4YCZ6036C-SUB-1A-EN

SUBMITTAL

3 Ton Convertible Gas/Electric Packaged Units 4YCZ6036C1070/1090A

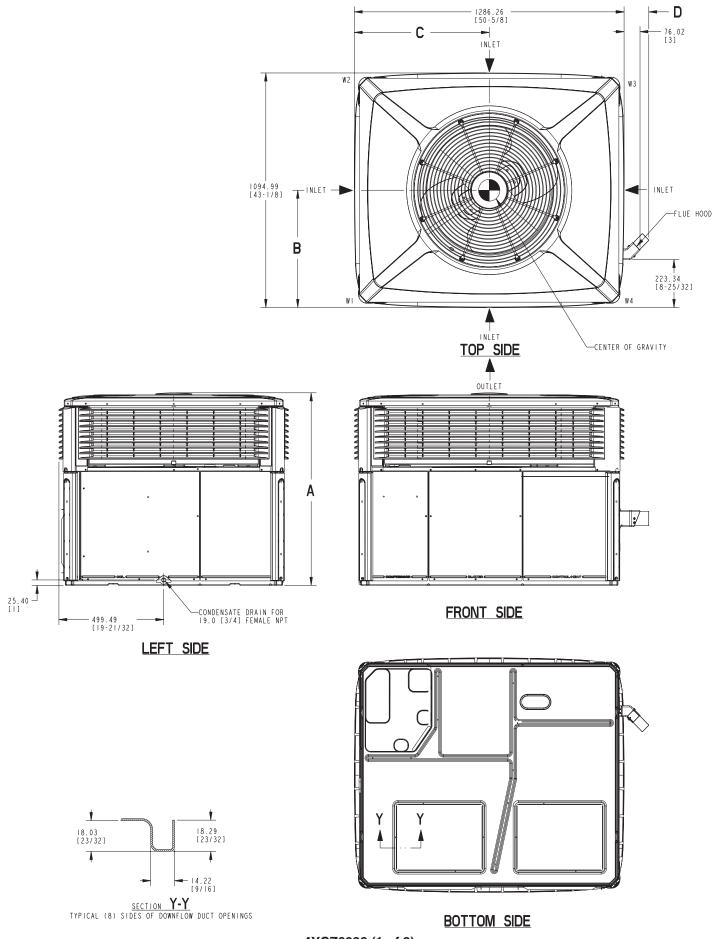
PRC	PRODUCT SPECIFICATIONS									
MODEL	4YCZ6036C1070A	4YCZ6036C1090A								
RATED Volts/PH/Hz	208-230/1/60	208-230/1/60								
Performance Cooling BTUH ^①	05000	05000								
BTUH (High)	35600 1175	35600								
Indoor`Airflów (CFM) (High) Power Input (KW)	2.93	1175								
BTUH (Low)	25200	2.93 25200								
Indoor Airflow (CFM) (Low)	830	830								
Power Input (KW)	1.85	1.85								
EER - HI / LOW / SEER	12.0 / 13.6 / 16.60	12.0 / 13.6 / 16.60								
Sound Power Rating [dB(A)]	70	70								
Performance Heating ²										
Input BTUH - 1st Stage (Natural Gas)	56250	72000								
Input BTUH - 2nd Stage (Natural Gas)		90000								
AFUE	81	81								
Temp. Rise — Min/Max (°F)	30 / 60	40 / 70								
Orifice Qty / Drill Size (Natural Gas) POWER CONN.—V/PH/HZ	<u>2 / #33</u> 208-230/1/60	3 / #37								
Min. Brch. Cir. Ampacity	208-230/1/60 26.0	208-230/1/60 26.0								
Fuse Size — Max./Recmd. (amps)	40 / 40	20.0 40 / 40								
COMPRESSOR	2-STAGE SCROLL	2-STAGE SCROLL								
Volts/Ph/Hz	208-230/1/60	208-230/1/60								
R.L. Amps — L.R. Amps	16.7 / 82.0	16.7 / 82.0								
OUTDOOR COIL — TYPE	SPINE-FIN	SPINE-FIN								
Rows/F.P.I.	2 / 24	2 / 24								
Face Area (sq.ft.)	15.49	15.49								
Tube Size (in.)	3/8	3/8								
INDOOR COIL — TYPE	PLATE FIN 4 / 15	PLATE FIN								
Rows/F.P.I. Face Area (sq.ft.)	3.54	4 / 15								
Tube Size (in.)	3/8	3.54 3/8								
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE								
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT								
OUTDOOR FAN — TYPE	PROPELLER	PROPELLER								
Dia. (in.)	23.4	23.4								
Drive/Nó. Speeds	DIRECT / 1	DIRECT / 1								
CFM @ 0.0 in. w.g. Motor — HP/R.P.M.	3000	3000								
Volts/Ph/Hz	1/6 / 830 208-230/1/60	1/6 / 830 208-230/1/60								
F.L. Amps/L.R. Amps	0.9 / 1.65	0.9 / 1.65								
INDOOR FAN — TYPE	CENTRIFUGAL	CENTRIFUGAL								
Dia x Width (in.)	10 X 10	10 X 10								
Drive/No. Speeds	DIRECT / VARIABLE	DIRECT / VARIABLE								
CFM @ 0.0 in. w.g.S	SEE FAN PERFORMANCE TABLE	SEE FAN PERFORMANCE TABLE								
Motor — HP/R.P.M.	1/2 / VARIABLE	1/2 / VARIABLE								
Volts/Ph/Hz	208-230/1/60	208-230/1/60								
F.L. Amps/L.R. Amps COMBUSTION FAN — TYPE	4.3 / 4.3 CENTRIFUGAL	<u>4.3 / 4.3</u>								
Drive/No. Speeds	DIRECT / 2	CENTRIFUGAL DIRECT / 2								
Motor — HP/R.P.M.	1/20 / 3350/2600	1/20 / 3350/2600								
Volts/Ph/Hz	208-230/1/60	208-230/1/60								
FLA	0.34	0.34								
FILTER / FURNISHED	NO	NO								
Type Recommended	THROWAWAY	THROWAWAY								
Recmd. Face Area (sq. ft.)6	4.0	4.0								
REFRIGERANT — Charge (lbs.) ④	R410A / 6.94 1/2	R410A / 6.94								
<u>GAS PIPE SIZE (in.)</u> DIMENSIONS	H X W X L	<u>1/2</u> H X W X L								
Crated (in.)	48.0 / 44.5 / 52.0	48.0 / 44.5 / 52.0								
WEIGHT— Shipping (lbs.) / Net (lbs		493 / 397								
	,									

⁽¹⁾ Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on ARI Standard 210/240.

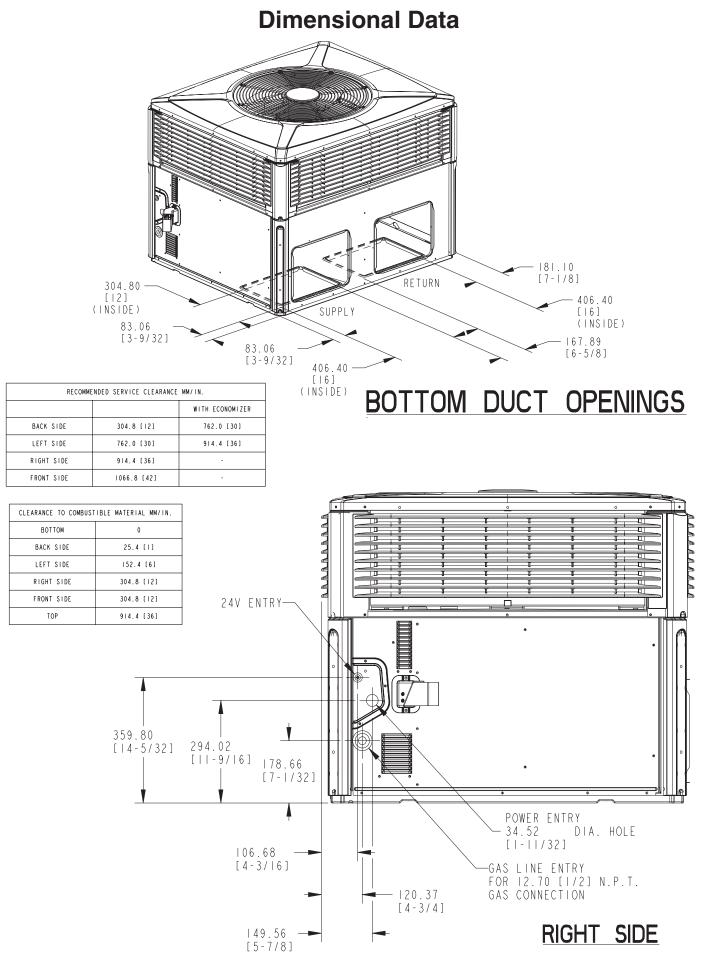
- ② All models are certified to UL 1995. Ratings shown are for elevations up to 2000 ft. For higher elevations reduce ratings at a rate of 4% per 1000 ft. elevation.
- ③ Convertible to LPG.
- ④ This value is approximate. For more precise value, see Unit Nameplate.
- ⁽⁵⁾ Based on U.S. Government Standard 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.
- ⑦ Sound Power values are not adjusted for ARI 270-95 tonal corrections.
- ⁽⁸⁾ Standard Air Dry Coil Outdoor.

TAG: ___

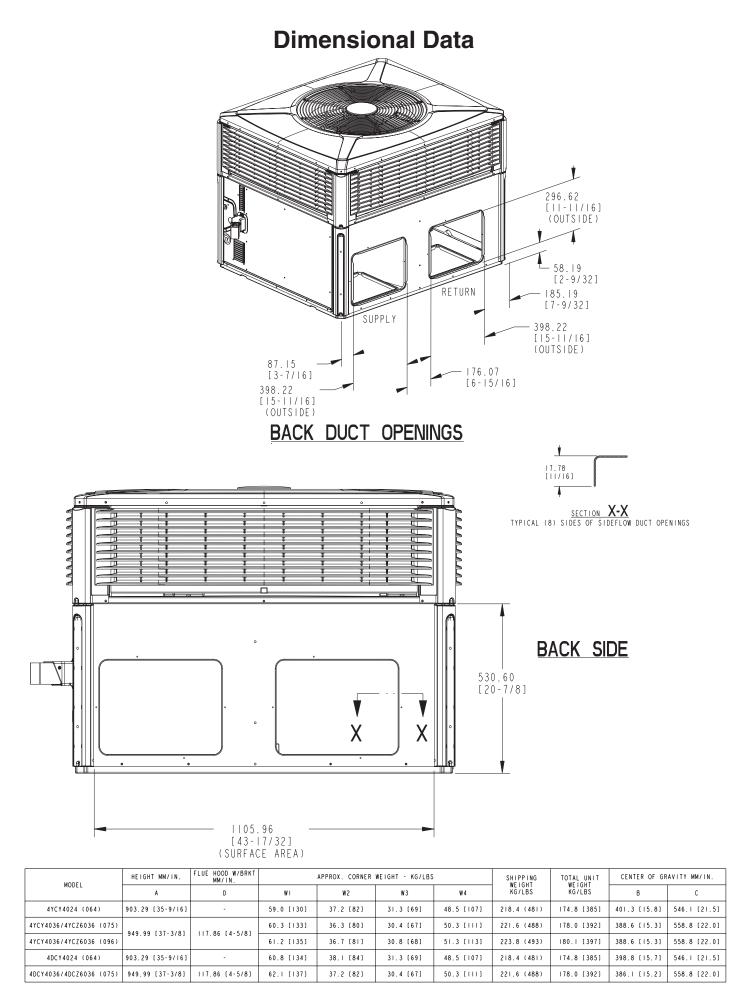
Dimensional Data



4YCZ6036 (1 of 3)



4YCZ6036 (2 of 3)



4YCZ6036 (3 of 3)

Indoor Blower Performance

Horizontal		External Static Pressure (in. wg)										
		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
350 CFM/Ton Setting	Low	-	741	743	744	744	743	742	740	737	-	-
	High	-	1059	1062	1063	1063	1062	1059	1057	1053	-	-
400 CFM/Ton Setting	Low	-	825	837	843	844	844	842	839	836	-	-
	High	-	1179	1196	1204	1206	1205	1203	1199	1194	-	-
450 CFM/Ton Setting	Low	-	976	964	959	957	953	949	945	945	-	-
	High	-	1394	1377	1371	1367	1362	1355	1350	1350	-	-

Down Flow		External Static Pressure (in. wg)										
		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
350 CFM/Ton Setting	Low	-	722	745	747	744	742	743	744	736	-	-
	High	-	1032	1064	1068	1063	1060	1062	1063	1052	-	-
400 CFM/Ton Setting	Low	-	830	841	842	840	839	838	836	828	-	-
	High	-	1186	1201	1203	1201	1198	1197	1194	1184	-	-
450 CFM/Ton Setting	Low	-	978	965	964	963	958	948	941	949	-	-
	High	-	1397	1378	1377	1376	1368	1354	1344	1356	-	-

Heating Airflow, horizontal or downflow from .2 to .6" wg.

-									
4YCZ6036C*070									
Switch	Switch Settings		Nomina	al Airflow					
			Low Stage	High Stage					
7-OFF	8-OFF	A	725	1000					
7-ON	8-OFF	В	775	1075					
7-OFF	8-ON	C	850	1150					
7-ON	8-ON	D	925	1250					
7-ON 7-OFF	8-OFF 8-ON	A B C D	725 775 850	1000 1075 1150					

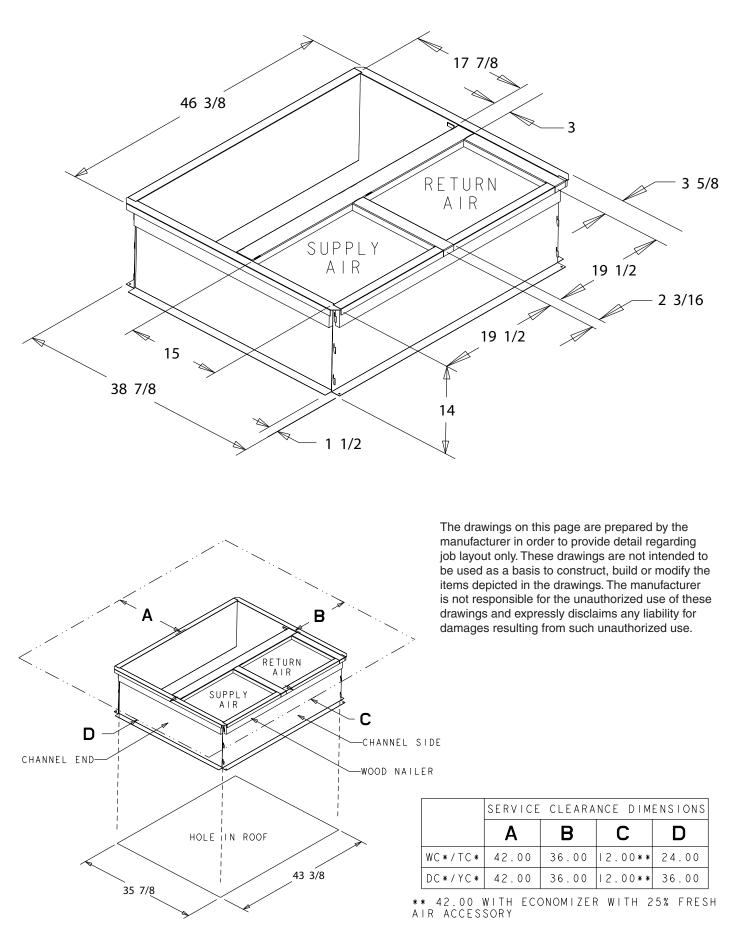
* can be 1, 3 or 4

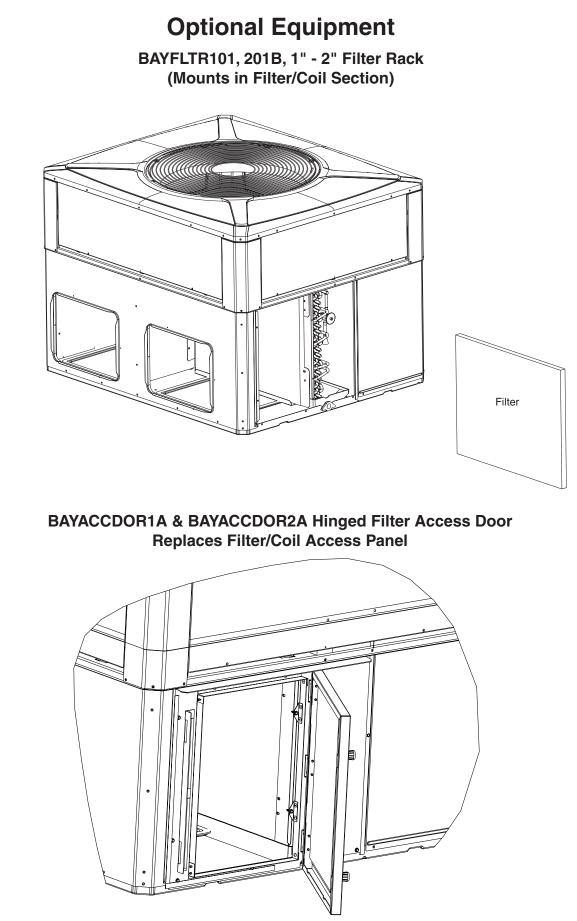
4YCZ6036C*090									
Switch	Switch Settings		Nominal Airflow						
			Low Stage	High Stage					
7-OFF	8-OFF	A	825	1100					
7-ON	8-OFF	В	875	1175					
7-OFF	8-ON	C	950	1275					
7-ON	8-ON	D	1025	1375					

* can be 1, 3 or 4

Optional Equipment

BAYCURB050A FULL PERIMETER ROOF MOUNTING CURB FOR 4YCZ6036

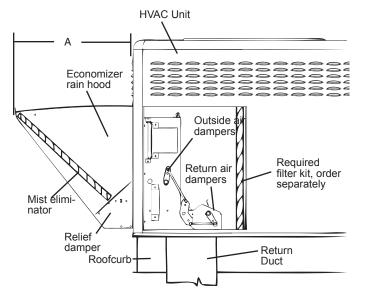




The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use.

Optional Equipment

BAYECON103,104A Down Discharge Economizer and Rain Hood (Mounts Over Horizontal Return Air Opening)



BAYECON204AA

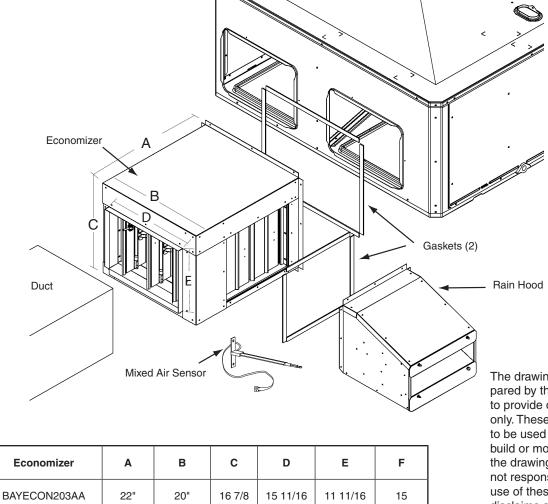
26"

22 21/32"

19"

Economizer	Models	А
BAYECO- N103A	4WCZ6036 4DCZ6036 4YCZ6036	20 1/8"
BAYECO- N104A	4WCZ6048-060 4DCZ6048-060 4YCZ6048-060	24 3/8"

BAYECON 203,204A Horizontal Economizer and Rain Hood



The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use.

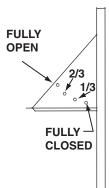
14 11/16

21-3/8

17 11/16

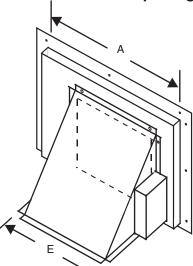
Optional Equipment

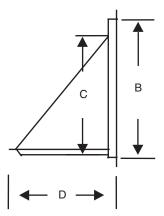
BAYOSAH001,002A, 25% Outside Air Damper (Replaces Filter/Coil Access Panel)

The drawings on this page are prepared by the manufacturer in order to provide detail regarding job layout only. These drawings are not intended to be used as a basis to construct, build or modify the items depicted in the drawings. The manufacturer is not responsible for the unauthorized use of these drawings and expressly disclaims any liability for damages resulting from such unauthorized use. 

Manual Fresh Air Model	Unit Application Models	Α	В	с	D
BAYOSAH001	4YC,WC3018-036 4TC*3018-036, 4W/T/Y/DCY4024-036, 4W/Y/DCZ6036	22 7/16""	20 11/16""	12 3/8""	9 3/16""
BAYOSAH002	4YC,WC3042-060, 4TC*3042-060, 4W/T/Y/DCY4042-060, 4W/Y/DC26048-060	25 3/16""	20 11/16""	12 3/8""	9 3/16""

BAYDMPR101,102A, 25% Motorized Outside Air Damper (Mounts Over Horizontal Return Alr Opening)





	Unit Application Models	А	В	с	D	E
BAYDMPR101A	4YC,WC3018-036 4TC*3018-036, 4W/T/Y/DCY4024-036, 4W/Y/DCZ6036	15 13/16""	11 13/16""	10 1/4""	11 1/2""	12 1/4""
BAYDMPR102A	4YC,WC3042-060, 4TC*3042-060, 4W/T/Y/DCY4042-060, 4W/Y/DCZ6048-060	18 3/16""	15 1/8""	10 1/4""	11 1/2""	12 1/4""

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.H.R.I. standards. The heating/cooling unit design is certified to ANSI 221.47/ CSA2.3, 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 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 two-stage scroll 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, and 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.

Mechanical Specifications

The **Spine Fin™** condenser coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8 inch OD 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, forwardcurved, 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 through 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.

Gas-Fired Heating System — 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 gas 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. Multiport inshot.

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.

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 barometic 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.



10/14

6200 Troup Highway Tyler, TX 75707-9010 The Manufacturer has a policy of continuous product and product data improvement and it reserves the right to change design and specifications without notice.