



Corsaire[®]
SERIES

10 SEER CONDENSING UNITS



Full Metal Jacket Option



Corner Post/Mesh Option

Features

- Choose between painted louvered steel cabinet or mesh wrap.
- Easily accessible control box.
- Condenser coils constructed with copper tubing and enhanced aluminum fins.
- Grille/Motor Mount for quiet fan operation.

Accessories

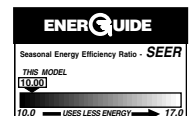
- Low Pressure Control (RXAC-A03)
- High Pressure Control (RXAB-A03)
- Low Ambient Control (RXAD-A04)
- Compressor Time Delay Control
- Start Components
- Crankcase Heater
- Sound Enclosure
- Filter Drier

Applications

Outdoor condensing unit designed for ground level or rooftop installations. These units offer comfort and dependability for single, multi-family and light commercial applications.

10AJB SERIES

Manufactured by



"CERTIFIED UNDER THE
A.R.I. CERTIFICATION
PROGRAM—A.R.I.
STANDARD 210"

Model Number Identification

10	A	J	B	18	A	01
10 SEER	AIR CONDITIONER	VOLTAGE	DESIGN SERIES	COOLING CAPACITY	CABINET	CORSAIRE
	J = 208-230 SINGLE PHASE		B = SECOND DESIGN	18 = 18,000 BTU/HR [5.28 kW] 24 = 24,000 BTU/HR [7.03 kW] 30 = 30,000 BTU/HR [8.79 kW] 36 = 36,000 BTU/HR [10.55 kW] 42 = 42,000 BTU/HR [12.31 kW] 48 = 48,000 BTU/HR [14.07 kW] 60 = 60,000 BTU/HR [17.58 kW]	A = FULL METAL JACKET B = CORNER POST / MESH	

Performance Data @ ARI Standard Conditions—Single Phase

Outdoor Unit 10AJB	Indoor Coil and/or Air Handler	Total Capacity BTU/H [kW]	Net Sensible BTU/H [kW]	Net Latent BTU/H [kW]	EER	SEER	ARI Sound Rating	Indoor CFM [L/s]
18	RCBA-2457 (Requires piston change to 51)	17,500 [5.2]	12,300 [3.7]	5,200 [1.5]	9.85	10.00	7.6	600 [283]
	TCBA-2457 ① (Requires piston change to 51)	17,500 [5.2]	12,300 [3.7]	5,200 [1.5]	9.85	10.00	7.6	600 [283]
	14AH*****C01+RCBA-2457 (Requires piston change to 51)	17,700 [5.2]	12,500 [3.7]	5,200 [1.5]	10.00	10.00	7.6	600 [283]
24	RCBA-2457	22,400 [6.5]	16,200 [4.7]	6,200 [1.8]	9.40	10.00	7.6	800 [378]
	TCBA-2457 ①	22,400 [6.5]	16,200 [4.7]	6,200 [1.8]	9.40	10.00	7.6	800 [378]
	14AH*****C01+RCBA-2457	22,600 [6.5]	16,400 [4.7]	6,200 [1.8]	9.75	10.00	7.6	800 [378]
30	RCBA-3765	27,800 [8.2]	20,600 [5.9]	7,200 [2.3]	9.40	10.00	7.6	1,000 [472]
	TCBA-3765 ①	27,800 [8.2]	20,600 [5.9]	7,200 [2.3]	9.40	10.00	7.6	1,000 [472]
	17AH*****C01+RCBA-3765	28,000 [8.2]	20,800 [5.9]	7,200 [2.3]	9.65	10.00	7.6	1,000 [472]
36	RCBA-3765 (Requires piston change to 73)	34,000 [10.0]	24,500 [7.2]	9,500 [2.8]	9.45	10.00	7.6	1,200 [566]
	TCBA-3765 ① (Requires piston change to 73)	34,000 [10.0]	24,500 [7.2]	9,500 [2.8]	9.45	10.00	7.6	1,200 [566]
	17AH*****C01+RCBA-3765 (Requires piston change to 73)	34,000 [10.0]	24,500 [7.2]	9,500 [2.8]	9.40	10.00	7.6	1,200 [566]
42	RCBA-4882 (Requires piston change to 78)	41,500 [12.2]	30,300 [8.9]	11,200 [3.3]	9.15	10.00	7.9	1,400 [661]
	TCBA-4882 ① (Requires piston change to 78)	41,500 [12.2]	30,300 [8.9]	11,200 [3.3]	9.15	10.00	7.9	1,400 [661]
	21AH*****C01+RCBA-4882 (Requires piston change to 78)	41,500 [12.2]	30,300 [8.9]	11,200 [3.3]	9.10	10.00	7.9	1,400 [661]
48	RCBA-4882	45,000 [13.2]	32,700 [9.2]	12,300 [4.0]	9.65	10.00	8.0	1,600 [755]
	TCBA-4882 ①	45,000 [13.2]	32,700 [9.2]	12,300 [4.0]	9.65	10.00	8.0	1,600 [755]
	21AH*****C01+RCBA-4882	45,000 [13.2]	32,800 [9.2]	12,200 [4.0]	9.90	10.00	8.0	1,600 [755]
60	RCBA-6089	56,000 [16.4]	40,700 [11.4]	15,300 [5.0]	9.05	10.00	8.2	2,000 [944]
	TCBA-6089 ①	56,000 [16.4]	40,700 [11.4]	15,300 [5.0]	9.05	10.00	8.2	2,000 [944]
	24AH*****C01+RCBA-6089	56,500 [16.6]	41,100 [11.5]	15,400 [5.0]	9.20	10.00	8.2	2,000 [944]

① Highest sales volume tested combination required by D.O.E test procedures.

[] Designates Metric Conversions

Piston Sizes (Part Number 61-23414-**)

Model Size	Indoor Piston Size	Outdoor Piston Size
18	51	N/A
24	57	N/A
30	65	N/A
36	73	N/A
42	78	N/A
48	82	N/A
60	89	N/A

Electrical and Physical Data

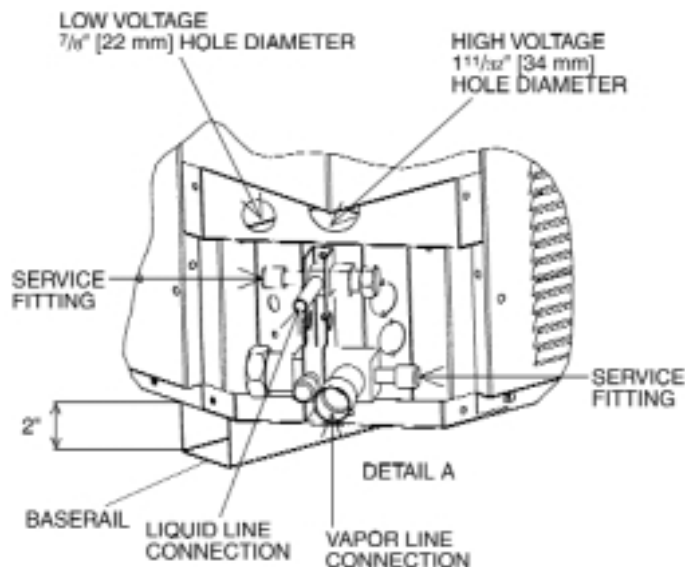
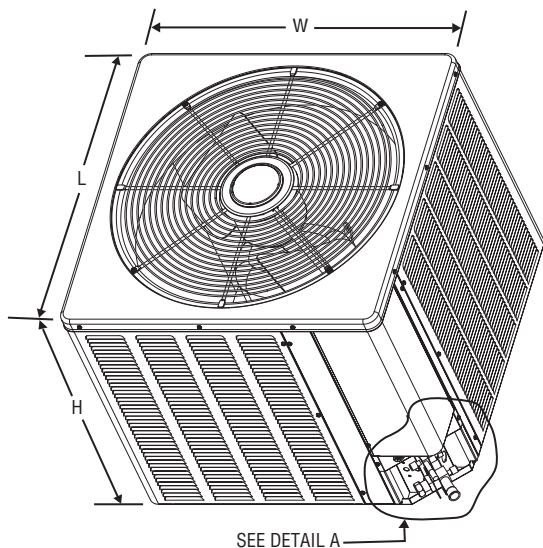
Model Number 10AJB	ELECTRICAL							PHYSICAL					
	Phase Frequency [HZ] Voltage [Volts]	Compressor		Fan Motor Full Load Amperes (FLA)	Minimum Circuit Ampacity Amperes	Fuse or HACR Circuit Breaker		Outdoor Coil			R22 Oz. [g]	Weight	
		Rated Load Amperes (RLA)	Locked Rotor Amperes (LRA)			Minimum Amperes	Maximum Amperes	Area Sq. Ft. [m ²]	No. Rows	CFM [L/s]		Net Lbs. [kg]	Shipping Lbs. [kg]
18	1-60-208/230	9.0	48	0.9	13	15	20	5.3 [0.53]	1	1,900 [708]	52.0 [1474]	130 [60.3]	138 [64.0]
24	1-60-208/230	11.5	60	0.9	16	20	25	8.5 [0.79]	1	1,650 [911]	65.0 [1729]	135 [63.1]	143 [66.7]
30	1-60-208/230	14.1	75	0.9	19	25	30	8.5 [0.79]	1	1,950 [991]	68.0 [1984]	135 [70.3]	143 [73.9]
36	1-60-208/230	16.7	96	1.3	23	30	35	11.1 [1.05]	1	2,200 [1057]	80.0 [2268]	140 [70.3]	148 [73.9]
42	1-60-208/230	18.3	102	1.3	25	30	40	11.1 [1.05]	1	2,200 [1109]	90.0 [2552]	145 [76.7]	153 [81.2]
48	1-60-208/230	26.6	150	1.5	35	45	60	13.8 [1.30]	1	2,900 [1935]	96.0 [2552]	167 [99.8]	177 [104.3]
60	1-60-208/230	28.8	175	1.5	38	45	60	16.5 [1.55]	1	3,600 [1958]	114.4 [3742]	180 [113.4]	192 [117.9]

[] Designates Metric Conversions

Unit Dimensions

Model No. 10AJB	Unit Dimensions		
	Width "W" Inches [mm]	Length "L" Inches [mm]	Height "H" Inches [mm]
18, 24, 30, 36, 42	23 ⁵ / ₈ [600.07]	23 ⁵ / ₈ [600.07]	24 ¹ / ₄ [615.95]
48	27 ⁵ / ₈ [701.67]	27 ⁵ / ₈ [701.67]	25 ¹⁵ / ₁₆ [658.81]
60	31 ⁵ / ₈ [803.27]	31 ⁵ / ₈ [803.27]	27 ¹⁵ / ₁₆ [709.61]

[] Designates Metric Conversions



BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

GENERAL TERMS OF LIMITED WARRANTY

ICECOSM will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

Condenser Coil leaks caused by
 factory defects.....Five (5) Years
 CompressorFive (5) Years
 Any Other PartFive (5) Years

For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or visit www.ICECOhvac.com.

Condensing Unit Refrigerant Line Size Information

System Capacity Model	Line Size (Inch O.D.) [mm]	Liquid Line Size Outdoor Unit Above Indoor Coil					Liquid Line Size Outdoor Unit Below Indoor Coil						
		Total Length—Feet [m]					Total Length—Feet [m]						
		25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]	25 [7.62]	50 [15.24]	75 [22.86]	100 [30.48]	125 [38.10]	150 [45.72]
		Vertical Separation—Feet [m]					Vertical Separation—Feet [m]						
18	1/4* [6.35]	25 [7.62]	50 [15.24]	70 [21.34]			25 [7.62]	23 [7.01]	8 [2.44]				
	5/16 [7.94]			36 [10.97]	42 [12.80]	48 [14.63]	54 [16.46]			36 [10.97]	30 [9.14]	24 [7.32]	18 [5.49]
24	1/4* [6.35]	25 [7.62]	50 [15.24]					25 [7.62]	23 [7.01]				
	5/16 [7.94]		24 [7.32]	34 [10.36]	44 [13.41]	54 [16.46]	64 [19.51]		48 [14.63]	38 [11.58]	28 [8.53]	18 [5.49]	8 [2.44]
30	1/4* [6.35]	25 [7.62]	50 [15.24]					25 [7.62]	23 [7.01]				
	5/16 [7.94]		19 [5.79]	33 [10.06]	47 [14.33]	61 [18.59]			50 [15.24]	39 [11.89]	25 [7.62]	11 [3.35]	
36	3/8 [9.53]					11 [3.35]	15 [4.57]						57 [17.37]
	5/16* [7.94]	25 [7.62]	50 [15.24]	70 [21.34]				25 [7.62]	23 [7.01]	9 [2.74]			
42	3/8 [9.53]			34 [10.36]	40 [12.19]	46 [14.02]	52 [15.85]			38 [11.58]	32 [9.75]	26 [7.92]	20 [6.10]
	5/16* [7.94]	25 [7.62]	50 [15.24]	75 [22.86]				25 [7.62]	23 [7.01]	9 [2.74]			
48	3/8 [9.53]			32 [9.75]	39 [11.89]	46 [14.02]	53 [16.15]			40 [12.19]	33 [10.06]	26 [7.92]	19 [5.79]
	1/2 [12.7]	25 [7.62]	44 [13.41]	53 [16.15]	61 [18.59]	70 [21.34]		25 [7.62]	28 [8.53]	19 [5.79]	11 [3.35]	3 [0.91]	
60	3/8* [9.53]	25 [7.62]	48 [14.63]	61 [18.59]	72 [21.95]			25 [7.62]	23 [7.01]	11 [3.35]	3 [0.91]		
	1/2 [12.7]				35 [10.67]	38 [11.58]	41 [12.50]				37 [11.28]	34 [10.36]	31 [9.45]

*Standard line size

NOTES:

- ① This chart is applicable for condensing units.
- ② If the separation height exceeds the table values, **reduce** the indoor coil flow-check piston two sizes plus one size for each additional 10 feet [3.05 m].
Example 1: A 5 ton [17.58 kW] *condensing unit* with a total line length of 125 feet [38.10 m] with a vertical separation of 101 feet [30.78 m] utilizing a 1/2" [12.7 mm] liquid line: Table = 38 feet [11.58 m] maximum vertical separation for 125 feet [38.10 m] run. Separation exceeds table by (101-38) = 63 feet [19.20 m]. Therefore, reduce the indoor coil flow-check piston 2 + 6 = 8 sizes (For example, a #89 piston would reduce to a #81 piston)
- ③ Do not exceed 120 feet [36.58 m] maximum vertical separation.
- ④ No changes are required for expansion valve coils.
- ⑤ Do not exceed table values for capillary tube coils.
- ⑥ Always use the smallest liquid line possible to minimize system charge.
- ⑦ Chart may be used to size horizontal runs.

NOTES:

- ① This chart is applicable for condensing units.
Example 1: A 2.5 ton [8.79 kW] *condensing unit* with a total line length of 75 feet [22.86 m] with a vertical separation of 30 feet [9.14 m] requires a liquid line size of 5/16" [7.94 mm].
- ② This chart may also be used to size horizontal runs.
Example 2: A 5 ton [17.58 kW] *condensing unit* may have a total horizontal run of 100 feet [30.48 m] if using the 3/8" [9.53 mm] liquid line. The total horizontal run if using 1/2" [12.7 mm] liquid line size will be 150 feet [45.72 m]
- ③ Do not exceed vertical separation as indicated on the chart.
- ④ Always use the smallest liquid line possible to minimize system charge.
- ⑤ No changes required for flow-check pistons or expansion valve coils.

Suction Line Length/Size versus Capacity Multiplier								
10AJB	18	24	30	36	42	48	60	
Unit Suction Line Connection Size	5/8" [15.88 mm] I.D. Sweat	3/4" [19.05 mm] I.D. Sweat		3/4" [19.05 mm] I.D. Sweat		7/8" [22.23 mm] I.D. Sweat*		
Suction Line Run—Feet [m]	5/8" [15.88 mm] O.D. Standard 3/4" [19.05 mm] O.D. Optional	5/8" [15.88 mm] O.D. Optional 3/4" [19.05 mm] O.D. Standard 7/8" [22.23 mm] O.D. Optional		3/4" [19.05 mm] O.D. Standard 7/8" [22.23 mm] O.D. Optional		7/8" [22.23 mm] O.D. Optional 1 1/8" [28.58 mm] O.D. Standard 1 3/8" [34.93 mm] O.D. Optional		
25' [7.62]	Optional Standard Optional	— 1.00 1.01	.98 1.00 1.01	— 1.00 1.01	— 1.00 1.01	— 1.00 1.01	.99 1.00 1.01	.99 1.00 1.01
50' [15.24]	Optional Standard Optional	— .98 1.00	.96 .99 1.00	— .99 1.00	— .98 1.00	— .97 1.00	.97 1.00 1.01	.97 .99 1.01
100' [30.48]	Optional Standard Optional	— .96 .99	.93 .98 1.00	— .97 .99	— .96 .99	— .94 .98	.96 .99 1.00	.95 .99 1.00
150' [45.72]	Optional Standard Optional	— .97 .98	— .98 1.00	— .97 .98	— .93 .97	— .90 .96	.93 .99 1.00	.93 .98 .99

NOTES: Capacity Multiplier x Rated Capacity = Actual Capacity. Additional compressor oil is not required for runs up to 150 feet [45.72 m]. Oil traps in vertical runs are not required for any height up to 125 feet [38.10 m]. See Liquid Line chart for Vertical Separation Requirements and Limitations.

*Adapter to 1 1/8" [28.58 mm] factory supplied.

[] Designates Metric Conversions

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

Manufactured By ICECO



5600 Old Greenwood Road, Fort Smith, Arkansas 72908



"In keeping with its policy of continuous progress and product improvement, ICECO reserves the right to make changes without notice."