

Goodman

Air Conditioning & Heating

AR SERIES

50 Hz

**MULTI-POSITION
ELECTRIC AIR HANDLER**

1½ TO 5 TON

CE



The AR Series electric air handler is designed for compact, versatile upflow, right or left horizontal and downflow applications. It may be located in a closet, utility room, attic, crawl space or basement.

Standard Features

- Equipped with a check flowrater for heat pump and cooling operation
- Direct-drive, multi-speed motor to permit air volume variation for heating and cooling application needs
- Built-in coil with horizontal and vertical thermoplastic drain pans with secondary drains
- Copper tube, aluminum fin coil
- Built-in filter provision
- Power supply entry at top
- Low-voltage entry on left side and top
- Transformer and blower time delay on all units

Cabinet Features

- Fully insulated steel cabinet
- G90 galvanized stucco finish with painted front panels

Accessories

- Permanent washable plastic airfilters (FIL18-32, FIL36-42, FIL48-61)

PRODUCT SPECIFICATIONS

SPECIFICATIONS

	A24-00-2R	A36-00-2R	A48-00-2R	A60-00-2R
Electrical Data				
MCA ¹	1.0/1.0	1.8/1.8	1.8/1.8	4.3/4.3
MOP ²	15/15	15/15	15/15	15/15
Min./Max. VAC	198/264	198/264	198/264	198/264
Blower Motor				
FLA	0.85	1.4	1.4	3.4
HP	1/8	1/4	1/4	3/4
Physical Data				
Blower				
Diameter	9½" [24.1]	9½" [24.1]	9½" [24.1]	10⅝" [26.9]
Width	6" [15.2]	8" [20.5]	8" [20.5]	10⅝" [26.9]
Coil Drain Connect FPT	¾" [1.9]	¾" [1.9]	¾" [1.9]	¾" [1.9]
Refrigerant Connection				
Liquid	⅜" [.95]	⅝" [.95]	⅜" [.95]	⅝" [.95]
Suction	¾" [1.9]	¾" [1.9]	⅞" [2.2]	⅞" [2.2]
Ship Weight	106 lbs. [48.0]	141 lbs. [63.9]	173 lbs. [78.4]	192 lbs. [87.0]

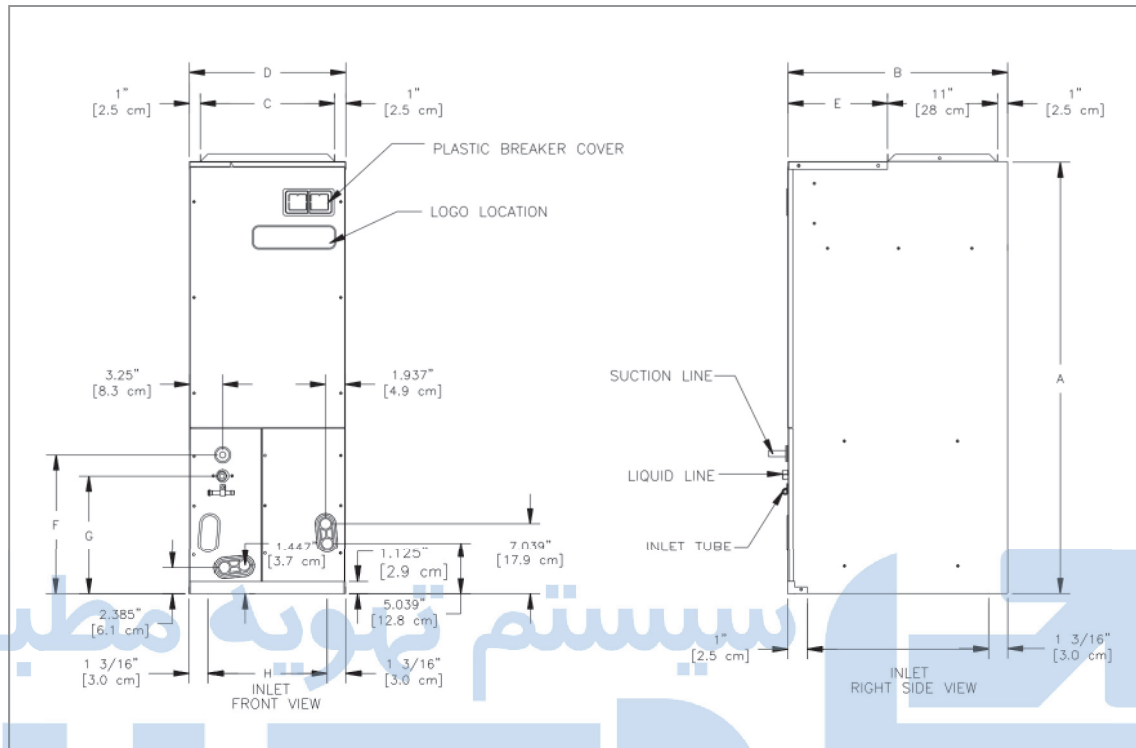
1. Minimum Circuit Ampacity @220/240V
 2. Maximum Overcurrent Protection @220/240V
- [] Designates metric equivalents

BLOWER PERFORMANCE

Model	Speed	Airflow Delivered against External Static Pressure				
		.1 [2.5]	.2 [5.0]	.3 [7.5]	.4 [10.0]	.5 [12.5]
A24-00-2R	HIGH	960 [453]	930 [439]	890 [420]	840 [397]	780 [368]
	LOW	810 [382]	780 [368]	760 [358]	720 [340]	670 [316]
A36-00-2R	HIGH	1,450 [685]	1,415 [668]	1,360 [642]	1,280 [604]	1,200 [567]
	LOW	1,260 [595]	1,240 [585]	1,200 [566]	1,145 [541]	1,060 [500]
A48-00-2R	HIGH	1,670 [789]	1,610 [760]	1,500 [708]	1,440 [680]	1,370 [647]
	LOW	1,310 [619]	1,300 [614]	1,290 [609]	1,280 [604]	1,260 [595]
A60-00-2R	HIGH	2,170 [1,025]	2,080 [982]	2,000 [944]	1,920 [907]	1,850 [874]
	LOW	1,900 [897]	1,810 [855]	1,700 [803]	1,590 [751]	1,500 [708]

- [] Designates metric equivalents
Assumes dry coil with Filter in Place
SCFM Correction for Wet Coil - 4%.

DIMENSIONS



Base Model	A	B	C	D	E	F	G	H	J	K
A24-002-2R	41.125 [107.0 cm]	22 [55.9 cm]	13.5 [34.3 cm]	15.5 [39.4 cm]	10 [25.4 cm]	13.375 [34.0 cm]	10.811 [27.5 cm]	13.125 [33.3 cm]	19.812 [50.3 cm]	3.563 [9.05CM]
A36-00-2R	46.75 [118.7 cm]	22 [55.9 cm]	17.5 [44.5 cm]	19.5 [49.5 cm]	10 [25.4 cm]	13.375 [34.0 cm]	10.811 [27.5 cm]	17.125 [43.5 cm]	19.812 [50.3 cm]	3.563 [9.05CM]
A48-00-2R A60-00-2R	53.25 [135.3 cm]	24 [61.0 cm]	20 [50.8 cm]	22 [55.9 cm]	12 [30.5 cm]	14.5 [36.8 cm]	11.935 [30.3 cm]	19.625 [49.8 cm]	21.812 [55.4 cm]	3.343 [8.49CM]

[] DESIGNATES METRIC EQUIVALENTS

PERFORMANCE RATINGS

Model	Nominal Cooling Capacity (tons)	Seasonal Efficiency AFUE%
A24-00-2R	2	100.0
A36-00-2R	3	100.0
A48-00-2R	4	100.0
A60-00-2R	5	100.0

REFRIGERANT LINE CONNECTIONS

LONG LINE APPLICATIONS

Cond Unit Tons	REFRIGERANT LINE LENGTH (meters)											
	0-7.3		7.4-14.9		15.0-22.6***		22.7-30.5		30.6-38.0		38.1-45.4	
	Line Diameter OD (mm)											
	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq
2	15.9	6.4	19.1	9.5	19.1	9.5	22.2	9.5	22.2	9.5	22.2	9.5
3	19.1	9.5	19.1*	9.5	22.2	9.5	28.6	9.5	28.6	9.5	28.6	9.5
4	22.2	9.5	28.6	9.5	28.6	9.5	28.6	9.5	28.6	9.5	28.6	9.5
5	22.2	9.5	28.6	9.5	28.6	9.5	28.6	9.5	34.9	9.5	34.9	9.5

* 19.1 mm required for full ratings

** 22.2 mm required for full ratings

*** for line lengths greater than 22.6 meters or vertical lifts greater than 15 meters additional engineering considerations **must be taken** - contact your local distributor.

SYSTEM PERFORMANCE vs. SUCTION LINE SIZING

COND SIZE (tons)	SUCTION LINE SIZE O.D. (mm)	CAPACITY MULTIPLIERS LENGTH OF TUBING (SUCTION LINE) - METERS					
		7.5	15	22.5	30	37.5	45
1-1/2	15.9	.98	.96	.94	.92	.90	.88
	19.1	1.00	.98	.96	.94	.92	.90
2	19.1	1.00	.98	.96	.94	.92	.90
	22.2	1.01	1.00	.99	.98	.97	.96
3	19.1	.98	.96	.94	.92	.90	.88
	22.2	.99	.98	.97	.96	.95	.94
	28.6	1.00	.99	.98	.97	.96	.95
4	19.1	.95	.92	.90	.86	.83	.80
	22.2	.98	.96	.94	.92	.90	.88
	28.6	1.00	.98	.96	.94	.92	.90
5	22.2	.98	.96	.94	.91	.89	.87
	28.6	1.00	.98	.95	.93	.91	.89