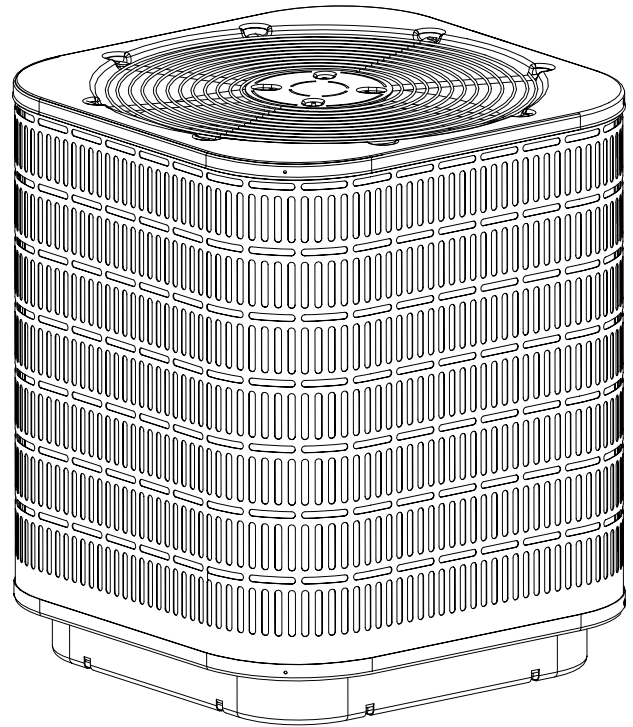

TECHNICAL SPECIFICATIONS



DS4BD Series R-410A High Efficiency Air Conditioner 13 SEER Residential System 1.5 – 5 Ton Capacity

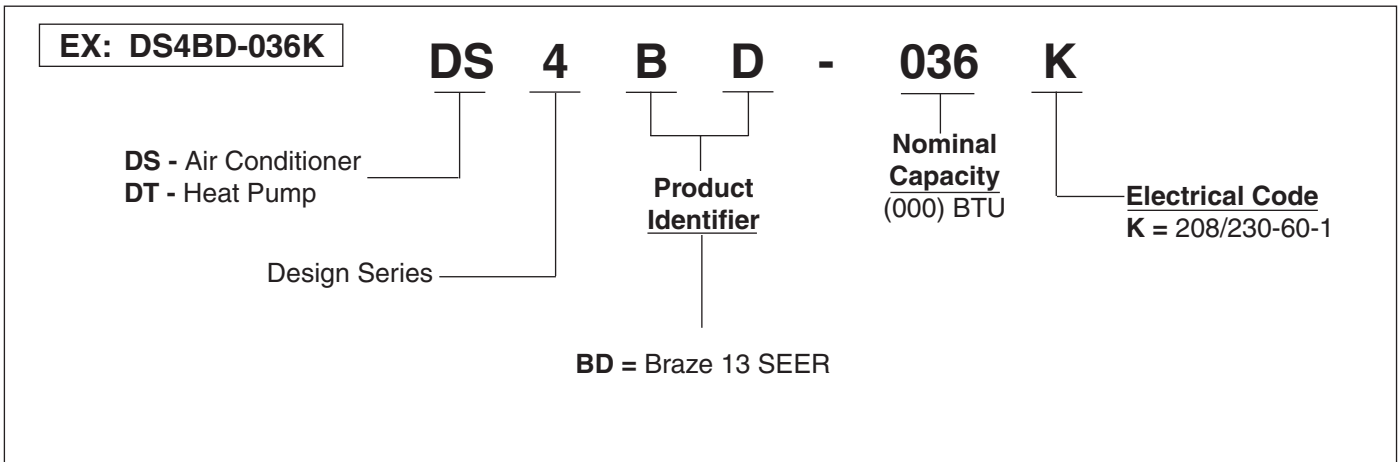
The DS4BD Series now offers the choice of an air conditioner that uses a more efficient and environmentally friendly refrigerant designated R-410A. The DS4BD Series of air conditioners offers exceptional performance. The unit, when combined with our engineered coils or air handlers, offers a full line of quality, split system cooling equipment.



FEATURES and BENEFITS

- **R-410A Refrigerant** – Earth friendly non-ozone depleting refrigerant.
- **Designed using galvanized steel** – with a polyester urethane coat 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 Port Service Valves** – Full port brass ball valves provide low pressure drop and ease of service. The valves are actuated by 1/4 turn full open to full close.
- **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.
- **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.
- **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.
- **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.
- **5 Year Limited Parts Warranty**

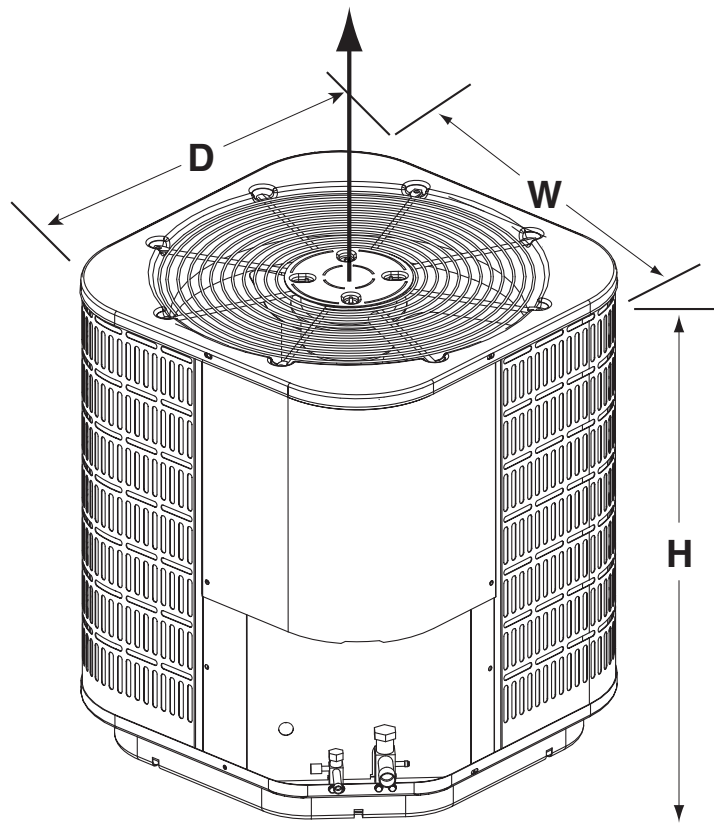
MODEL IDENTIFICATION CODES



DIMENSIONS AIR CONDITIONER OUTDOOR SECTION

DS4BD	018K	024K	030K	036K	042K	048K	060K
H	34 1/2	30 1/2	34 1/2	38 1/2	38 1/2	42 1/2	42 1/2
W	22 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2
D	22 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2

Air Discharge
Allow Adequate Clearance for Airflow



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

12 SEER — High Efficiency — Single Phase

Model Number DS4BD-		018K	024K	030K	036K	042K	048K	060K	
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	9.3	14.44	15.08	17.64	19.32	23.16	27.64	
	Delay Fuse Max. (2)	20	30	30	35	40	45	50	
	Min. Circuit Ampacity	11.54	17.8	18.6	21.8	23.8	28.6	34.2	
Condenser Data	Coil	Area	13.2	17.5	20.3	22.8	22.8	25.4	25.4
		Rows-FPI	1-22	1-22	1-22	1-22	1-22	1-22	2-16
		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	0.34	1	1	1	1.4	1.4	1.4
		Watts-HP	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	Fan Blade	Dia-# Blades	18"- 3	24"- 2	24"- 2	24"- 2	24"- 2	24"- 2	24"- 2
		SCFM	2600	3000	3200	3300	3600	3800	3800
	Compressor Data	RLA	10	15	15.7	18.6	20	24.3	29.3
		LRA	48	58.3	73	77	112	117	134
Refrigerant suction line O.D.(all length of liquid line are 3/8" O.D.)	0-24 ft.	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	
	25-39 ft.	3/4"	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)	
	40-75 ft.	3/4"	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)	
Refrigerant charge (R-410A) in ounces for outdoor unit, indoor unit and 15' lineset.		83	96	117	125	144	149	248	
Weight Approximate (lbs.)	Net	157	166	171	176	176	181	223	
	Ship	165	175	180	185	185	190	235	

- (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.

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 Model Number DS4BD-	Indoor Unit	BTUH	SEER	EER	SCFM	Required Orifice (1)
018K	C5B(A,H)-024(U,C)-A	18000	13	11.6	550	0.049
024K	C5B(A,H)-024(U,C)-(A,B)	24000	13	12.3	800	0.055
030K	C5B(A,H)-030(U,C)-(A,B)	30000	13	12.3	950	0.062
036K	C5B(A,H)-036(U,C)-B	34400	13	12.3	1100	0.069
042K	C5B(A,H)-042(U,C)-B	41600	13	12.1	1300	0.073
048K	C5B(A,H)-048(U,C)-(B,C)	48000	13	12.1	1400	0.082
060K	C5B(A,H)-060(U,C)-C	60000	13	11.5	1700	0.087

Outdoor Unit Model Number DS4BD-	Indoor Unit	BTUH	SEER	EER	SCFM	Required Orifice (1)
018K	GB5B(M,V)-024(A,K)-A	18000	13	11.6	550	0.049
024K	GB5B(M,V)-024(A,K)-A	24000	13	12.3	800	0.055
024K	GB5B(M,V)-024(A,K)-B	24000	13	12.3	800	0.055
030K	GB5B(M,V)-030K-A	30000	13	12.3	950	0.062
030K	GB5B(M,V)-030K-B	30000	13	12.3	950	0.062
036K	GB5B(M,V)-036(A,K)-B	34400	13	12.3	1100	0.069
042K	GB5B(M,V)-042K-B	41000	13	12.1	1300	0.073
048K	GB5B(M,V)-048(A,K)-C	48000	13	12.1	1400	0.082
060K	GB5B(M,V)-060K-C	60000	13	11.5	1700	0.087

¹ Orifice supplied with outdoor unit.

See current ARI Directory for certified combinations and ratings. All ratings are with time delay relay.

14 SEER — High Efficiency — Single Phase

Outdoor Unit Model Number DS4BD-	Indoor Unit	BTUH	SEER	EER	SCFM	Required Orifice (1)
018K	C5B(A,H)-024(C,U)-B+VSB-B	18400	14	12.8	550	0.049
024K	C5B(A,H)-024(C,U)-B+VSB-B	24400	14	13.8	800	0.055
030K	C5B(A,H)-030(C,U)-B+VSB-B	30400	14	13.6	950	0.062
036K	C5B(A,H)-036(C,U)-B+VSB-B	35000	14	13.4	1100	0.069
042K	C5B(A,H)-048(C,U)-C+VSB-C	42500	14	13.4	1300	0.073
048K	C5B(A,H)-048(C,U)-C+VSB-C	48500	14	13.1	1400	0.082
060K	C5B(A,H)-060(C,U)-C+VSB-C	60500	14	12.1	1700	0.087

Outdoor Unit Model Number DS4BD-	Indoor Unit	BTUH	SEER	EER	SCFM	Required Orifice (1)
018K	GB5VM-024K-B	18400	14	12.8	550	0.049
024K	GB5VM-024K-B	24400	14	13.8	800	0.055
030K	GB5VM-030K-B	30400	14	13.6	950	0.062
036K	GB5VM-036K-B	35000	14	13.4	1100	0.069
042K	GB5VM-048K-C	42500	14	13.4	1300	0.073
048K	GB5VM-048K-C	48500	14	13.1	1400	0.082
060K	GB5VM-060K-C	60500	14	12.1	1700	0.087

¹ Orifice supplied with outdoor unit.

See current ARI Directory for certified combinations and ratings. All ratings are with time delay relay.



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI