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SPECIFICATIONS

SINGLE PACKAGED GAS HEATING ELECTRIC COOLING

4YCC3048A3075/96/120A

PRODUCT SPECIFICATIONS

MODEL	4YCC3048A3075A	4YCC3048A3096A	4YCC3048A3120A
RATED Volts/PH/Hz	208-230/3/60	208-230/3/60	208-230/3/60
Performance Cooling BTUH^①	46500	46500	46500
Indoor Airflow (CFM)	1600	1600	1600
Power Input (KW)	4.252	4.252	4.252
EER/SEER (BTU/Watt-Hr.)	11.0 / 13.0	11.0 / 13.0	11.0 / 13.0
Sound Rating No. ^②	80	80	80
Performance Heating^③			
Input BTUH (Natural Gas) ^③	75000	96000	120000
AFUE	80.0	80.0	80.0
Temp. Rise — Min/Max (°F)	20 / 50	30 / 60	40 / 70
Orifice Qty / Drill Size (Natural Gas)	2 / #33	3 / #37	3 / #32
POWER CONN. — V/PH/Hz	208-230/3/60	208-230/3/60	208-230/3/60
Min. Brch. Cir. Ampacity	24.0	24.0	24.0
Fuse Size — Max. (amps)	35	35	35
Fuse Size — Recmd. (amps)	35	35	35
COMPRESSOR	SCROLL	SCROLL	SCROLL
Volts/Ph/Hz	208-230/3/60	208-230/3/60	208-230/3/60
R.L. Amps — L.R. Amps	14.6 / 91	14.6 / 91	14.6 / 91
OUTDOOR COIL — TYPE	SPINE-FIN	SPINE-FIN	SPINE-FIN
Rows/F.P.I.	2 / 24	2 / 24	2 / 24
Face Area (sq.ft.)	18.01	18.01	18.01
Tube Size (in.)	3/8	3/8	3/8
INDOOR COIL — TYPE	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I.	3 / 15	3 / 15	3 / 15
Face Area (sq.ft.)	5	5	5
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
OUTDOOR FAN — TYPE	PROPELLER	PROPELLER	PROPELLER
Dia. (in.)	27.6	27.6	27.6
Drive/No. Speeds	DIRECT / 1	DIRECT / 1	DIRECT / 1
Motor — HP/R.P.M.	1/4 / 825	1/4 / 825	1/4 / 825
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R. Amps	1.4 / 3.5	1.4 / 3.5	1.4 / 3.5
INDOOR FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia x Width (in.)	10 X 10	10 X 10	10 X 10
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2
CFM @ 0.0 in. w.g. ^⑤	SEE FAN PERF TABLE	SEE FAN PERF TABLE	SEE FAN PERF TABLE
Motor — HP/R.P.M.	3/4 / 1075	3/4 / 1075	3/4 / 1075
Volts/Ph/Hz	200-230/1/60	200-230/1/60	200-230/1/60
F.L. Amps/L.R. Amps	4.4 / 8.8	4.4 / 8.8	4.4 / 8.8
COMBUSTION FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 1	DIRECT / 1	DIRECT / 1
Motor — HP/R.P.M.	1/35 / 3480	1/35 / 3480	1/35 / 3480
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
FLA	0.53	0.53	0.53
FILTER / FURNISHED	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft.) ^⑥	5.3	5.3	5.3
REFRIGERANT	R410A	R410A	R410A
Charge (lbs.) ^④	8.2	8.2	8.2
GAS PIPE SIZE (in.)	1/2	1/2	1/2
DIMENSIONS	H X W X L	H X W X L	H X W X L
Crated (in.)	47.86 / 47.4 / 61.75	47.86 / 47.4 / 61.75	47.86 / 47.4 / 61.75
WEIGHT			
Shipping (lbs.) / Net (lbs.)	645 / 517	653 / 525	659 / 531

① Rated in accordance with A.R.I. Standard 210/240. Sound rated in accordance with A.R.I. Standard 270. A.R.I. standard rating conditions are: 80 D.B. 67 W.B. entering air to indoor coil. 95 D.B. entering air to outdoor coil.

② All models are UL Listed. Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.

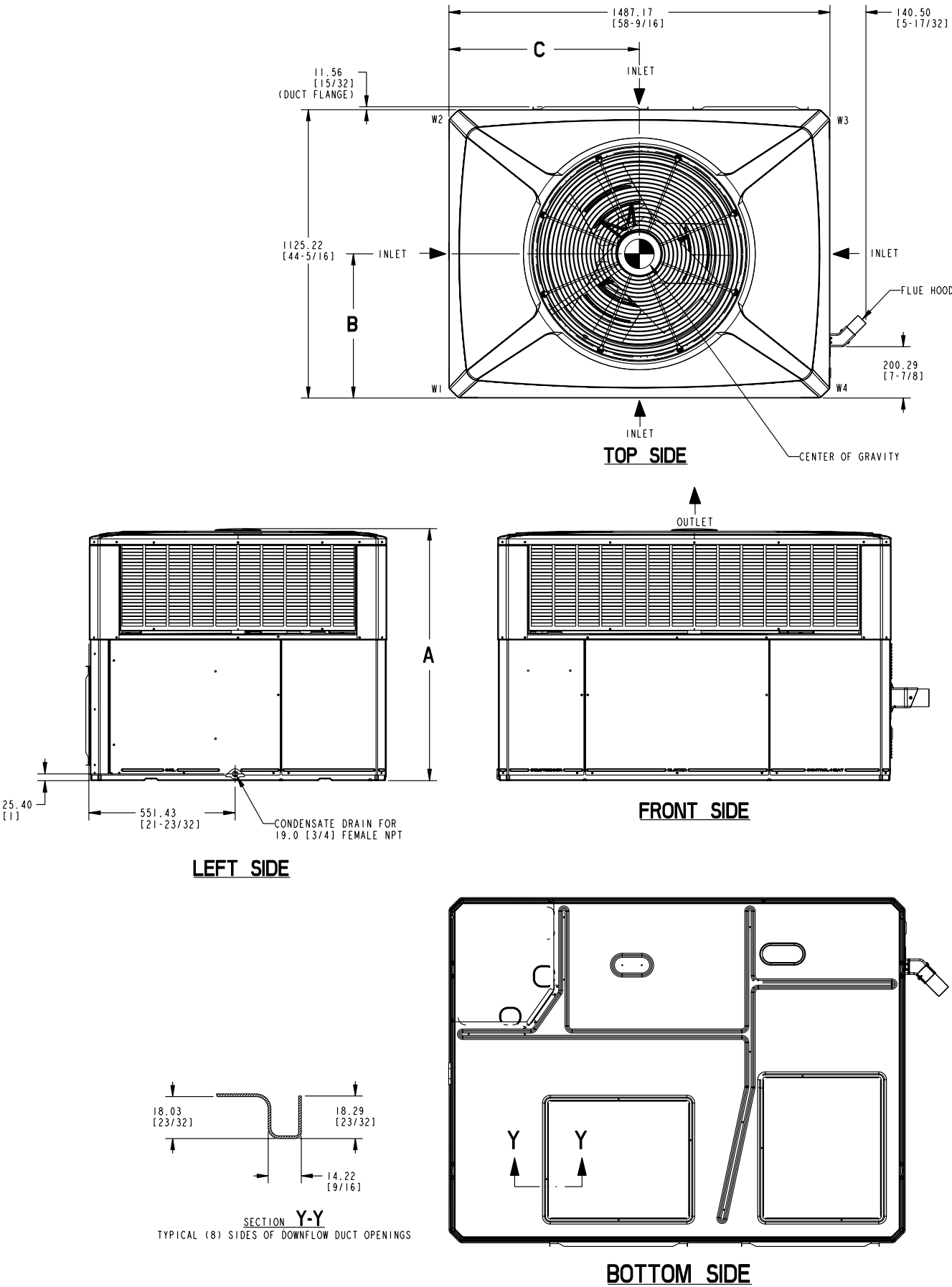
③ Convertible to LPG.

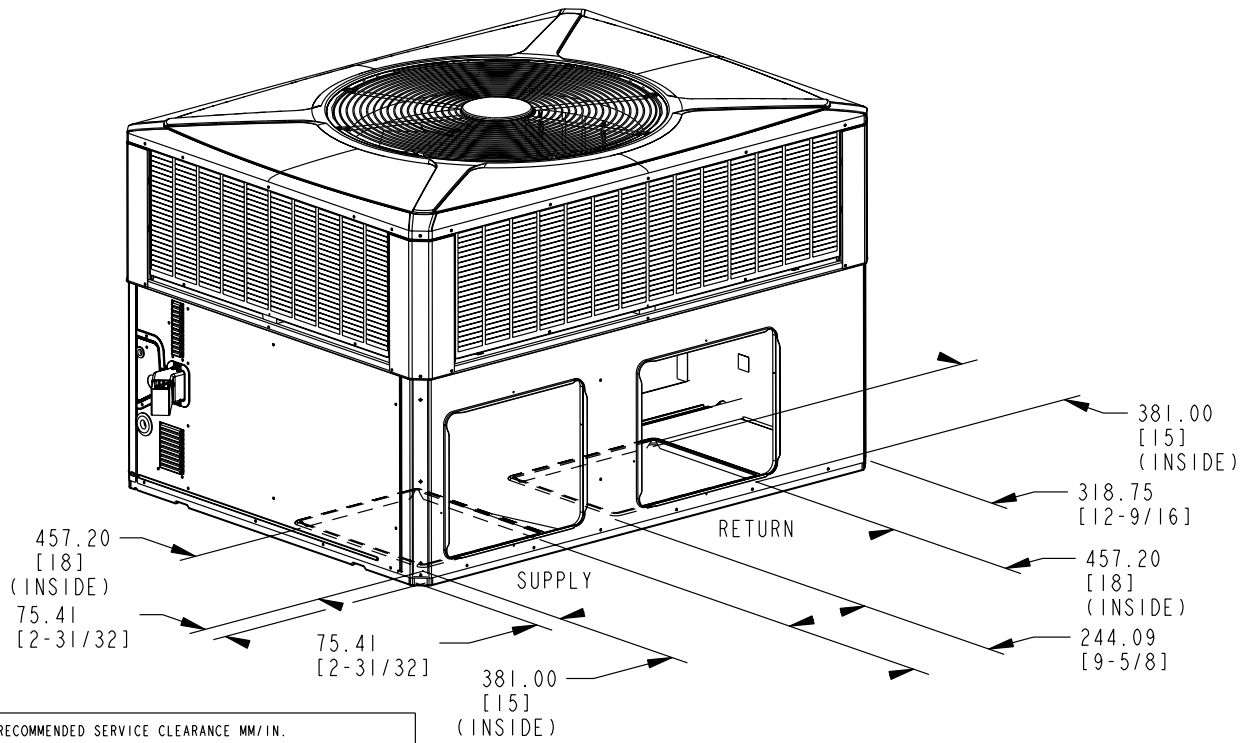
④ This value is approximate. For more precise value, see Unit Nameplate.

⑤ Based on U.S. Government Standard Tests.

⑥ Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.

Unit Clearance and Weight Information



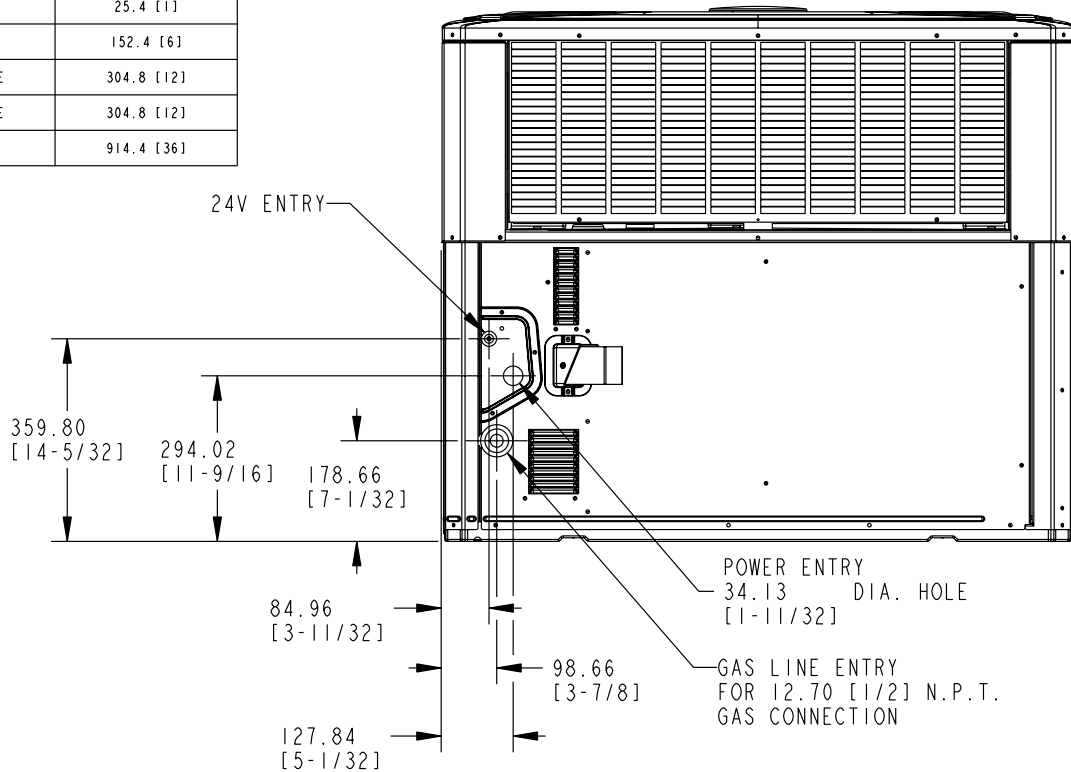


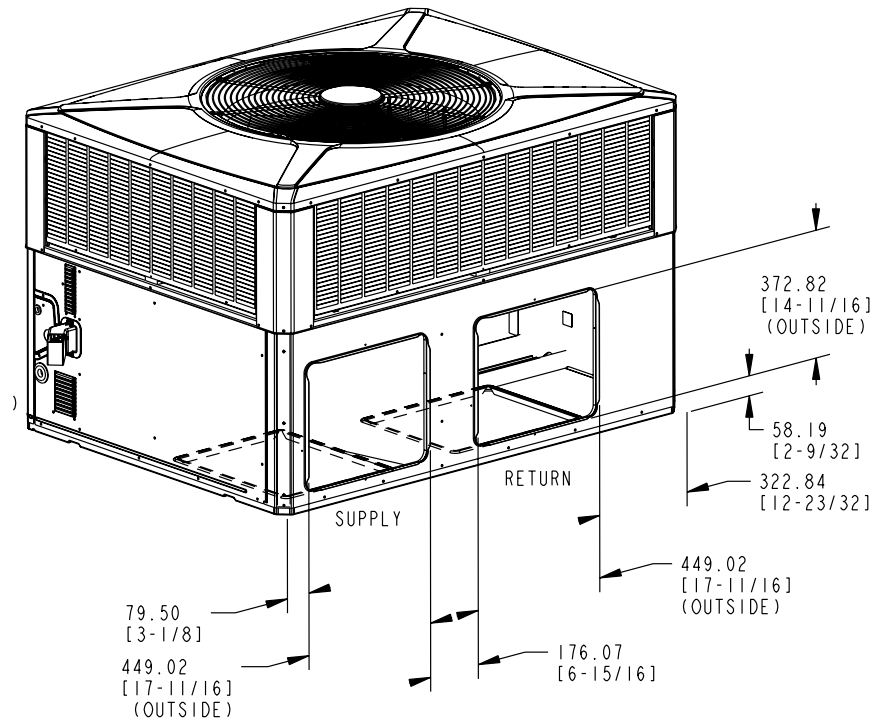
RECOMMENDED SERVICE CLEARANCE MM/IN.		
		WITH O.A. DAMPER/ECON.
BACK SIDE	304.8 [12]	762.0 [30]
LEFT SIDE	914.4 [36]	1066.8 [42]
RIGHT SIDE	914.4 [36]	-
FRONT SIDE	1066.8 [42]	-

BOTTOM DUCT OPENINGS

CLEARANCE TO COMBUSTIBLE MATERIAL MM/IN.	
BOTTOM	0
BACK SIDE	25.4 [1]
LEFT SIDE	152.4 [6]
RIGHT SIDE	304.8 [12]
FRONT SIDE	304.8 [12]
TOP	914.4 [36]

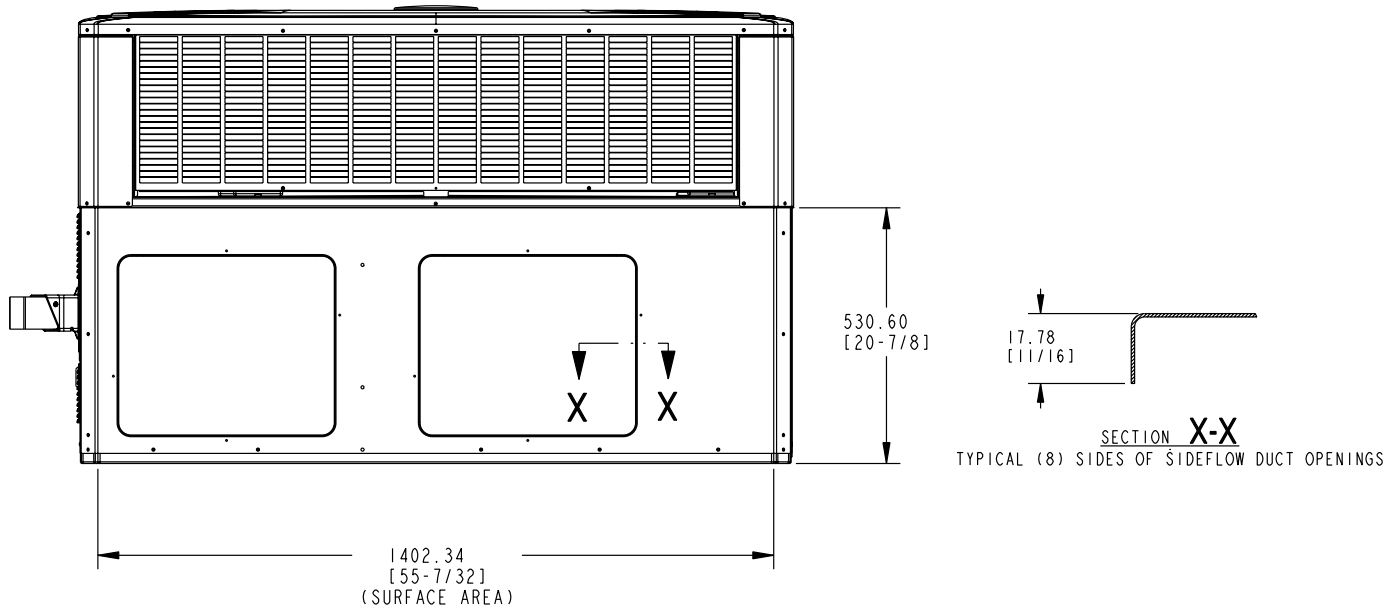
RIGHT SIDE





BACK SIDE

BACK DUCT OPENINGS



MODEL	HEIGHT MM/IN.	APPROX. CORNER WEIGHT - KG/LBS				TOTAL UNIT WEIGHT KG/LBS	CENTER OF GRAVITY MM/IN.	
		W1	W2	W3	W4		B	C
2YCC042 (064/075)	949.33 [37-3/8]	67.6 [149]	44.9 [99]	40.4 [89]	60.8 [134]	213.6 [471]	444.5 [17.5]	698.5 [27.5]
2YCC042 (096)		68.5 [151]	45.8 [101]	41.3 [91]	61.7 [136]	217.3 [479]	444.5 [17.5]	698.5 [27.5]
2YCC048 (075)		75.7 [167]	50.3 [111]	45.4 [100]	68.0 [150]	239.5 [528]	444.5 [17.5]	698.5 [27.5]
2YCC048 (096)		76.7 [169]	51.3 [113]	46.3 [102]	68.9 [152]	242.7 [535]	444.5 [17.5]	698.5 [27.5]
2YCC048 (120)		77.6 [171]	51.7 [114]	46.7 [103]	69.9 [154]	245.4 [541]	444.5 [17.5]	698.5 [27.5]
4YCC048 (075)		73.9 [163]	49.4 [109]	44.5 [98]	66.7 [147]	234.5 [517]	444.5 [17.5]	698.5 [27.5]
4YCC048 (096)		75.3 [166]	50.3 [111]	45.4 [100]	67.6 [149]	238.1 [525]	444.5 [17.5]	698.5 [27.5]
4YCC048 (120)		75.7 [167]	50.8 [112]	45.8 [101]	68.5 [151]	240.9 [531]	444.5 [17.5]	698.5 [27.5]
2YCC060 (096)	1050.93 [41-3/8]	82.6 [182]	46.7 [103]	43.5 [96]	77.1 [170]	249.5 [550]	401.3 [15.8]	711.2 [28.0]
2YCC060 (120)		83.5 [184]	47.2 [104]	44.0 [97]	77.6 [171]	252.2 [556]	401.3 [15.8]	711.2 [28.0]
4YCC060A1/A3 (096)	1000.13 [39-3/8]	81.2 [179]	45.8 [101]	42.6 [94]	75.7 [167]	245.8 [542]	401.3 [15.8]	711.2 [28.0]
4YCC060A1/A3 (120)		82.1 [181]	46.3 [102]	43.1 [95]	76.7 [169]	248.6 [548]	401.3 [15.8]	711.2 [28.0]
4YCC060A4 (096)		82.6 [182]	46.7 [103]	43.5 [96]	77.1 [170]	249.5 [550]	401.3 [15.8]	711.2 [28.0]
4YCC060A4 (120)		83.5 [184]	47.2 [104]	44.0 [97]	77.6 [171]	252.2 [556]	401.3 [15.8]	711.2 [28.0]

Unit Performance Data

Performance Data Cooling

4YCC3048A AT 1600 CFM (CAPACITIES ARE NET IN BTUH/1000-INDOOR FAN HEAT DEDUCTED)

O.D. D.B.	I.D. W.B.	TOTAL CAP.	SENS. CAP. AT		ENTERING D.B. TEMP.		COMPR. KW	CORRECTION FACTORS FOR OTHER AIRFLOWS (MULTIPLY DATA BY FACTOR)			
			72	75	78	80		AIRFLOW		TOTAL CAPACITY	SENSIBLE CAPACITY
85	59	43.8	29.8	35.8	41.7	43.8	3.74	LOW HIGH	1400 1800	0.98 1.02	0.97 1.03
	63	45.6	27.3	32.9	38.3	41.9	3.77				
	67	49.2	23.6	28.4	33.1	36.1	3.83				
	71	53.1	19.6	23.5	27.4	30.0	3.87				
95	59	41.4	28.8	34.6	40.3	41.4	4.13	VALUES AT ARI RATING CONDITIONS			
	63	43.2	26.4	31.7	37.0	40.4	4.16				
	67	46.5	22.8	27.4	31.9	34.9	4.23				
	71	50.2	18.9	22.7	26.5	28.9	4.27				
105	59	39.0	27.7	33.3	38.8	39.0	4.52	TOTAL NET CAPACITY = 46500 BTUH AIRFLOW = 1599 CFM COMPRESSOR POWER = 3322 WATTS I.D. FAN POWER = 592 WATTS O.D. FAN POWER = 313 WATTS S.E.E.R. = 13.00 BTUH/WATT E.E.R = 11.00 BTUH/WATT			
	63	40.7	25.4	30.5	35.6	38.9	4.55				
	67	43.8	21.9	26.3	30.7	33.6	4.63				
	71	47.3	18.2	21.9	25.5	27.8	4.67				
115	59	36.6	26.5	31.9	36.6	36.6	4.91	ALL TEMPERATURES IN DEGREES F.			
	63	38.2	24.3	29.2	34.1	37.2	4.94				
	67	41.2	21.0	25.2	29.4	32.1	5.02				
	71	44.4	17.4	20.9	24.4	26.7	5.07				

Indoor Fan Performance 4YCC3048A3

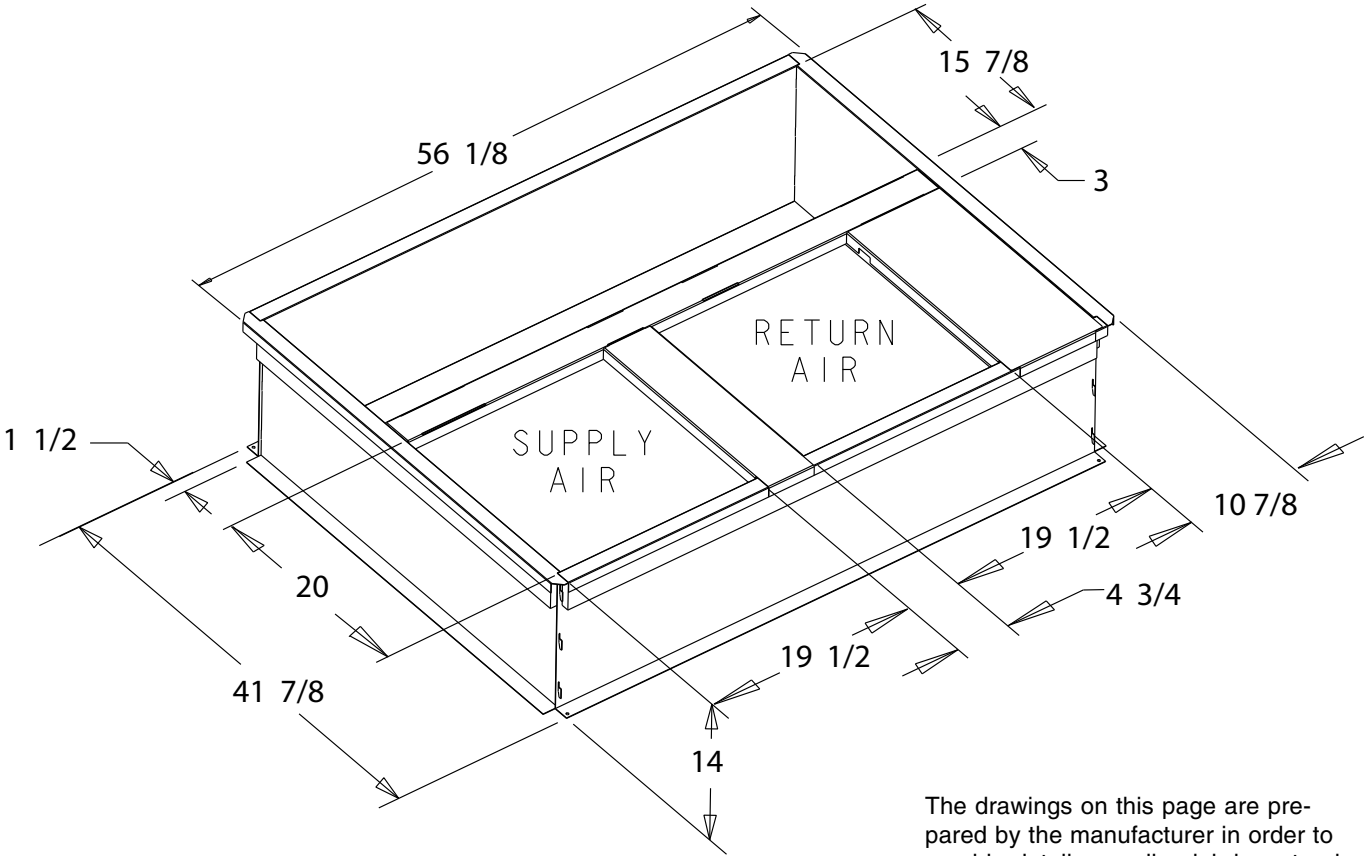
Horizontal Airflow

2/4YC*3048A1 -HOR		EXTERNAL STATIC PRESSURE (IN. WG)										
MOTOR SPEED		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
LOW	WATTS	687	668	649	628	606	581	551	516	-	-	-
	CFM	1863	1810	1760	1708	1648	1577	1493	1391	-	-	-
HIGH	WATTS	-	935	921	886	851	825	803	773	708	-	-
	CFM	-	2159	2110	2017	1919	1833	1753	1652	1482	-	-

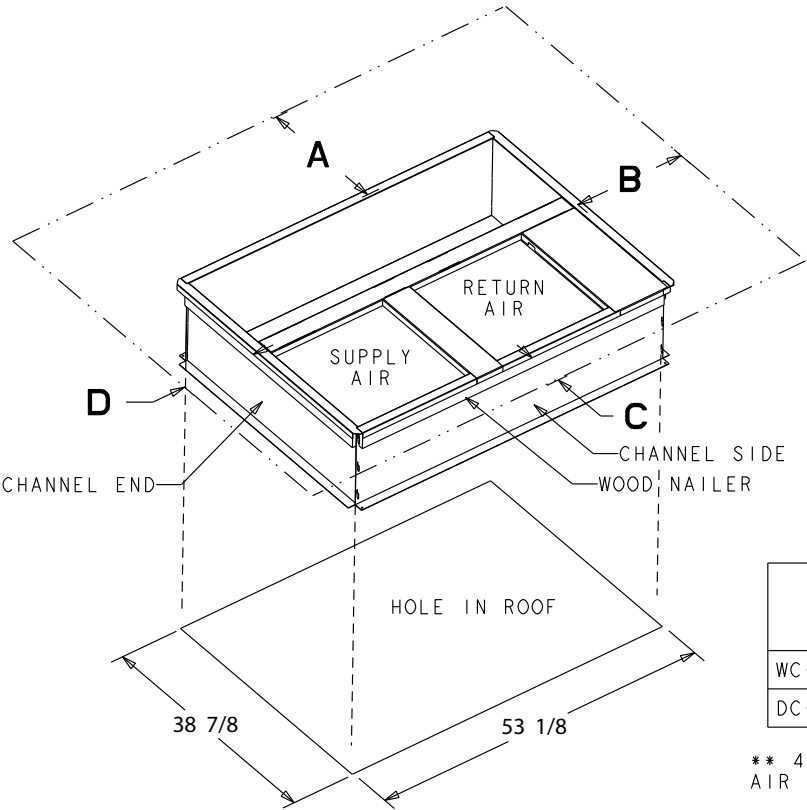
Down Airflow

2/4YC*3048A1 -DOWN		EXTERNAL STATIC PRESSURE (IN. WG)										
MOTOR SPEED		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
LOW	WATTS	671	650	632	614	594	571	543	512	-	-	-
	CFM	1839	1795	1741	1682	1622	1554	1472	1362	-	-	-
HIGH	WATTS	-	901	879	857	835	813	787	754	708	-	-
	CFM	-	2080	2013	1943	1872	1797	1709	1590	1418	-	-

BAYCURB051A Full Perimeter Roof Mounting Curb for ***042-060A**



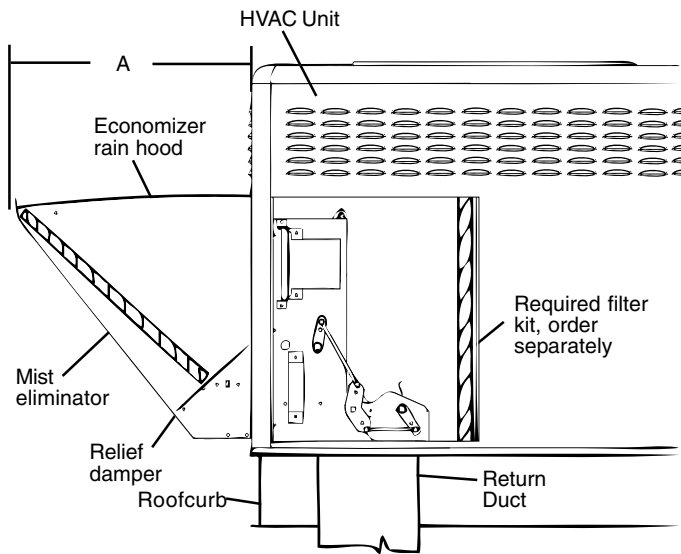
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	SERVICE CLEARANCE DIMENSIONS			
	A	B	C	D
WC*/TC*	42.00	36.00	12.00**	24.00
DC*/YC*	42.00	36.00	12.00**	36.00

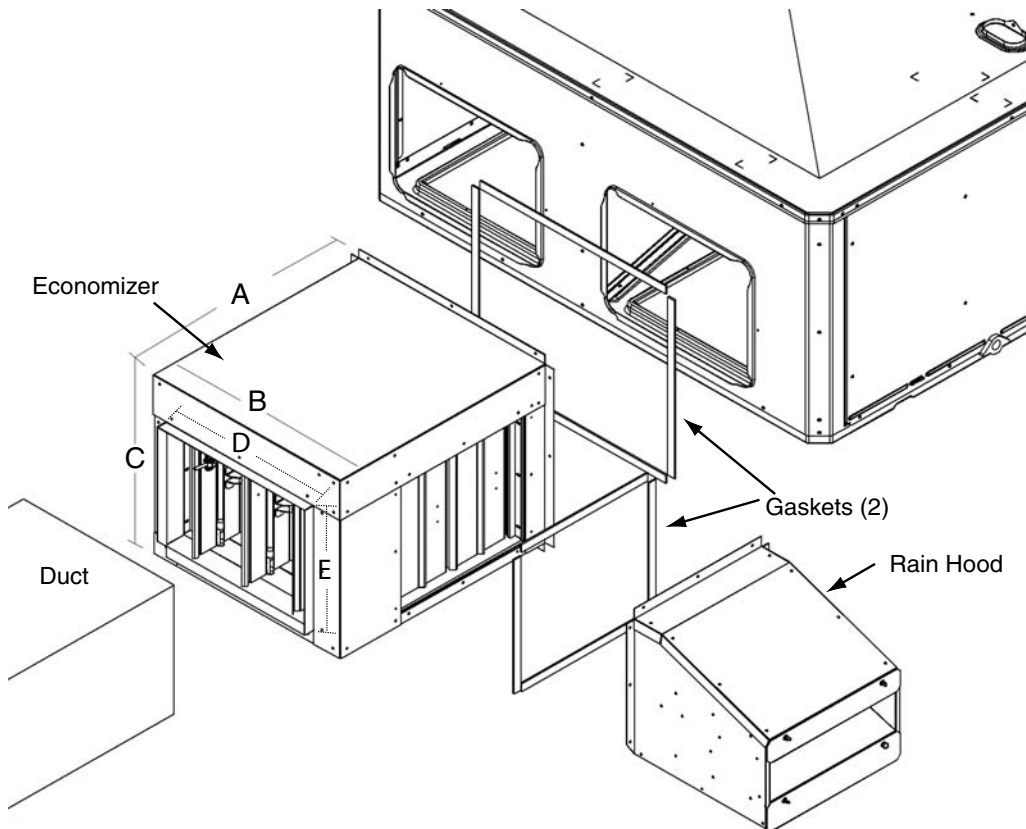
** 42.00 WITH ECONOMIZER WITH 25% FRESH AIR ACCESSORY

BAYECON102A Down Discharge Economizer and Rain Hood (Mounts Over Horizontal Return Air Opening)



Economizer	Unit Application Models	A
BAYECON101A	2/4YC, WC3018-036A 4TC*3018-036A	20.125"
BAYECON102A	2/4YC, WC3042-060A 4TC*3042-060A	24.375"

BAYCON201A Horizontal Economizer and Rain Hood



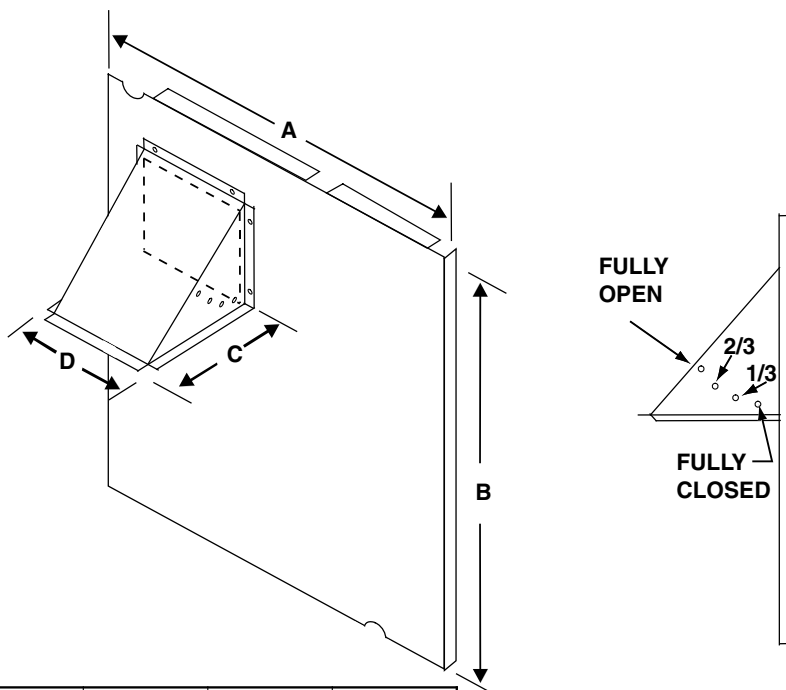
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Economizer	A	B	C	D	E
BAYECON200AA	22.00"	20.00"	16.87"	15 11/16	11 11/16
BAYECON201AA	24.00"	22.65"	19.00"	17 11/16	14 11/16

Submittal

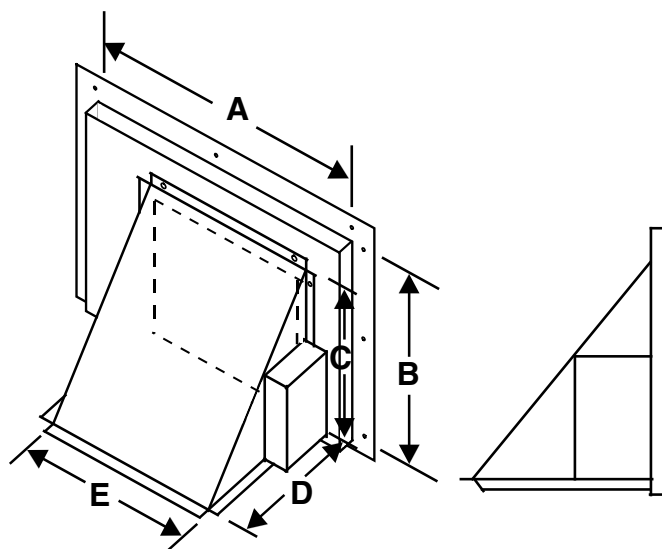
BAYOSAH002, 25% Outside Air Damper (Replaces Filter/Coil Access Panel)

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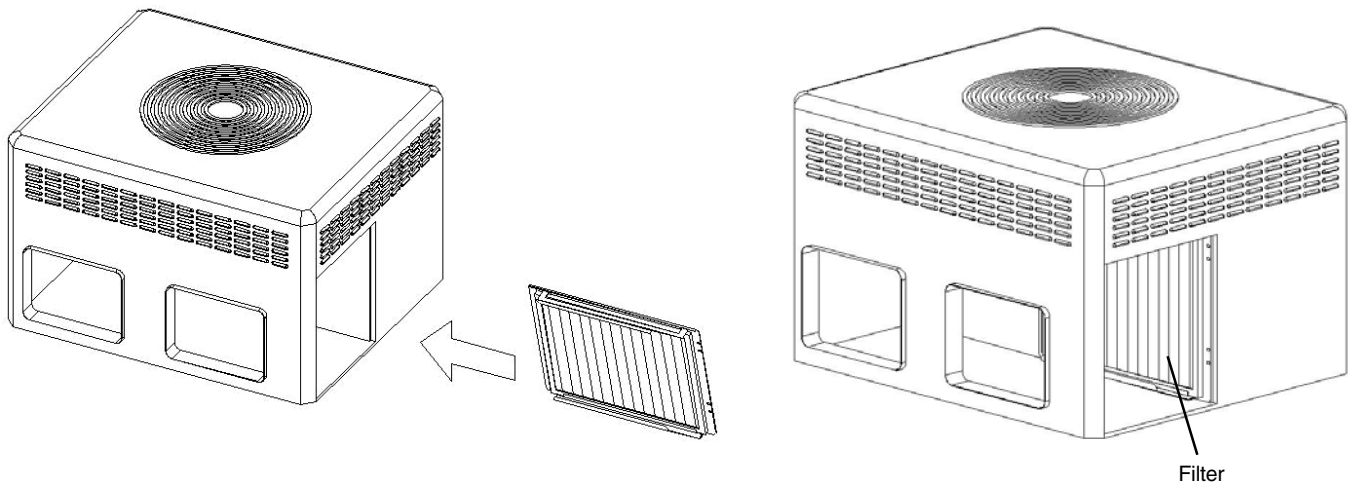
Manual Fresh Air Model	Unit Application Models	A	B	C	D
BAYOSAH001	2/4YC,WC3018-036A 4TC*3018-036A	22 7/16"	20 11/16"	12 3/8"	9 3/16"
BAYOSAH002	2/4YC,WC3042-060A 4TC*3042-060A	25 3/16"	20 11/16"	12 3/8"	9 3/16"

BAYDMPR102A, 25% Motorized Outside Air Damper (Mounts Over Horizontal Return Air Opening)



	Unit Application Models	A	B	C	D	E
BAYDMPR101A	2/4YC,WC3018-036A 4TC3018-036A	15 13/16"	11 13/16"	10 1/4"	11 1/2"	12 1/4"
BAYDMPR102A	2/4YC,WC3042-060A 4TC3042-060A	18 3/16"	15 1/8"	10 1/4"	11 1/2"	12 1/4"

BAYFLTR201A, 1" - 2" Filter Rack (Mounts in Filter/Coil Section)



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Mechanical Specification Options

General

All units shall be factory assembled, piped, internally wired and fully charged with refrigerant. All units shall be designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities shall be rated in accordance with A.R.I. standards. The YC heating/cooling unit design is UL listed, specifically for outdoor applications using natural gas or propane. All units shall be designed for outdoor rooftop or ground level installation. Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint.

Shipped for horizontal application, convertible to downflow.

Casings

All panels shall be heavy gauge steel, gasketed and insulated. Foil-faced fiber insulation shall be in the heat exchanger section. Foil-faced insulation shall be in the evaporator section. Base pan shall be heavy gauge steel. **WEATHERGUARD™** exterior corrosion resistant screws shall be used for added resistance to rust and corrosion.

Controls

Refrigeration cycle controls shall include condenser fan, evaporator fan and compressor contactors. Compressors shall be equipped with a combination internal winding thermostat/current overload. Internal high pressure relief shall also be provided.

Refrigeration System

Compressors —

The Duration™ compressor features internal over temperature and pressure protector, total dipped hermetic motor. Other features include: roto lock suction and discharge refrigeration connections, centrifugal oil pump, low vibration and noise.

Evaporator Coil — Internally enhanced 3/8-inch OD seamless copper tubing mechanically bonded to aluminum fins, factory pressure and leak tested at 250 to 300 psig. All units have TXV to control refrigeration flow.

Condenser Coil —

The Spine Fin™ condenser coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8 inch O.D. seamless aluminum tubing glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch. The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Indoor Air Fan — Direct-drive, forward-curved, centrifugal wheel in a Composite Vortica® Blower housing. Motor shall have thermal overload protection. Permanently lubricated motor bearings. Motor/blower assembly isolated from unit with rubber mounts.

Condenser Fan — Direct-drive, draw thru propeller type. Weather-proofed permanent split capacitor fan motor shall have built-in thermal overload and permanently lubricated motor bearings.

Low Ambient — Standard refrigerant system operation down to 55°F. Low ambient accessory required for operation to 0°F ambient condition.

Heating System

Gas-Fired Heating Section — Models shall provide completely assembled, wired and piped gas fired heating systems within unit. Design certified by UL, specifically for outdoor application. Threaded gas connection on the unit.

Electronic Ignition System — Main burner is lit each time thermostat calls for heat. Flame sensor proves flame and keeps the main burners on. Should a loss of flame occur, the main valve closes and the spark recurs within 0.8 second. When thermostat is satisfied, main burner is extinguished.

Forced Combustion Blower — Insures flame stability under varying wind conditions. Gives higher combustion efficiency and location flexibility.

Heat Exchanger — stainless steel tubes. Free floating design.

Burners — stainless steel. Multi-port inshot.

Downflow Accessories (U.S. Domestic Models)

Roof Curb — The roof curb shall be designed to mate with the unit and provide support and complete weather-tight installation when properly installed. Curb shall ship knocked down for field assembly, and include wood nailer strips.

Economizer

Modulating Economizer — This accessory shall be field installed and be composed of the following items: 0-100% fresh air damper, damper drive motor fixed dry bulb enthalpy control, and low voltage polarized plug for electrical connections. Solid state enthalpy or differential enthalpy control is optional. Economizer operations shall be controlled by the preset position of the enthalpy control. A barometric relief damper shall be standard with the economizer and provide a pressure operated damper that shall be gravity closing and prohibit entrance of outside air on equipment "off" cycle.

Manual Fresh Air Hood

Manual outside air provides a fixed outside air quantity from 0 to 25 percent. Includes hood and birdscreen.

Low Ambient Control

Control allows cycling of compressor under low ambient cooling conditions. Required for cooling operation to 0°F.

Propane Gas

Conversion Kit — For conversion from natural gas to LP gas.

American Standard Inc.
6200 Troup Highway
Tyler, TX 75707

For more information contact
your local dealer



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