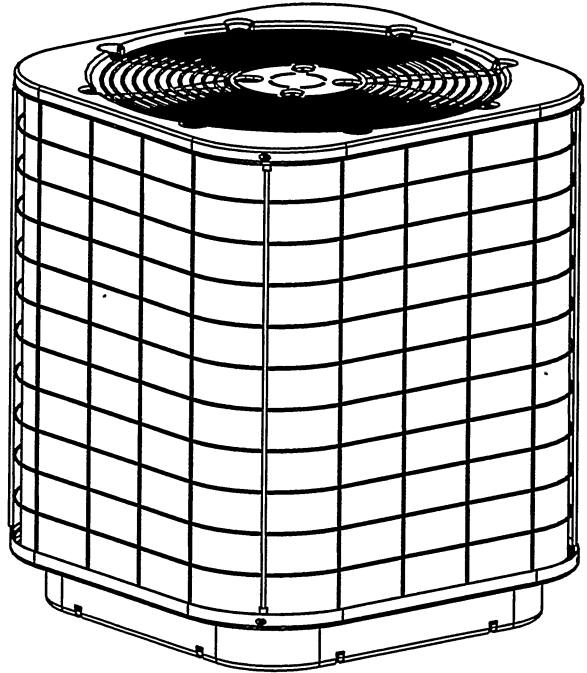
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## TECHNICAL SPECIFICATIONS

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### S3BA-(-)(K,C)A 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

- **Designed using galvanized steel** with a polyester urethane finish. The 950 hour salt spray finish 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 and Mesh Hail Guard** – will never rust and protects the unit coil from being damaged by balls, lawnmowers, hail, 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 Parts Warranty** – The best in the industry and has proven to be a major benefit to the consumer.

# MODEL IDENTIFICATION CODES

**EX: S3BA-036K A**

**S** - Air Conditioner  
**T** - Heat Pump

**3** - Generation 1, 2, 3, etc.

**BA** - Braze 10 SEER  
**BC** - Braze 12 SEER  
**BD** - Braze 13 SEER

**Product Identifier**

**036** - Nominal Capacity (000) BTU

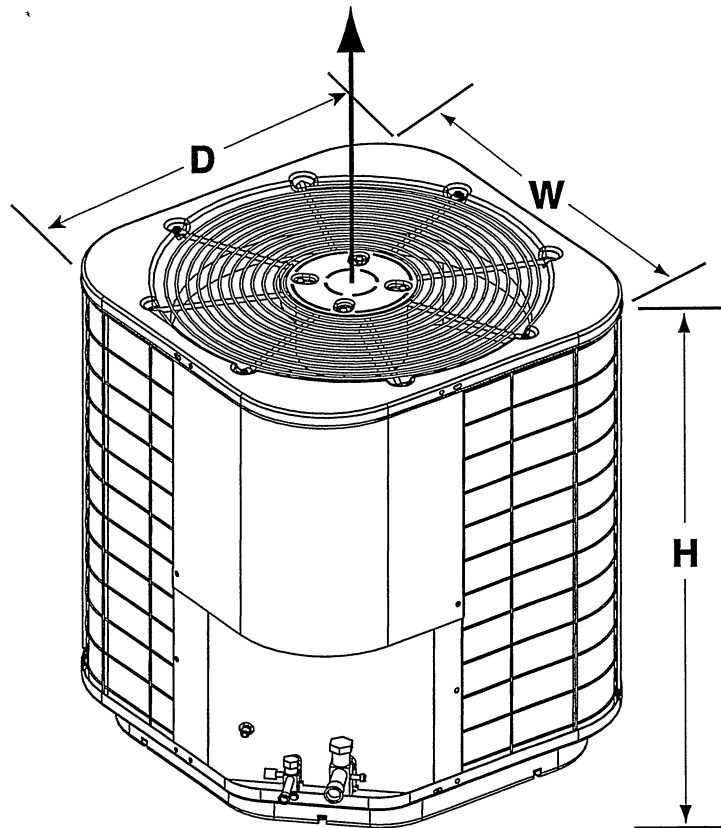
**K** - Electrical Code  
**C** = 208/230-60-3  
**K** = 208/230-60-1

**A** - Style  
A, B, etc.

# DIMENSIONS OUTDOOR SECTION

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

Air Discharge  
Allow Adequate Clearance for Airflow



# PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

## 10 SEER — High Efficiency — Single Phase

Model No. S3BA-		018	024	030	036	042	048	060	
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	
	Total Amps	9.2	10.5	14.8	15.9	18.1	23.2	26.5	
	Max. Overcurrent (2)	15	20	30	30	35	50	50	
	Min. Circuit Ampacity	11.4	12.9	18.2	19.7	22.4	28.6	32.7	
Component Data	Coil	Area	8.3	8.3	8.3	8.3	11.5	13.2	20.2
		Rows-FPI	1-14	1-14	1-18	1-22	1-20	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	1.13	1.13	1.13	1.4	1.5
		HP	1/10	1/10	1/8	1/8	1/8	1/4	1/4
	Fan Blade	Di.-#Blades	18 in. - 3	18 in. - 3	18 in. - 3	18 in. - 3	18 in. - 3	18 in. - 4	24 in. - 3
		SCFM	2100	2100	2500	2500	2500	3000	4000
	Compressor Data*	RLA	8.6	9.8	13.7	14.8	17.0	21.8	25.0
		LRA	49	56	75	96	105	131	150
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8" O.D.)	15-24 ft.	5/8" (3)	5/8" (3)	3/4"	3/4"	3/4"	7/8"	7/8"	
	25-39 ft.	5/8" (3)	3/4"	3/4"	3/4"	7/8" (4)	7/8"	1-1/8" (5)	
	40-75 ft.	3/4"	3/4"	3/4"	7/8" (4)	7/8" (4)	7/8"	1-1/8" (5)	
Refrigerant Charge R-22 Ounces	(Outdoor unit, Indoor Unit 15' Line Set)	63	64	68	69	87	115	122	
Weight Approximate (lbs.)	Net	116	118	124	128	133	162	194	
	Ship	122	124	130	134	140	174	206	

## 10 SEER — High Efficiency — Three Phase

Model No. S3BA-		036	048	060	
Electrical Data	Volts-Cycles-Phase (1)	208/230-60-3	208/230-60-3	208/230-60-3	
	Total Amps	11.3	14.2	16.9	
	Max. Overcurrent (2)	20	30	35	
	Min. Circuit Ampacity	13.9	17.4	20.8	
Component Data	Coil	Area	8.3	13.2	20.2
		Rows-FPI	1-22	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	1.13	1.4	1.5
		HP	1/8	1/4	1/4
	Fan Blade	Di.-#Blades	18 in. - 3	18 in. - 4	24 in. - 3
		SCFM	2500	3000	4000
	Compressor Data*	RLA	10.2	12.8	15.4
		LRA	75	91	124
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8" O.D.)	15-24 ft.	3/4"	7/8"	7/8"	
	25-39 ft.	3/4"	7/8"	1-1/8" (5)	
	40-75 ft.	7/8" (4)	7/8"	1-1/8" (5)	
Refrigerant Charge R-22 Ounces	(Outdoor unit, Indoor Unit 15' Line Set)	69	115	122	
Weight Approximate (lbs.)	Net	128	162	194	
	Ship	134	174	206	

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 or Time Delay Fuse
  - (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 Model Number	With This Coil				Required Orifice Size
	Coil	Cooling Btuh	SEER	Nominal CFM	
S3BA-018KA	C3BA-024C/U-A (2)	18,000	10	675	.051 (1)
S3BA-024KA	C3BA-024C/U-B	23,400	10	900	.060
S3BA-024KA	C3BA-024C/U-A (2)	22,800	10	900	.060
S3BA-030KA	C3BA-030C/U-B	28,600	10	1125	.063
S3BA-030KA	C3BA-036C/U-A (2)	29,000	10	1125	.063 (1)
S3BA-036(C,K)A	C3BA-036C/U-B (2)	34,600	10	1350	.067
S3BA-036(C,K)A	C3BA-036C/U-A (2)	34,000	10	1150	.067
S3BA-042KA	C3BA-042C/U-B	40,000	10	1500	.075
S3BA-048(C,K)A	C3BA-048C/U-B (2)	46,000	10	1500	.080
S3BA-048(C,K)A	C3BA-048C/U-C	46,000	10	1500	.080
S3BA-060(C,K)A	C3BA-060C/U-C (2)	56,500	10	1800	.093

Outdoor Unit Model Number	With This Air Handler				Required Orifice Size
	Air Handler	Cooling Btuh	SEER	Nominal CFM	
S3BA-018KA	B3B(M,V)-024K-A	18,000	10	675	.051 (1)
S3BA-024KA	B3B(M,V)-024K-A	23,000	10	900	.060
S3BA-030KA	B3B(M,V)-030K-A	28,600	10	1125	.063
S3BA-030KA	B3B(M,V)-030K-B	28,600	10	1125	.063
S3BA-036(C,K)A	B3B(M,V)-036K-B	34,600	10	1350	.067
S3BA-042KA	B3B(M,V)-042K-B	40,000	10	1500	.075
S3BA-048(C,K)A	B3B(M,V)-048K-B	46,000	10	1600	.080
S3BA-060(C,K)A	B3B(M,V)-060K-C	56,500	10	1800	.093

(1) Supplied with indoor section.

(2) Also available as C3BH Horizontal Case Coil.

See current ARI Directory for certified combinations and ratings.

## 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.

**917004** - Single-Stage

**917005** - Two-Stage Heat / One-Stage Cool



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI

We Encourage Professionalism



Through Technician Certification by NATE

325A-1200 (Replaces 325A-0600)

St. Louis, MO

**NORDYNE**



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.