

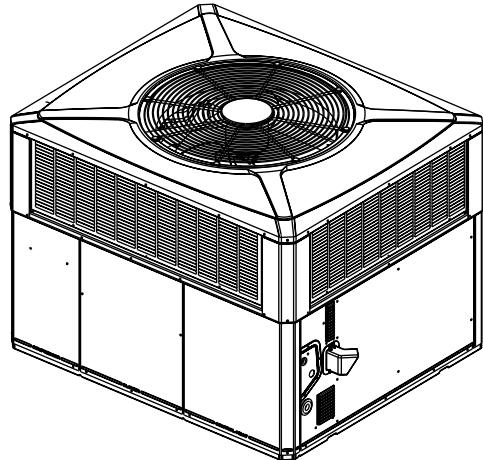


**TRANE®**

# Product Data

## Single Packaged Gas/Electric, Priority, 2 - 5 Ton, 60 - 115 KBTU, R-454B

5YCZ5024A1060A  
5YCZ5030A1070A  
5YCZ5036A1070A  
5YCZ5036A1090A  
5YCZ5042A1090A  
5YCZ5048A1090A  
5YCZ5048A1115A  
5YCZ5060A1115A  
5YCZ5036A3070A  
5YCZ5036A3090A  
5YCZ5048A3090A  
5YCZ5048A3115A  
5YCZ5060A3115A



*Note: "Graphics in this document are for representation only. Actual model may differ in appearance."*



# SAFETY SECTION

**Important** — This document contains a wiring diagram, a parts list, and service information. This is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

## ⚠ WARNING

### HAZARDOUS VOLTAGE!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

Disconnect all electric power, including remote disconnects before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized.

## ⚠ WARNING

### SAFETY AND ELECTRICAL HAZARD!

Failure to follow this Warning could result in property damage, severe personal injury, or death.

These servicing instructions are for use by qualified personnel only. To reduce the risk of electrical shock, do not perform any servicing other than that contained in these operating instructions unless you are qualified to do so.

## ⚠ CAUTION

### SHARP EDGE HAZARD!

Failure to follow this Caution could result in property damage or personal injury.

Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing.

## ⚠ WARNING

### UNIT CONTAINS R-454B REFRIGERANT!

Proper service equipment is required. Failure to use proper service tools may result in equipment damage or personal injury.

## ⚠ WARNING

### SERVICE!

USE ONLY R-454B REFRIGERANT AND APPROVED COMPRESSOR OIL.

## ⚠ WARNING

### SAFETY HAZARD!

Children should be supervised to ensure that they do not play with the appliance.

## ⚠ WARNING

### SAFETY HAZARD!

This appliance is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

**⚠ CAUTION****GROUNDING REQUIRED!**

Failure to inspect or use proper service tools may result in equipment damage or personal injury.

Reconnect all grounding devices. All parts of this product that are capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

**⚠ WARNING****RISK OF FIRE!**

Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.

Dispose of refrigerant in accordance with federal and/or local regulations.

**⚠ WARNING****SAFETY HAZARD!**

Operating the unit without the access panels properly installed may result in severe personal injury or death.

Do not operate the unit without the evaporator fan access panel or evaporator coil access panel in place.

**⚠ WARNING****LEAK DETECTION SYSTEM!**

LEAK DETECTION SYSTEM installed. Unit must be powered except for service.

**⚠ WARNING****WARNING!**

This product can expose you to chemicals including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

*Important:* Wear appropriate gloves, arm sleeve protectors and eye protection when servicing or maintaining this equipment.

*Important:* Air filters and media wheels or plates shall meet the test requirements in UL 900.



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# Packaged Convertible Gas/Electric System

**Introducing the new Trane Packaged Convertible Gas/Electric System.**

**Single Packaged Convertible Gas/Electric Systems are easy and versatile to install.**

Because cooling and heating functions are all contained in a single cabinet, a Trane single package convertible gas/electric system is easy to install and service. It can be flush mounted beside your home at ground level or placed on the roof for horizontal or downflow installation. When connected to an optional Trane thermostat control and air distribution ducts, you have a highly efficient, total home comfort system.

**Single Packaged Convertible Gas/Electric Systems are unmatched in quality and reliability.**

All major components on these products, including the compressor, have been designed and manufactured for maximum service. Every Climatuff® two stage compressor is designed and manufactured to exacting specifications. Each design is life tested in extreme environments to ensure reliable and long lasting operation in normal applications. Each compressor has internal motor protection for added reliability.

**Single Packaged Convertible Gas/Electric Systems provide better performance.**

Trane offers a complete family of packaged gas/electric heating and cooling systems, designed to give you the unbeatable combination of energy efficiency and lower operating costs. In warm weather, the package gas/electric system functions as an all-electric, high efficiency air conditioner. In cold weather, it operates as a natural gas or propane gas furnace, offering you the best of both energy worlds.



# Optional Equipment Listing

Hinged Filter Access Door (4YCZ5024-036) <sup>(a)</sup>	BAYACCDOR1A[ ]
Hinged Filter Access Door (4YCZ5048-060) <sup>(a)</sup>	BAYACCDOR2A[ ]
Roof Curb Full Perimeter (4YCZ5024-036A) <sup>(b)</sup>	BAYCURB050A[ ]
Roof Curb Full Perimeter (4YCZ5048-60A) <sup>(b)</sup>	BAYCURB051A[ ]
Roof Curb Utility Extension Kit (BAYCURB050A)	BAYUTIL101B[ ]
Roof Curb Utility Extension Kit (BAYCURB051A)	BAYUTIL102B[ ]
Outside Air Control for V S Economizer (4YCZ5024-060A) <sup>(c)</sup>	BAYOSAC001C[ ]
0-25% Motorized Outside Air Damper (4YCZ5024-036)	BAYDMPR101A[ ]
0-25% Motorized Outside Air Damper (4YCZ5048-060)	BAYDMPR102A[ ]
0-25% Manual Fresh Air Damper (4YCZ5024-036A) <sup>(d)</sup>	BAYOSAH001A[ ]
0-25% Manual Fresh Air Damper (4YCZ5048-60A) <sup>(d)</sup>	BAYOSAH002A[ ]
0-100% Mod Economizer w/Baro Relief (4YCZ5024-036A) <sup>(d)(e)(f)</sup>	BAYECON107A[ ]
0-100% Mod Economizer w/Baro Relief (4YCZ5048-60A) <sup>(d)(e)(f)</sup>	BAYECON108A[ ]
0-100% Horizontal Economizer (4YCZ5024-036A) <sup>(d)(e)</sup>	BAYECON207A[ ]
0-100% Horizontal Economizer (4YCZ5048-60A) <sup>(d)(e)</sup>	BAYECON208A[ ]
Enthalpy Control for Economizer (solid state)	BAYENTH001A[ ]
Remote Potentiometer (All-BAYECON***A)	BAYSTAT023[ ]
1"-2" Filter Frame (4YCZ5024-036A) (20 x 25 filter not included) <sup>(d)(a)</sup>	BAYFLTR101B[ ]
1"-2" Filter Frame (4YCZ5048-60A) (20 x 20,20X18 filter not included) <sup>(d)(a)</sup>	BAYFLTR201B[ ]
LP Conversion Kit (All 40K,115K,120K Models)	BAYLPKT100B[ ]
LP Conversion Kit (All 60K,64K,90K, 96K Models)	BAYLPKT101B[ ]
LP Conversion Kit (All 70K,75K Models)	BAYLPKT102B[ ]
Evaporator Defrost Control (Low Ambient Cooling) Kit ⑤	BAYLOAM011A[ ]
Head Pressure Control (Low Ambient Cool) (208/240v) Kit <sup>(g)</sup>	BAYLOAM105A[ ]
Crankcase Heater Scroll(4YCZ5048,60 1/3)(230v) <sup>(g)</sup>	BAYCCHT102A[ ]
Crankcase Heater Scroll(4YCZ5024-036)(230v) <sup>(g)</sup>	BAYCCHT103A[ ]
Crankcase Heater Scroll(4YCZ5048,60)(460v) <sup>(g)</sup>	BAYCCHT404B[ ]
Crankcase Heater Scroll (4YCZ5036)(460v) <sup>(g)</sup>	BAYCCHT405A[ ]
Adapter Curb 4YCZ5024-036A to BAYCURB030,38	BAYADAP050A[ ]
Adapter Curb 4YCZ5024-036A to BAYCURB033	BAYADAP051A[ ]
Adapter Curb 4YCZ5048-060A to BAYCURB030,38	BAYADAP052A[ ]
Adapter Curb 4YCZ5048-060A to BAYCURB033	BAYADAP053A[ ]
Adapter Curb 4YCZ5048-060A to BAYCURB034	BAYADAP054A[ ]
12" Duct Shroud Covers Horizontal 4YCZ5024-060A <sup>(h)</sup>	BAYCOVR112A[ ]
18" Duct Shroud Covers Horizontal 4YCZ5024-060A <sup>(h)</sup>	BAYCOVR118A[ ]
Extreme Condition Mounting Kit - All BAYCURB & BAYADAP	BAYEXMK001A[ ]
Extreme Condition Mounting Kit - All BAYUTIL	BAYEXMK002B[ ]
Extreme Condition Mounting Kit - All Slab Mounts	BAYEXMK003A[ ]
Lifting Lug Kit - All models	BAYLIFT002B[ ]

<sup>(a)</sup> BAYACCDOR1A requires BAYFLTR101B & BAYACCDOR2A requires BAYFLTR201B. They are not backward compatible to BAYFLTR101/201A.

<sup>(b)</sup> Ships knocked down.

<sup>(c)</sup> BAYOSAC001C is not compatible with BAYACCDOR1A or BAYACCDOR2A.

<sup>(d)</sup> Must use filter frame when economizer/fresh air kit is used.

<sup>(e)</sup> Dry bulb control standard with economizer.

<sup>(f)</sup> Downflow only.

<sup>(g)</sup> Low Ambient cooling requires crankcase heater (BAYCCHT—A).

<sup>(h)</sup> BAYCOVR112,118A will not cover 18" square-to-round applications.



# Product Specifications

UNITS	5YCZ5024A 1060A	5YCZ5030A 1070A	5YCZ5036A 1070A	5YCZ5036A 1090A
RATED Volts/PH/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
<b>Performance Cooling</b>				
BTUH (High) <sup>(a)</sup>	24000	31200	35800	35800
Indoor Airflow (CFM) (High)	770	1030	1070	1070
Power Input (KW)	1.96	2.63	3.03	3.03
BTUH (Low)	18600	25000	27800	27800
Indoor Airflow (CFM) (Low)	580	800	840	840
Power Input (KW)	1.07	1.49	1.75	1.75
EER2 / SEER2	11.5/15.2	11.5/15.2	11.5/15.2	11.5/15.2
Sound Power Rating [dB(A)] <sup>(b)</sup>	65.4	69.5	70	70
<b>PERFORMANCE HEATING<sup>(c)</sup></b>				
Input BTUH-1st Stage	48000	56000	56000	72000
Input BTUH-2nd Stage	60000	70000	70000	90000
AFUE	81	81	81	81
Temp rise-Min/Max (F°)	40 / 70	30 / 60	30 / 60	40 / 70
Orifice Qty/Drill Size (Nat Gas) <sup>(d)</sup>	2 / #37	2 / #33	2 / #33	3 / #37
<b>POWER CONN. – V/Ph/Hz</b>	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
Min. Brch. Cir. Ampacity <sup>(e)</sup>	<b>LOCATED ON UNIT NAMEPLATE</b>			
Fuse Size — Max/Rec (A)	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>COMPRESSOR</b>	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL
VOLTS/PH/HZ	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
R.L. Amps — L.R. Amps	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>OUTDOOR COIL – TYPE</b>	SPINE FIN	SPINE FIN	SPINE FIN	SPINE FIN
Rows/F.P.I	2/24	2/24	2/24	2/24
Face Area (sq. ft.)	13.32	15.49	15.49	15.49
Tube Size (in.)	3/8	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
<b>INDOOR COIL – TYPE</b>	MCHE	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I	2/16	4/15	4/15	4/15
Face Area (sq. ft.)	2.7	3.54	3.54	3.54
Tube Size (in.)	1	3/8	3/8	3/8
Refrigeration Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
<b>OUTDOOR FAN – TYPE</b>	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.)	23.4	23.4	23.4	23.4
DRIVE/NO. SPEEDS	DIRECT / 1	DIRECT / 1	DIRECT / 1	DIRECT / 1
CFM @ 0.0 in. w.g. <sup>(f)</sup>	2550	3000	3000	3000
Motor — HP/R.P.M	1/12/810	1/6/830	1/6/830	1/6/830
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R Amps	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>INDOOR FAN – TYPE</b>	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia. x Width (in.)	10.62 X 10.62	10.62 X 10.62	10.62 X 10.62	10.62 X 10.62
Drive/No. Speeds	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE
CFM @ 0.0 in. w.g. <sup>(g)</sup>	<b>SEE FAN PERFORMANCE TABLE</b>			
Motor—HP/R.P.M.	1/2/VARIABLE	1/2/VARIABLE	1/2/VARIABLE	1/2/VARIABLE
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>COMBUSTION FAN – TYPE</b>	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2	DIRECT / 2



## Product Specifications

<b>UNITS</b>	<b>SYCZ5024A 1060A</b>	<b>SYCZ5030A 1070A</b>	<b>SYCZ5036A 1070A</b>	<b>SYCZ5036A 1090A</b>
Motor — HP/R.P.M.	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600
Volts/Ph/Hz	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
<b>FILTER/ FURNISHED</b>	NO	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft.) <sup>(h)</sup>	4.0	4.0	4.0	4.0
<b>REFRIGERANT</b>	R-454B	R-454B	R-454B	R-454B
Charge (lbs.)	<b>LOCATED ON UNIT NAMEPLATE</b>			
Subcooling	7° F	10° F	9° F	9° F

(a) Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240. Noise calculated in accordance with AHRI Standard 270.

(b) Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

(c) 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.

(d) Convertible to LPG.

(e) This value is approximate. For more precise value, see Unit Nameplate.

(f) Standard Air - Dry Coil - Outdoor.

(g) Based on U.S. Government Standard Tests.

(h) 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.

<b>UNITS</b>	<b>SYCZ5042A 1090A</b>	<b>SYCZ5048A 1090A</b>	<b>SYCZ5048A 1115A</b>	<b>SYCZ5060A 1115A</b>
RATED Volts/PH/Hz	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
<b>Performance Cooling</b>				
BTUH (High) <sup>(a)</sup>	43000	48000	48000	60000
Indoor Airflow (CFM) (High)	1390	1580	1580	1780
Power Input (KW)	3.5	4.01	4.01	5.12
BTUH (Low)	34400	38000	38000	46000
Indoor Airflow (CFM) (Low)	1020	1160	1160	1270
Power Input (KW)	1.98	2.21	2.21	2.86
EER2 / SEER2	11.5/15.2	11.5/15.2	11.5/15.2	11.5/15.2
Sound Power Rating [dB(A)] <sup>(b)</sup>	71	71	71	73
<b>PERFORMANCE HEATING<sup>(c)</sup></b>				
Input BTUH-1st Stage	72000	72000	92000	92000
Input BTUH-2nd Stage	90000	90000	115000	115000
AFUE	81	81	81	81
Temp rise-Min/Max (F°)	30 / 60	30 / 60	40 / 70	30 / 60
Orifice Qty/Drill Size (Nat Gas) <sup>(d)</sup>	3 / #37	3 / #37	3 / #32	3 / #32
<b>POWER CONN. – V/Ph/Hz</b>	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
Min. Brch. Cir. Ampacity <sup>(e)</sup>	<b>LOCATED ON UNIT NAMEPLATE</b>			
Fuse Size – Max/Rec (A)	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>COMPRESSOR</b>	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL
VOLTS/PH/Hz	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
R.L. Amps – L.R. Amps	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>OUTDOOR COIL – TYPE</b>	SPINE FIN	SPINE FIN	SPINE FIN	SPINE FIN
Rows/F.P.I	2/24	2/24	2/24	2/24
Face Area (sq. ft.)	23.57	23.57	23.57	23.57
Tube Size (in.)	3/8	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
<b>INDOOR COIL – TYPE</b>	PLATE FIN	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I	4/15	4/15	4/15	4/15
Face Area (sq. ft.)	5.0	5.0	5.0	5.0
Tube Size (in.)	3/8	3/8	3/8	3/8
Refrigeration Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
<b>OUTDOOR FAN – TYPE</b>	PROPELLER	PROPELLER	PROPELLER	PROPELLER



## Product Specifications

<b>UNITS</b>	<b>SYCZ5042A 1090A</b>	<b>SYCZ5048A 1090A</b>	<b>SYCZ5048A 1115A</b>	<b>SYCZ5060A 1115A</b>
DIA. (IN.)	28.2	28.2	28.2	28.2
DRIVE/NO. SPEEDS	DIRECT / 1	DIRECT / 1	DIRECT / 1	DIRECT / 1
CFM @ 0.0 in. w.g. <sup>(f)</sup>	4200	4200	4200	4700
Motor — HP/R.P.M.	1/6/830	1/6/830	1/6/830	1/4/830
Volts/Ph/Hz	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
F.L. Amps/L.R Amps	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>INDOOR FAN – TYPE</b>	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia. x Width (in.)	11.87 X 10.68	11.87 X 10.68	11.87 X 10.68	11.87 X 10.68
Drive/No. Speeds	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE
CFM @ 0.0 in. w.g. <sup>(g)</sup>	<b>SEE FAN PERFORMANCE TABLE</b>			
Motor—HP/R.P.M.	3/4/VARIABLE	3/4/VARIABLE	3/4/VARIABLE	1/VARIABLE
Volts/Ph/Hz	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
F.L. Amps	<b>LOCATED ON UNIT NAMEPLATE</b>			
<b>COMBUSTION FAN – TYPE</b>	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2	DIRECT / 2
Motor — HP/R.P.M.	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600
Volts/Ph/Hz	208–230/1/60	208–230/1/60	208–230/1/60	208–230/1/60
<b>FILTER/ FURNISHED</b>	NO	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft) <sup>(h)</sup>	5.3	5.3	5.3	5.3
<b>REFRIGERANT</b>	R-454B	R-454B	R-454B	R-454B
Charge (lbs.)	<b>LOCATED ON UNIT NAMEPLATE</b>			
Subcooling	10° F	10° F	10° F	9° F

(a) Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240. Noise calculated in accordance with AHRI Standard 270.

(b) Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

(c) 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.

(d) Convertible to LPG.

(e) This value is approximate. For more precise value, see Unit Nameplate.

(f) Standard Air - Dry Coil - Outdoor.

(g) Based on U.S. Government Standard Tests.

(h) 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.

<b>UNITS</b>	<b>SYCZ5036A 3070A</b>	<b>SYCZ5036A 3090A</b>	<b>SYCZ5048A 3090A</b>	<b>SYCZ5048A 3115A</b>	<b>SYCZ5060A 3115A</b>
RATED Volts/PH/Hz	208–230/3/60	208–230/3/60	208–230/3/60	208–230/3/60	208–230/3/60
<b>Performance Cooling</b> BTUH (High) <sup>(a)</sup>	35600	35600	45000	45000	58000
Indoor Airflow (CFM) (High)	1070	1070	1580	1580	1780
Power Input (KW)	3.03	3.03	4.01	4.01	5.12
BTUH (Low)	27800	27800	38000	38000	46000
Indoor Airflow (CFM) (Low)	840	840	1160	1160	1270
Power Input (KW)	1.75	1.75	2.21	2.21	2.86
EER2 / SEER2	11.5/14.3	11.5/14.3	11.5/15.2	11.5/15.2	11.5/15.2
Sound Power Rating [dB(A)] <sup>(b)</sup>	70	70	71	71	73
<b>PERFORMANCE HEATING<sup>(c)</sup></b>					
Input BTUH-1st Stage	56000	72000	72000	92000	92000
Input BTUH-2nd Stage	70000	90000	90000	115000	115000
AFUE	81	81	81	81	81
Temp rise-Min/Max (F°)	30/60	40 / 70	30 / 60	40 / 70	30 / 60
Orifice Qty/Drill Size (Nat Gas) <sup>(d)</sup>	2 / #33	3 / #37	3 / #37	3 / #32	3 / #32
<b>POWER CONN. – V/Ph/Hz</b>	208–230/3/60	208–230/3/60	208–230/3/60	208–230/3/60	208–230/3/60
Min. Brch. Cir. Ampacity <sup>(e)</sup>	<b>LOCATED ON UNIT NAMEPLATE</b>				
Fuse Size — Max/Rec (A)	<b>LOCATED ON UNIT NAMEPLATE</b>				



## Product Specifications

UNITS	<b>SYCZ5036A 3070A</b>	<b>SYCZ5036A 3090A</b>	<b>SYCZ5048A 3090A</b>	<b>SYCZ5048A 3115A</b>	<b>SYCZ5060A 3115A</b>
<b>COMPRESSOR</b>	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL	2 STAGE SCROLL
VOLTS/PH/HZ	208-230/3/60	208-230/3/60	208-230/3/60	208-230/3/60	208-230/3/60
R.L. Amps – L.R. Amps	<b>LOCATED ON UNIT NAMEPLATE</b>				
<b>OUTDOOR COIL – TYPE</b>	SPINE FIN	SPINE FIN	SPINE FIN	SPINE FIN	SPINE FIN
Rows/F.P.I	2/24	2/24	2/24	2/24	2/24
Face Area (sq. ft.)	15.49	15.49	23.57	23.57	23.57
Tube Size (in.)	3/8	3/8	3/8	3/8	3/8
Refrigerant Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
<b>INDOOR COIL – TYPE</b>	PLATE FIN	PLATE FIN	PLATE FIN	PLATE FIN	PLATE FIN
Rows/F.P.I	4/15	4/15	4/15	4/15	4/15
Face Area (sq. ft.)	3.54	3.54	5.0	5.0	5.0
Tube Size (in.)	3/8	3/8	3/8	3/8	3/8
Refrigeration Control	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT	3/4 FEMALE NPT
<b>OUTDOOR FAN – TYPE</b>	PROPELLER	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.)	23.4	23.4	28.2	28.2	28.2
DRIVE/NO. SPEEDS	DIRECT / 1	DIRECT / 1	DIRECT / 1	DIRECT / 1	DIRECT / 1
CFM @ 0.0 in. w.g. <sup>(f)</sup>	3000	3000	4200	4200	4700
Motor – HP/R.P.M	1/6/830	1/6/830	1/6/830	1/6/830	1/4/830
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps/L.R Amps	<b>LOCATED ON UNIT NAMEPLATE</b>				
<b>INDOOR FAN – TYPE</b>	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Dia. x Width (in.)	10.62 X 10.62	10.62 X 10.62	11.87 X 10.68	11.87 X 10.68	11.87 X 10.68
Drive/No. Speeds	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE	DIRECT/VARIABLE
CFM @ 0.0 in. w.g. <sup>(g)</sup>	<b>SEE FAN PERFORMANCE TABLE</b>				
Motor—HP/R.P.M.	1/2/VARIABLE	1/2/VARIABLE	3/4/VARIABLE	3/4/VARIABLE	1/VARIABLE
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
F.L. Amps	<b>LOCATED ON UNIT NAMEPLATE</b>				
<b>COMBUSTION FAN – TYPE</b>	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive/No. Speeds	DIRECT / 2	DIRECT / 2	DIRECT / 2	DIRECT / 2	DIRECT / 2
Motor — HP/R.P.M.	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600	1/20 / 3350/2600
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
<b>FILTER/ FURNISHED</b>	NO	NO	NO	NO	NO
Type Recommended	THROWAWAY	THROWAWAY	THROWAWAY	THROWAWAY	THROWAWAY
Recmd. Face Area (sq. ft) <sup>(h)</sup>	4.0	4.0	5.3	5.3	5.3
<b>REFRIGERANT</b>	R-454B	R-454B	R-454B	R-454B	R-454B
Charge (lbs.)	<b>LOCATED ON UNIT NAMEPLATE</b>				
Subcooling	9° F	9° F	10° F	10° F	9° F

(a) Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240. Noise calculated in accordance with AHRI Standard 270.

(b) Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

(c) 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.

(d) Convertible to LPG.

(e) This value is approximate. For more precise value, see Unit Nameplate.

(f) Standard Air - Dry Coil - Outdoor.

(g) Based on U.S. Government Standard Tests.

(h) 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.



# Indoor Fan Performance

**Table 1. Indoor Fan Performance**

5YCZ5024A		External Static Pressure (IN.WG)										
		Cooling CFM Horizontal [Downflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
350CFM/ Ton Setting	Low	-	489 [498]	485 [489]	480 [477]	474 [467]	468 [465]	435 [439]	403 [403]	384 [392]	365 [376]	356 [367]
	High	-	663 [675]	666 [673]	670 [665]	661 [652]	653 [649]	635 [639]	617 [617]	596 [608]	574 [592]	556 [574]
400CFM/ Ton Setting	Low	-	565 [575]	569 [567]	573 [571]	560 [562]	547 [552]	533 [540]	519 [528]	493 [507]	467 [480]	451 [463]
	High	-	770 [783]	779 [776]	789 [786]	777 [780]	765 [771]	760 [769]	754 [768]	735 [756]	717 [735]	668 [686]
450CFM/ Ton Setting	Low	-	654 [658]	660 [664]	666 [672]	652 [656]	638 [640]	627 [626]	616 [617]	589 [610]	563 [594]	547 [577]
	High	-	874 [879]	880 [885]	887 [893]	880 [886]	873 [876]	860 [858]	846 [848]	814 [842]	782 [825]	721 [761]
5YCZ5030A		Cooling CFM Horizontal [Downflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
350CFM/ Ton Setting	Low	-	729 [729]	735 [732]	732 [735]	715 [715]	701 [706]	688 [690]	672 [674]	655 [660]	640 [644]	623 [628]
	High	-	920 [923]	927 [933]	934 [938]	932 [939]	929 [935]	918 [910]	898 [893]	886 [885]	878 [870]	854 [799]
400CFM/ Ton Setting	Low	-	780 [782]	788 [788]	787 [793]	790 [789]	768 [761]	755 [755]	741 [739]	726 [720]	707 [712]	688 [694]
	High	-	1021 [1022]	1030 [1033]	1035 [1037]	1036 [1040]	1034 [1038]	1032 [1035]	1024 [1012]	1007 [987]	984 [964]	900 [838]
450CFM/ Ton Setting	Low	-	837 [841]	847 [839]	855 [833]	854 [834]	845 [823]	834 [811]	821 [798]	805 [788]	795 [778]	781 [764]
	High	-	1103 [1116]	1113 [1123]	1118 [1128]	1120 [1130]	1122 [1132]	1122 [1132]	1118 [1126]	1108 [1113]	1074 [1064]	949 [950]
5YCZ5036A		Cooling CFM Horizontal [Downflow]										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
350CFM/ Ton Setting	Low	-	841 [842]	846 [846]	848 [846]	842 [839]	833 [831]	821 [819]	804 [802]	788 [784]	779 [773]	767 [761]
	High	-	1100 [1097]	1109 [1101]	1111 [1103]	1110 [1101]	1106 [1096]	1098 [1088]	1091 [1080]	1080 [1070]	1032 [1018]	935 [931]
400CFM/ Ton Setting	Low	-	923 [922]	929 [929]	935 [931]	929 [926]	922 [919]	915 [911]	903 [900]	888 [883]	868 [861]	848 [838]
	High	-	1243 [1228]	1247 [1237]	1248 [1238]	1249 [1238]	1247 [1236]	1242 [1230]	1233 [1220]	1195 [1167]	1095 [1085]	1003 [988]
450CFM/ Ton Setting	Low	-	990 [988]	1002 [994]	1009 [1004]	1013 [1005]	1012 [1003]	1009 [997]	1000 [983]	989 [969]	974 [943]	866 [863]
	High	-	1369 [1381]	1370 [1381]	1372 [1383]	1374 [1381]	1375 [1382]	1375 [1369]	1370 [1373]	1300 [1298]	1199 [1194]	1091 [1085]



## Indoor Fan Performance

**Table 2. Indoor Fan Performance**

5YCZ5042A		Cooling CFM Horizontal [Downflow])										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
350CFM/ Ton Setting	Low	-	910 [913]	901 [903]	893 [894]	885 [882]	873 [870]	859 [853]	835 [829]	812 [806]	791 [781]	771 [759]
	High	-	1206 [1223]	1210 [1224]	1206 [1221]	1209 [1223]	1203 [1217]	1200 [1223]	1195 [1213]	1188 [1200]	1180 [1187]	1170 [1169]
400CFM/ Ton Setting	Low	-	1012 [1021]	1008 [1015]	1003 [1010]	996 [1003]	994 [999]	984 [986]	969 [970]	950 [951]	927 [933]	905 [909]
	High	-	1359 [1380]	1364 [1383]	1363 [1389]	1365 [1385]	1362 [1380]	1357 [1375]	1350 [1366]	1347 [1357]	1343 [1347]	1336 [1339]
450CFM/ Ton Setting	Low	-	1136 [1157]	1136 [1135]	1132 [1130]	1126 [1126]	1125 [1121]	1120 [1113]	1113 [1103]	1101 [1091]	1088 [1075]	1072 [1058]
	High	-	1526 [1546]	1531 [1557]	1544 [1558]	1542 [1555]	1539 [1550]	1534 [1546]	1530 [1542]	1525 [1535]	1522 [1530]	1518 [1524]
5YCZ5048A*		Cooling CFM Horizontal [Downflow])										
Motor Speed		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
350CFM/ Ton Setting	Low	-	954 [948]	973 [977]	977 [977]	973 [970]	966 [969]	957 [975]	950 [979]	944 [962]	-	-
	High	-	1363 [1354]	1390 [1396]	1396 [1396]	1390 [1386]	1379 [1384]	1368 [1393]	1358 [1399]	1349 [1375]	-	-
400CFM/ Ton Setting	Low	-	1121 [1102]	1106 [1106]	1104 [1109]	1106 [1113]	1108 [1116]	1108 [1119]	1104 [1120]	1097 [1118]	-	-
	High	-	1601 [1574]	1580 [1580]	1577 [1585]	1580 [1589]	1583 [1594]	1583 [1599]	1577 [1601]	1567 [1597]	-	-
450CFM/ Ton Setting	Low	-	1223 [1295]	1254 [1277]	1268 [1272]	1271 [1273]	1268 [1274]	1264 [1273]	1261 [1272]	1258 [1273]	-	-
	High	-	1747 [1851]	1792 [1824]	1811 [1817]	1816 [1818]	1812 [1820]	1806 [1819]	1801 [1817]	1797 [1819]	-	-
5YCZ5060A*		Cooling CFM Horizontal [Downflow])										
350CFM/ Ton Setting	Low	-	1163 [1259]	1238 [1219]	1259 [1208]	1256 [1207]	1246 [1206]	1240 [1199]	1237 [1188]	1230 [1185]	-	-
	High	-	1662 [1799]	1768 [1742]	1799 [1726]	1794 [1725]	1780 [1723]	1771 [1712]	1767 [1698]	1757 [1692]	-	-
400CFM/ Ton Setting	Low	-	1443 [1410]	1427 [1393]	1422 [1386]	1422 [1384]	1423 [1383]	1422 [1380]	1418 [1368]	1410 [1344]	-	-
	High	-	2062 [2015]	2038 [1990]	2031 [1980]	2032 [1977]	2034 [1976]	2032 [1971]	2025 [1955]	2015 [1920]	-	-

**Table 3. Heating Air Volume (CFM)**

Switch Settings		Selection	5YCZ5024 *060		5YCZ5030 *070		5YCZ5036 *070		5YCZ5036 *090	
			Nominal Airflow							
			Low Stage	High Stage						
7 - OFF	8 - OFF	A	600	850	860	1130	860	1130	860	1170
7 - ON	8 - OFF	B	625	900	915	1200	910	1200	910	1200
7 - OFF	8 - ON	C	650	925	960	1325	960	1320	960	1300
7 - ON	8 - ON	D	700	975	1030	1415	1030	1420	1030	1420

**Table 4. Heating Air Volume (CFM)**

Switch Settings		Selection	5YCZ5042 *090		5YCZ5048 *090		5YCZ5048 *115		5YCZ5060 *090		5YCZ5060 *115	
			Nominal Airflow									
			Low Stage	High Stage								
7 - OFF	8 - OFF	A	1150	1500	1075	1375	1050	1500	1375	1800	1375	1800
7 - ON	8 - OFF	B	1200	1550	1100	1450	1100	1575	1450	1900	1450	1900
7 - OFF	8 - ON	C	1250	1600	1150	1500	1150	1625	—	—	—	—
7 - ON	8 - ON	D	1300	1680	1200	1575	1200	1700	—	—	—	—



## **Wiring Diagram**

**Figure 1.** 5YCZ5024A1-48A1

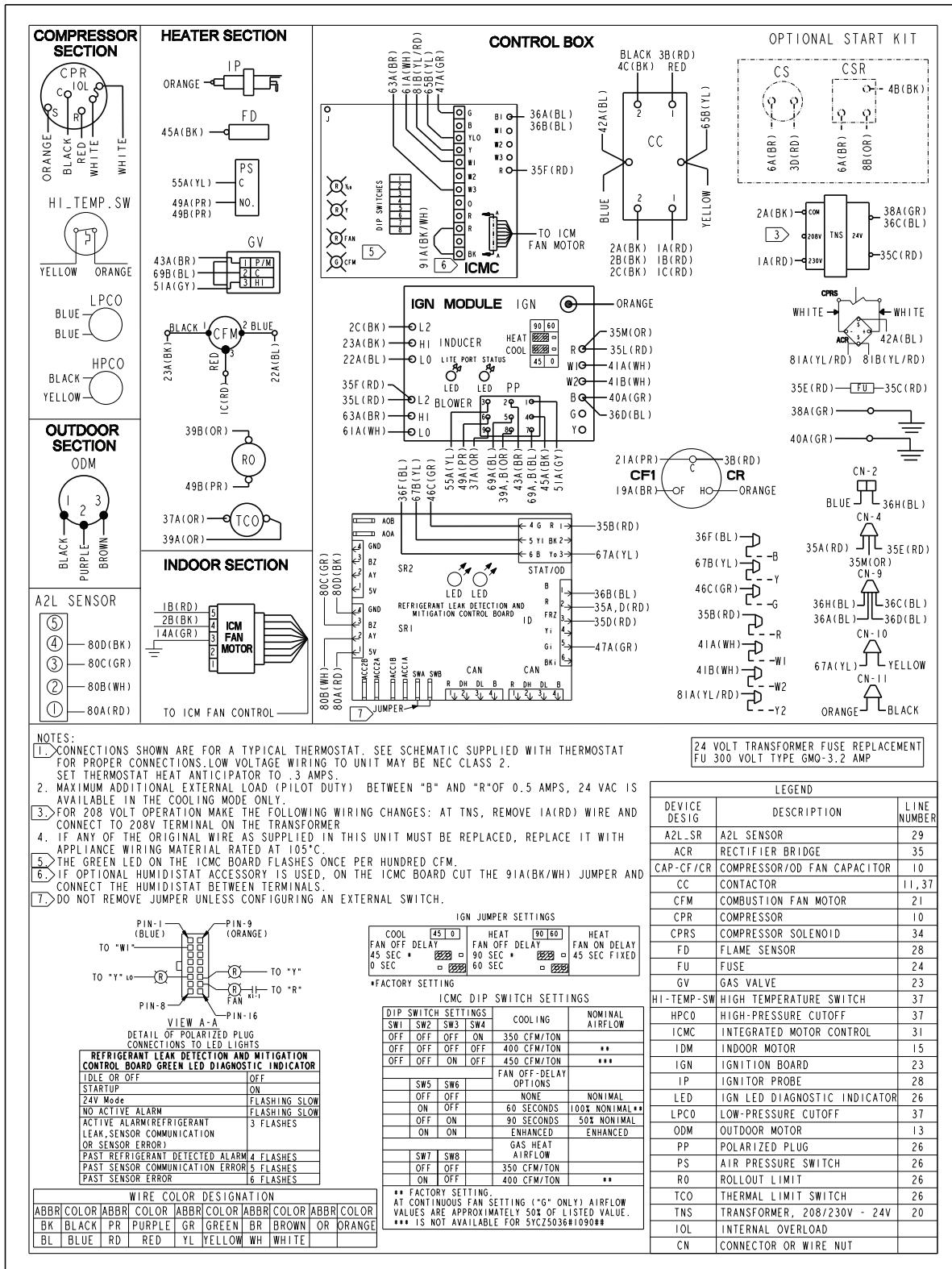
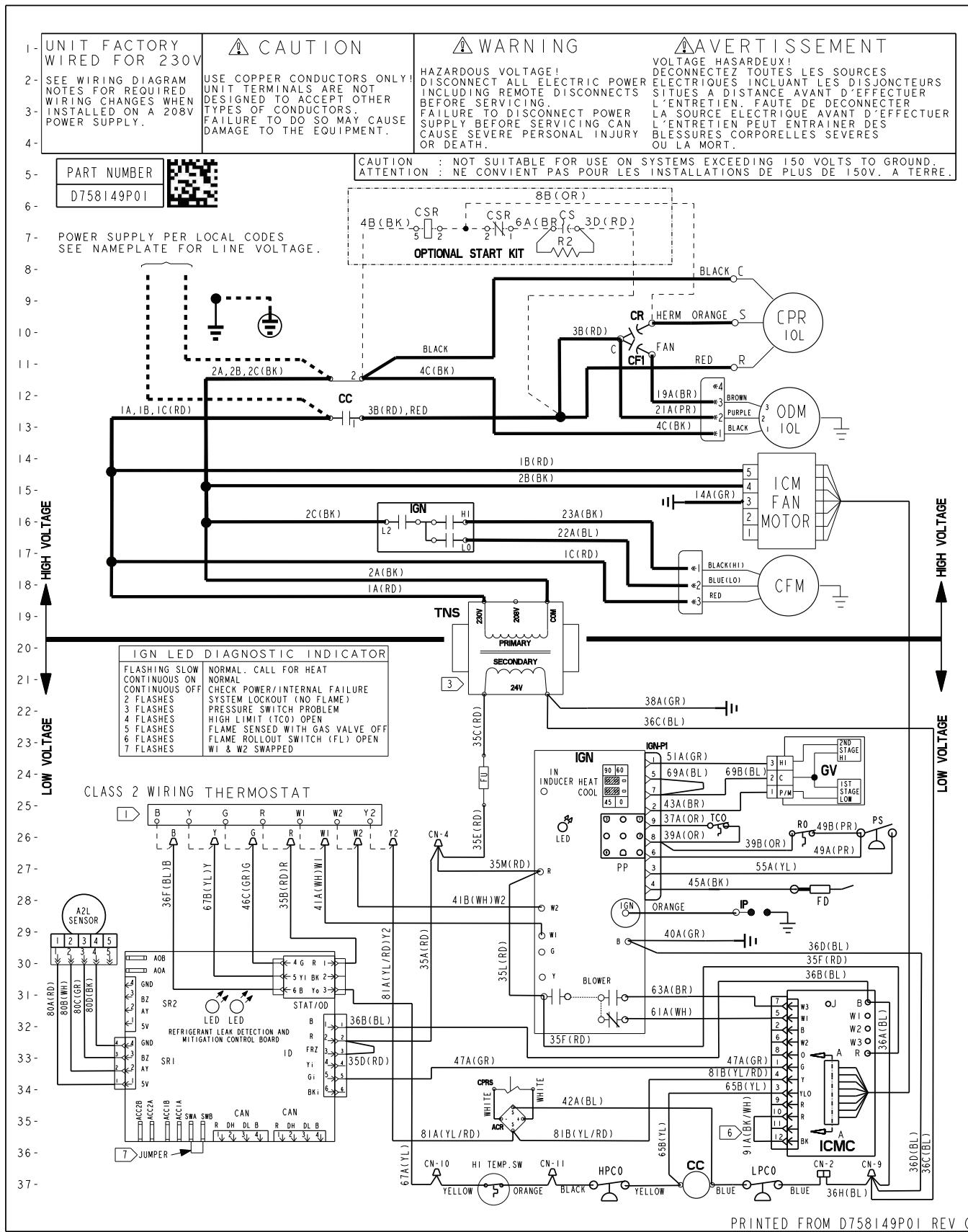


Figure 2. 5YCZ5024A1-48A1





## Wiring Diagram

**Figure 3.** 5YCZ5060A1

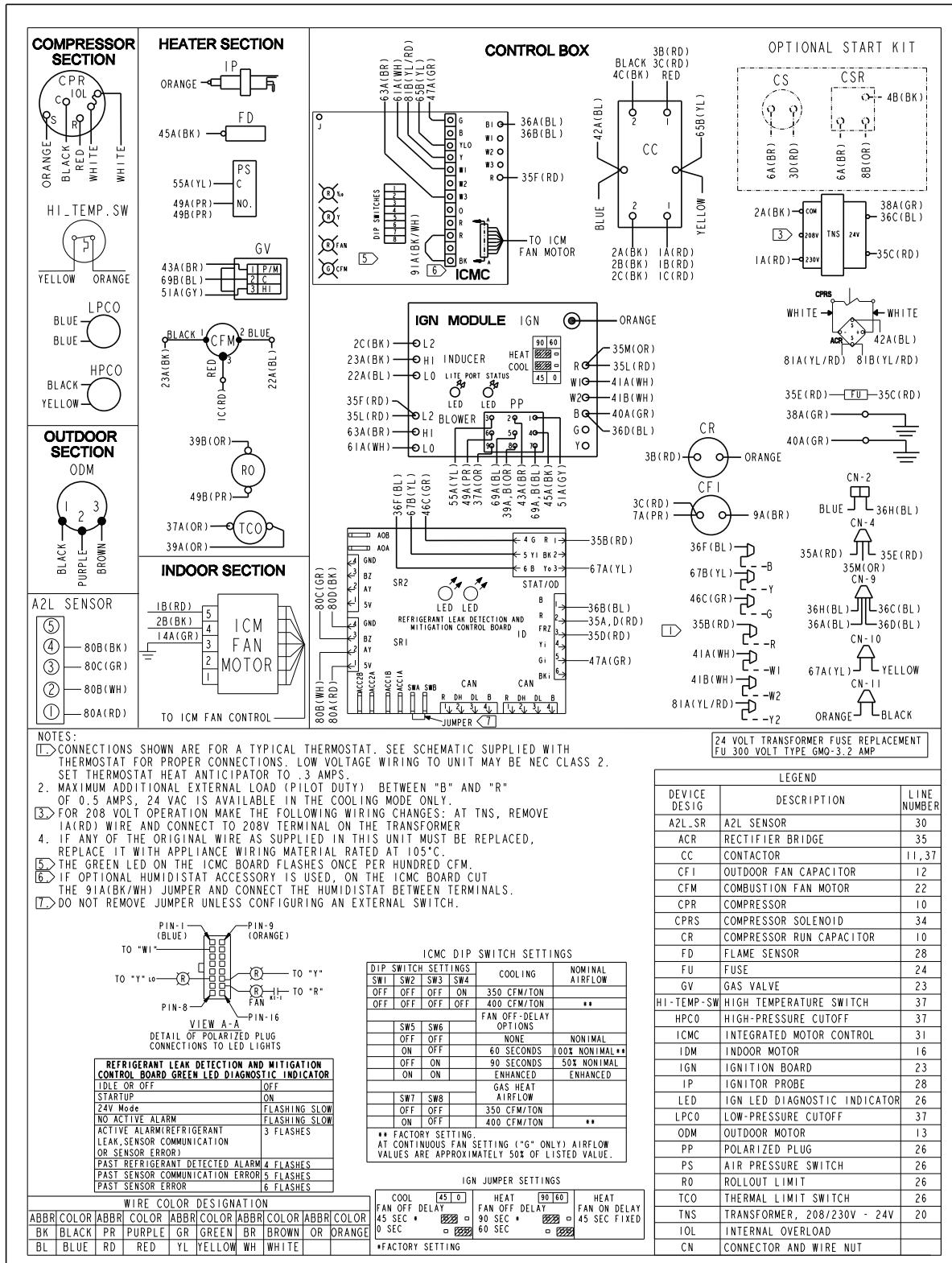
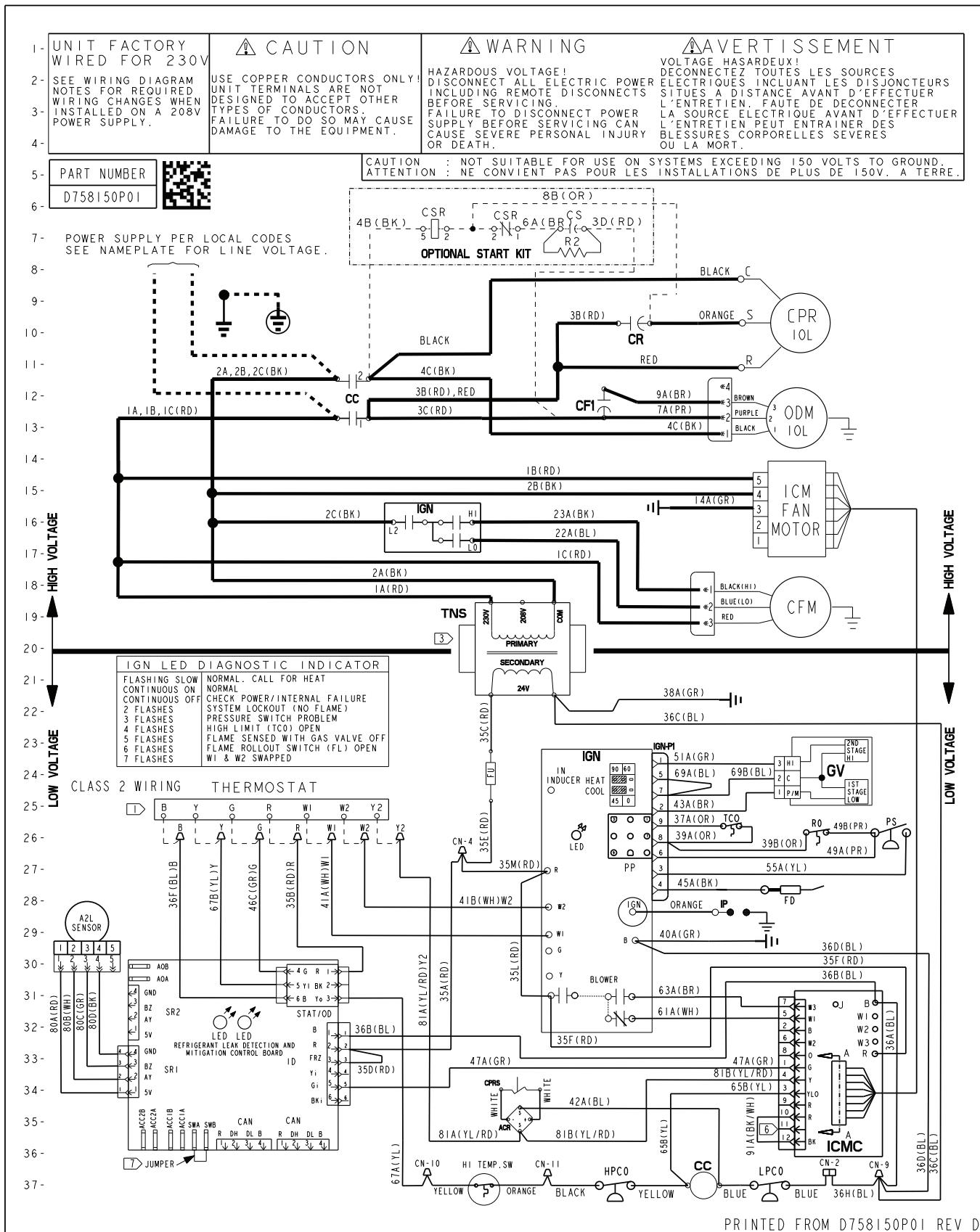


Figure 4. 5YCZ5060A1





## Wiring Diagram

**Figure 5.** 5YCZ5036A3–60A3

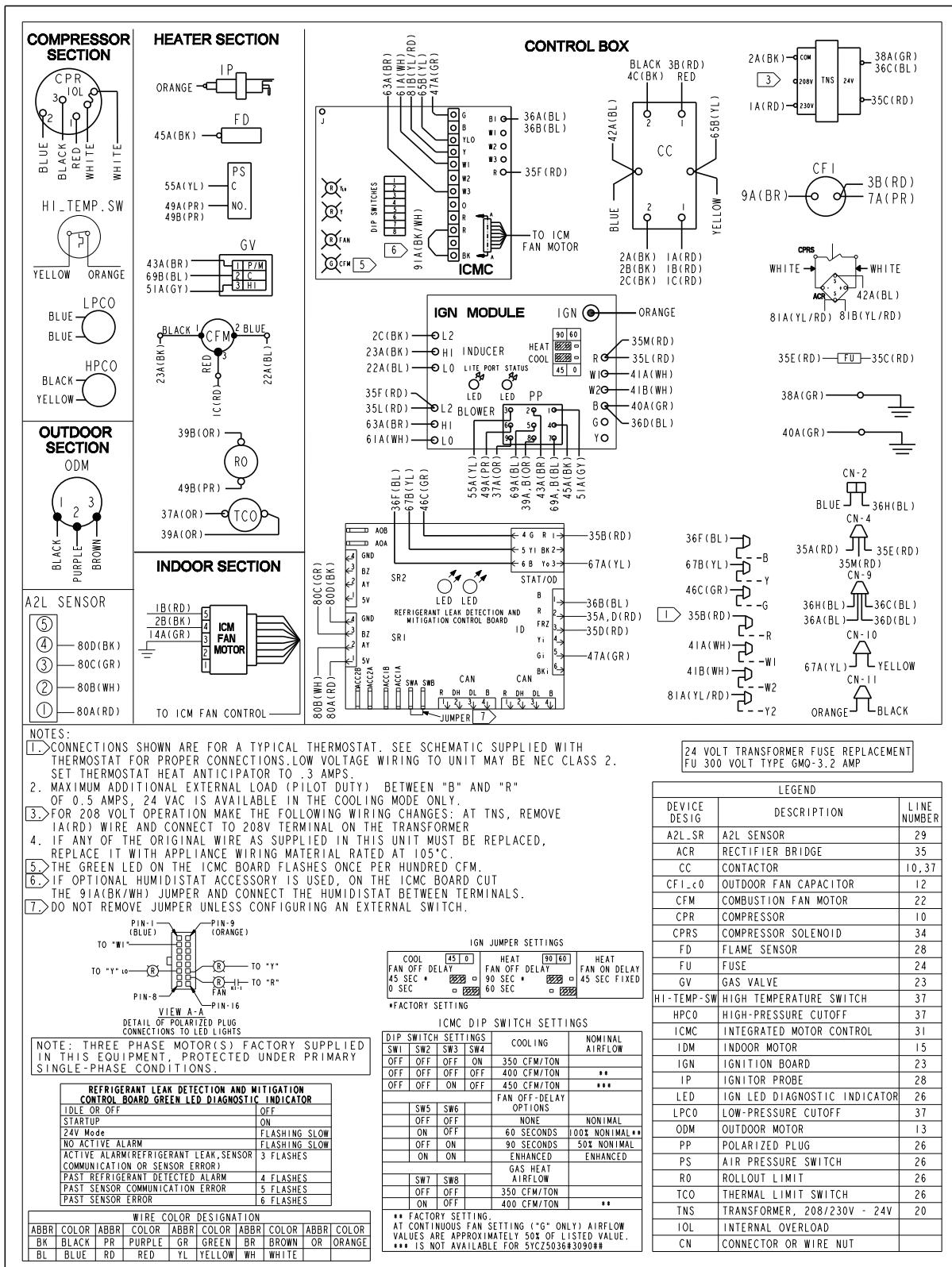
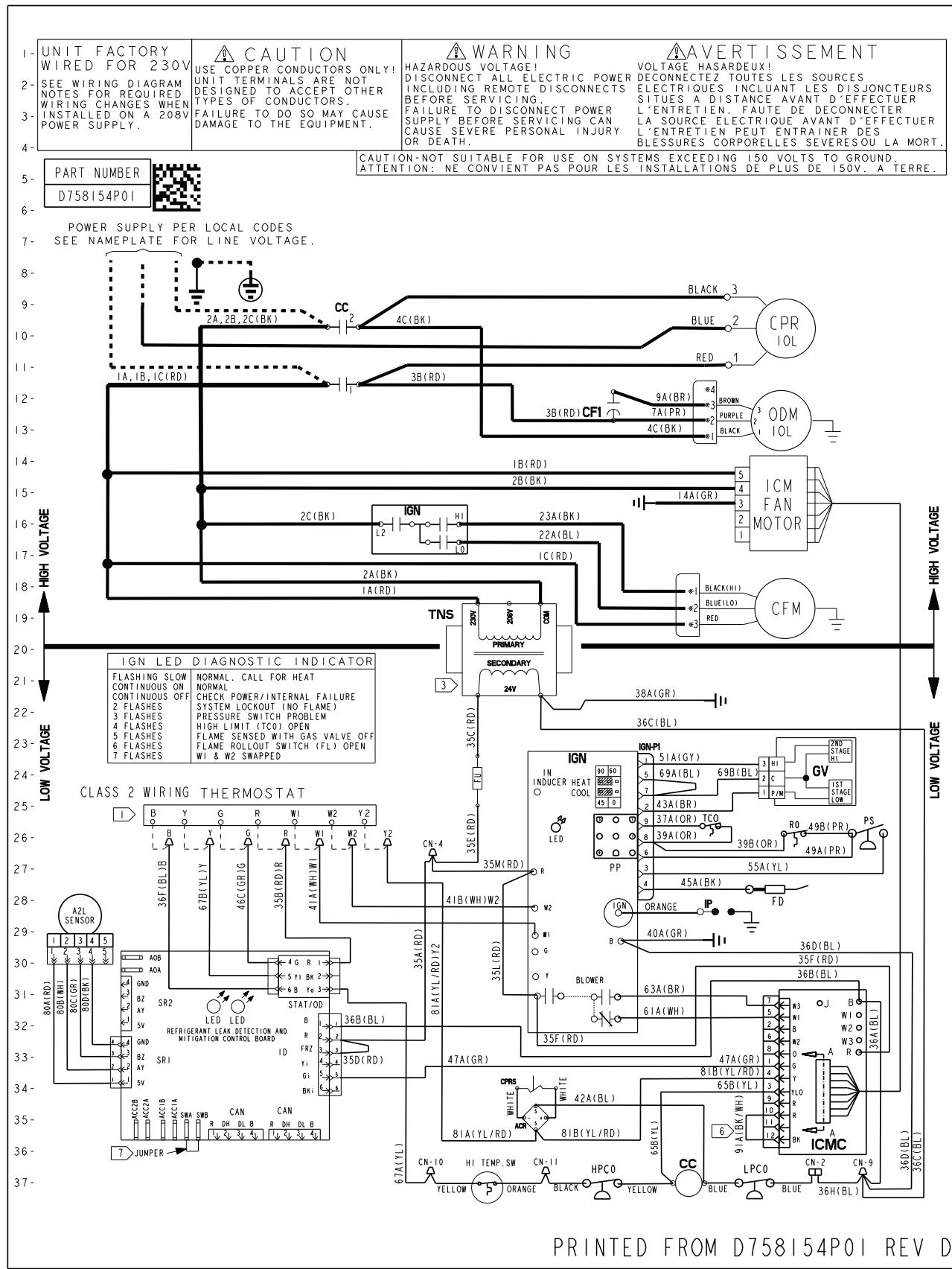


Figure 6. 5YCZ5036A31-60A3

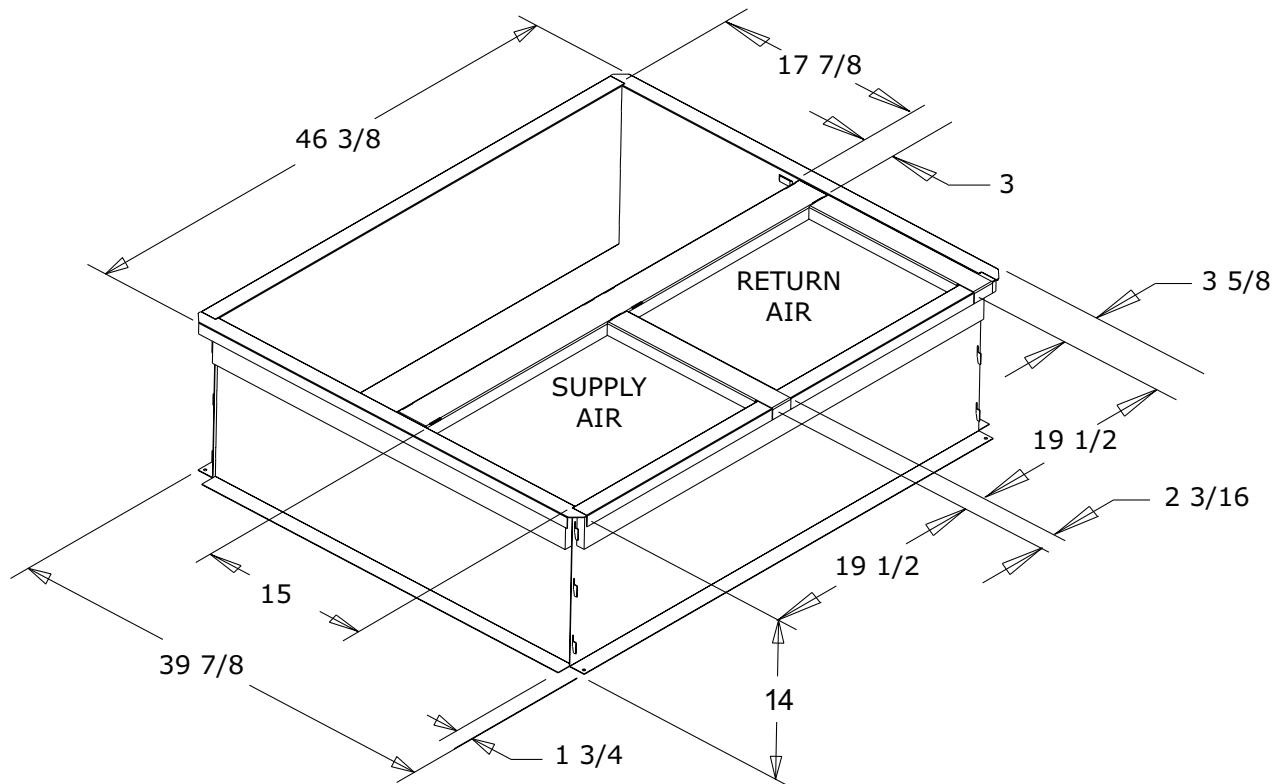




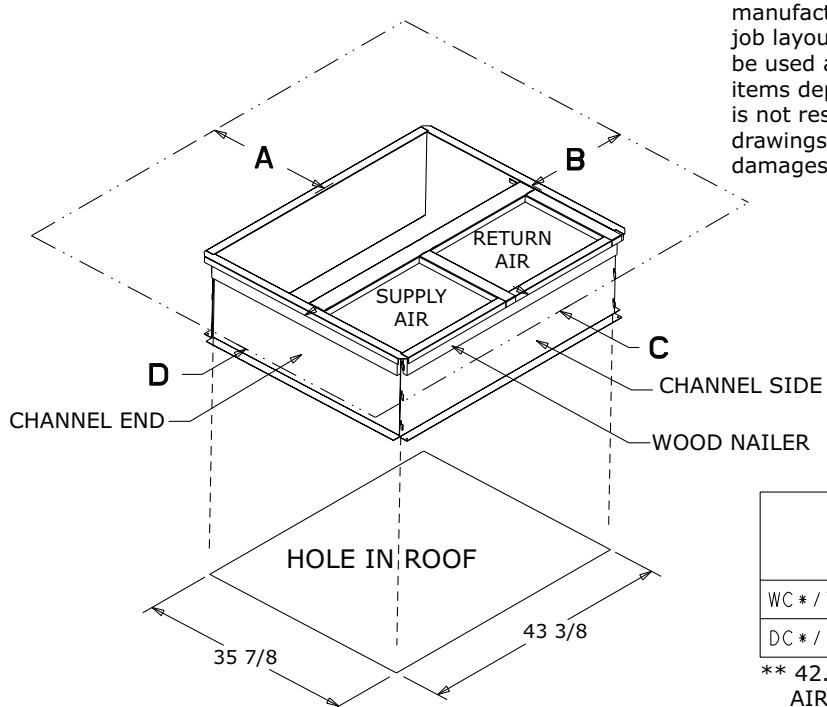
# Full Perimeter Roof Mounting Curb

Figure 7. 2.0 – 3.0 Ton Models

## BAYCURB050A Full Perimeter Roof Mounting Curb

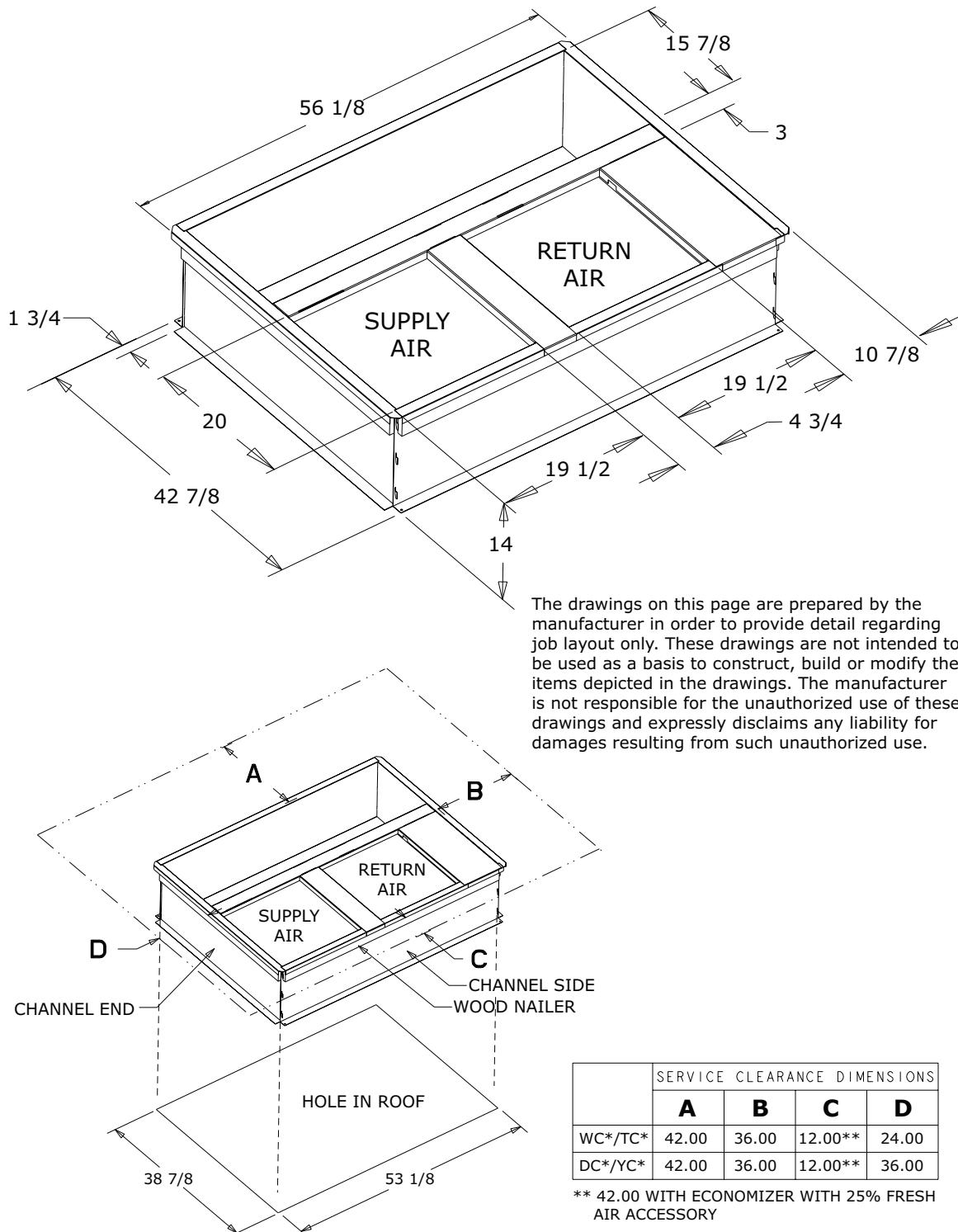


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	SERVICE CLEARANCE DIMENSIONS			
	A	B	C	D
WC * / TC *	42.00	36.00	12.00**	24.00
DC * / YC *	42.00	36.00	12.00**	36.00

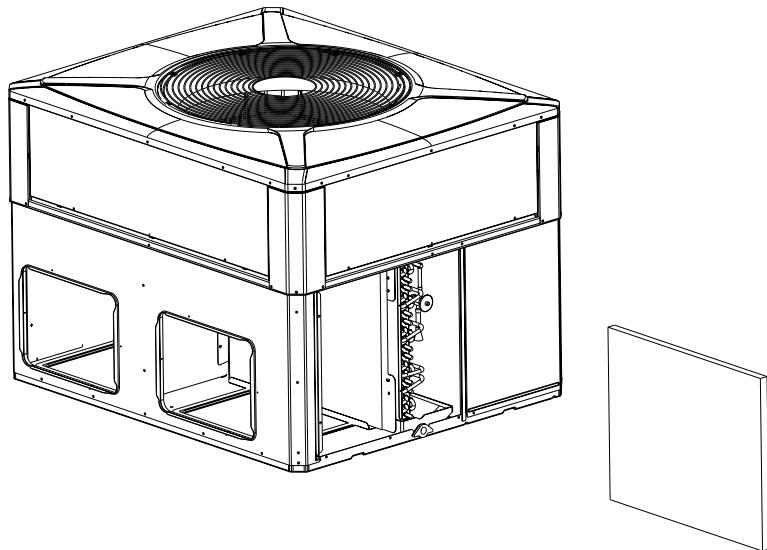
\*\* 42.00 WITH ECONOMIZER WITH 25% FRESH AIR ACCESSORY

**Figure 8. 3.5 – 5.0 Ton Models**
**BAYCURB051A Full Perimeter Roof Mounting Curb**


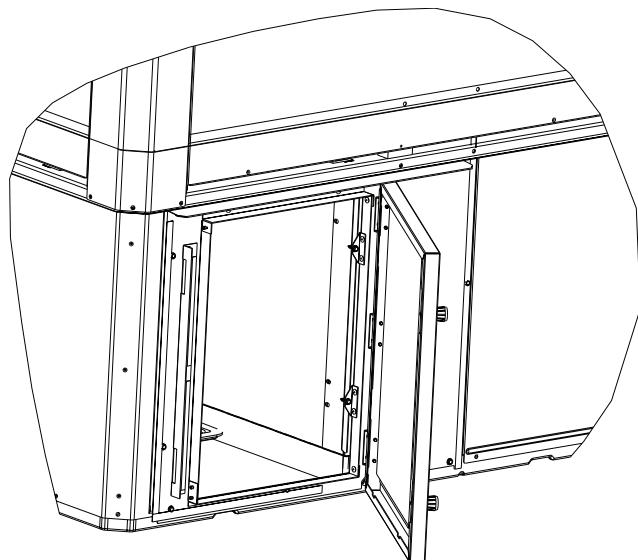


## Optional Equipment – Filter Rack

**Figure 9. BAYFLTR101 Filter Rack (2.0 – 3.0 Ton Models)  
BAYFLTR201 (3.5 – 5.0 Ton Models)  
(Mounts in Filter/Coil Section)**



**Figure 10. BAYACCDOR1A Hinged Filter Access Door (2.0 – 3.0 Ton Models)  
BAYACCDOR2A (3.5 – 5.0 Ton Models)  
Replaces Filter/Coil Access Panel**

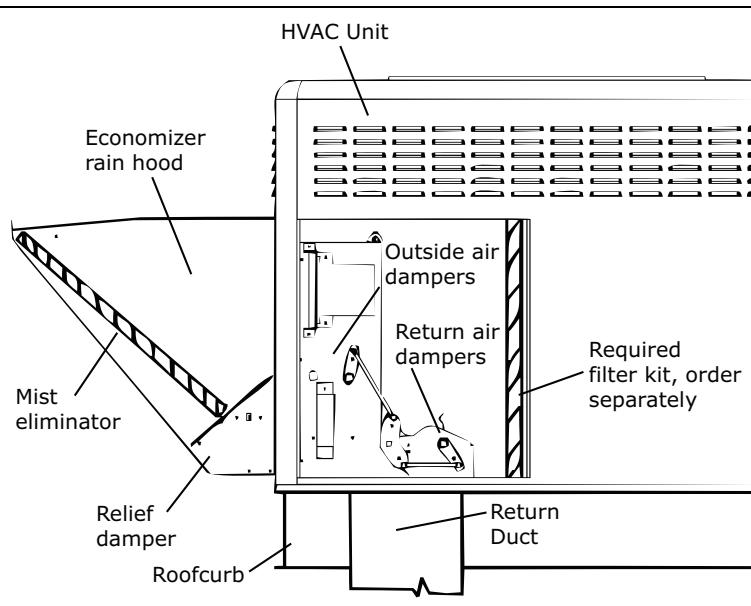


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## Optional Equipment — Economizer

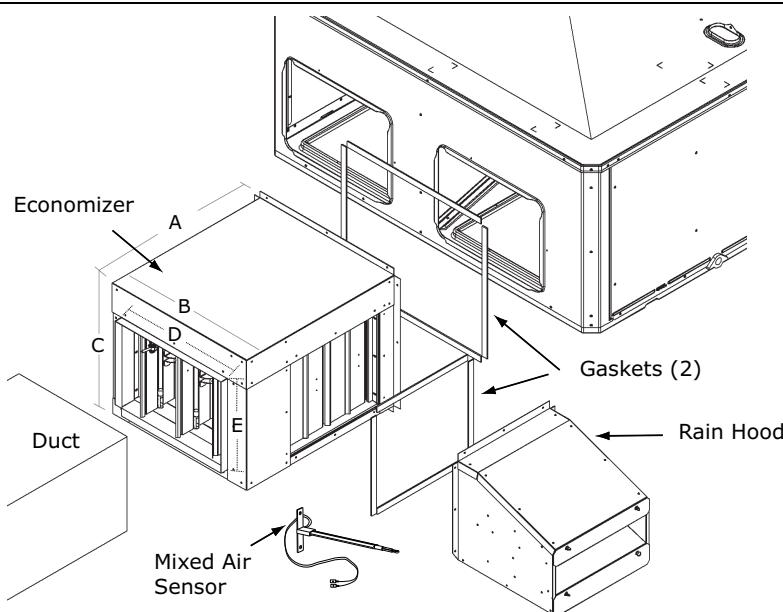
**Table 5. BAYECON107, 108A Down Discharge Economizer and Rain Hood  
(Mounts Over Horizontal Return Air Opening)**

Economizer	Unit Application Models
BAYECON107A	2.0 — 3.0 Ton Models
BAYECON108A	3.5 — 5.0 Ton Models



**Table 6. BAYCON207, 208A Horizontal Economizer and Rain Hood**

Economizer	Models	A	B	C	D	E	F
BAYECON207A	2.0 — 3.0 Ton	22"	20"	16-7/8"	15-11/16"	11-11/16"	15"
BAYECON208A	3.5 — 5.0 Ton	26"	22-21/32"	19"	17-11/16"	14-11/16"	21-3/8"



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## Optional Equipment — Outside Air Damper

**Table 7. BAYOSAH001 and 002A Outside Air Damper  
(Replaces Filter/Coil Access Panel)**

Manual Fresh Air Model	Unit Application Models	A	B	C	D
		2.0 — 3.0 Ton	22-7/16"	20-11/16"	12-3/8"
BAYOSAH001A	3.5 — 5.0 Ton	25-3/16"	20-11/16"	12-3/8"	9-3/16"

**Table 8. BAYDMPR101 and 102A, 25% Motorized Outside Air Damper  
(Mounts Over Horizontal Return Air Opening)**

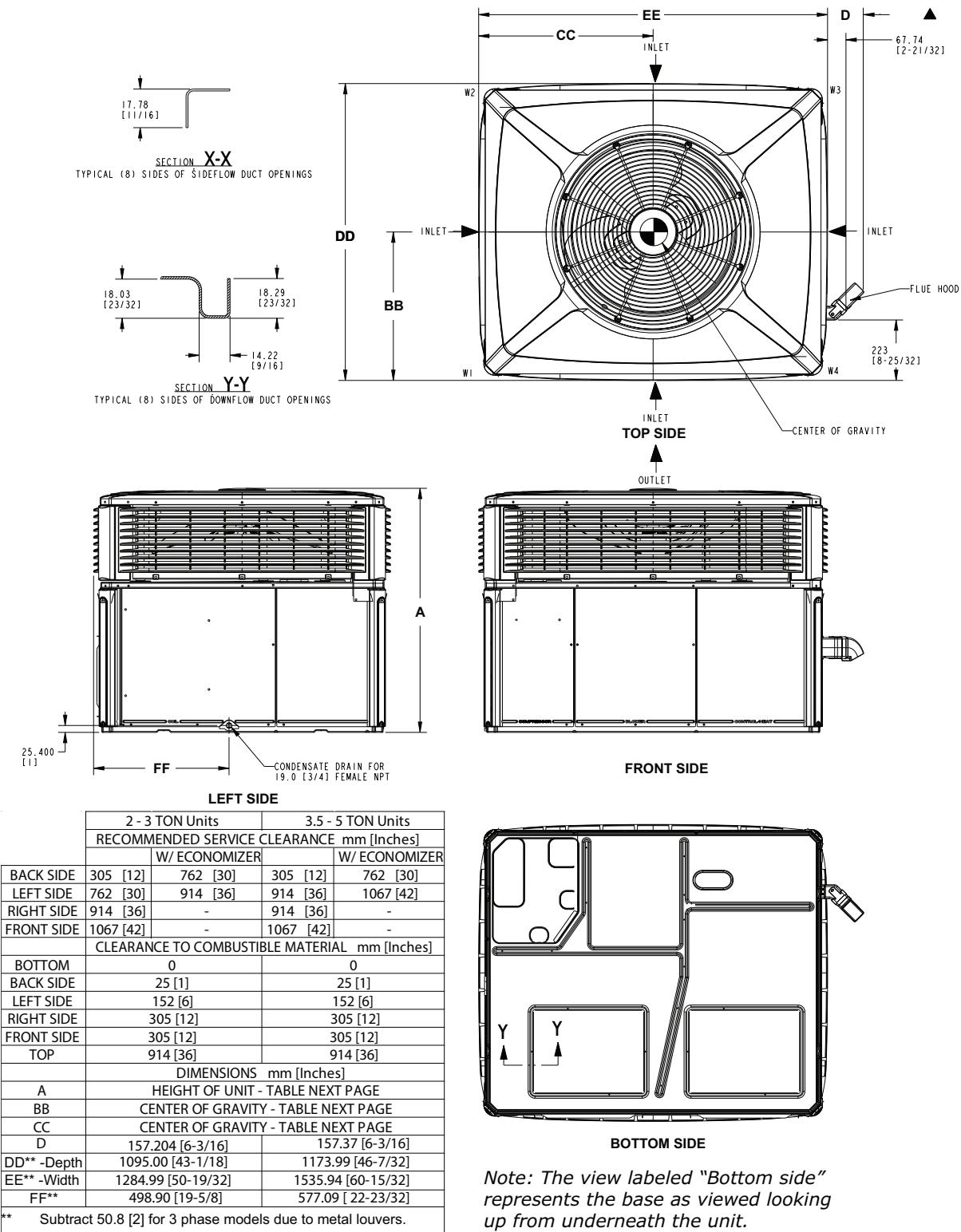
Manual Fresh Air Model	Unit Application Models	A	B	C	D	E
		2.0 — 3.0 Ton	15-13/16"	11-13/16"	10-1/4"	11-1/2"
BAYDM-PR101A	3.5 — 5.0 Ton	18-3/16"	15-1/8"	10-1/4"	11-1/2"	12-1/4"

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# Determine Unit Clearances

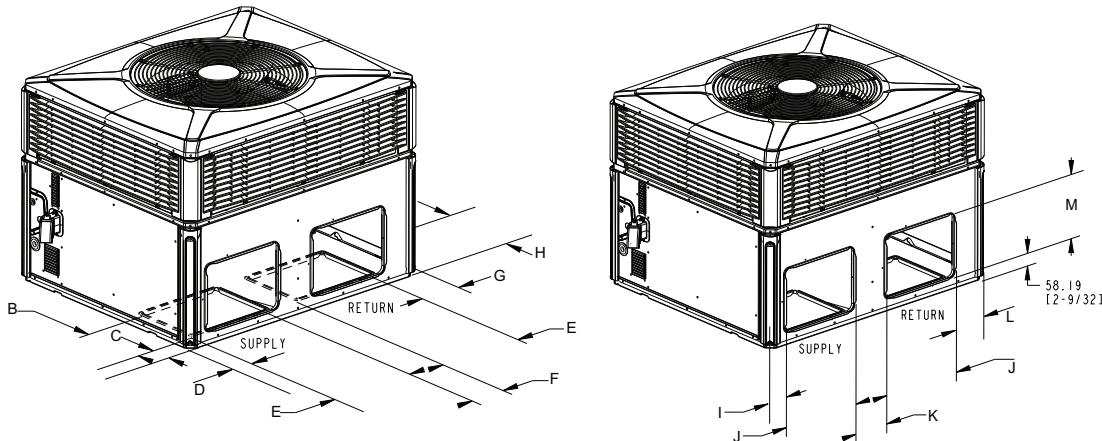
Figure 11. Space on Sides Requirements



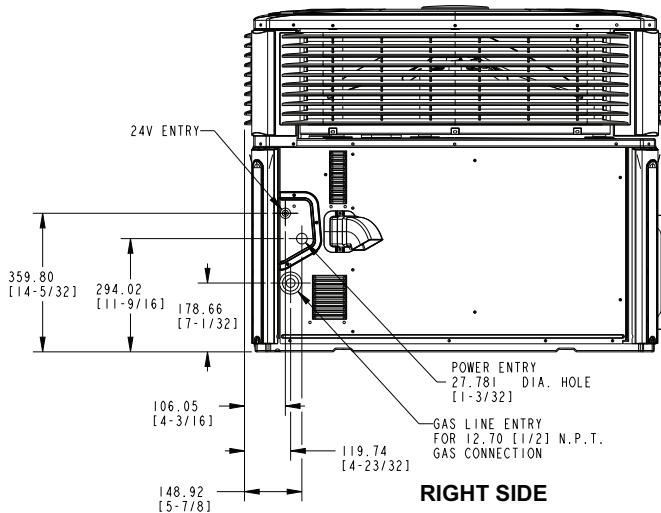


## Determine Unit Clearances

**Figure 12. Bottom and Back Duct Openings**

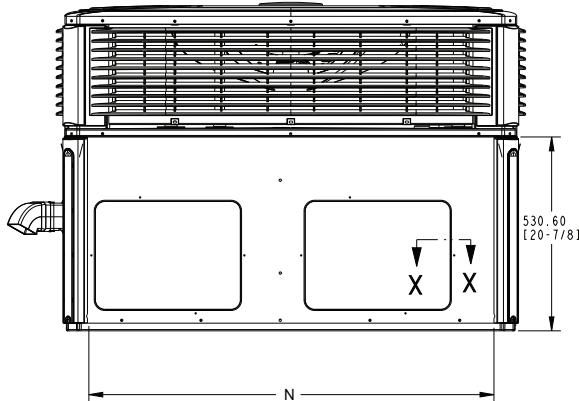


**BOTTOM DUCT OPENINGS**



**RIGHT SIDE**

**BACK DUCT OPENINGS**



**BACK SIDE**

Height mm [in]	PHYSICAL DIMENSIONS mm [in]													
	A - Height	B	C	D	E	F	G	H	I	J	K	L	M	N
5YCZ5024	898.53 [35 - 3/8]	304.80 [12.0]	75.41 [2.93]	75.41 [2.93]	406.40 [16.0]	167.89 [6.61]	173.46 [6.84]	380.21 [14.96]	79.50 [3.13]	398.22 [15.68]	176.07 [6.93]	177.55 [7.00]	296.62 [11.68]	1155.46 [45.50]
5YCZ5030	949.33 [37 - 3/8]													
5YCZ5036														
5YCZ5042														
5YCZ5048	1050.93 [41 - 3/8]	457.20 [18.0]	75.41 [2.96]	75.41 [2.96]	381.00 [15.0]	244.09 [9.61]	318.75 [12.56]	381.00 [15.0]	79.50 [3.12]	449.02 [17.68]	176.07 [6.93]	322.84 [12.71]	372.82 [14.68]	1402.34 [55.21]
5YCZ5060														

	Corner Weights KG/LBS				SHIPPING WEIGHT KG/LBS	UNIT WEIGHT KG/LBS	Center Of Gravity mm[inch]	
	W1	W2	W3	W4			BB	CC
5YCZ5024*1	62.1 [133]	38.1 [84]	26.8 [59]	42.6 [94]	201.4 [444]	169.6 [374]	406.0 [16.0]	533.4 [21.0]
5YCZ5030*1	63.1 [140]	36.3 [80]	30.4 [67]	50.3 [111]	223.6 [493]	180.1 [397]	388.6 [15.3]	558.8 [22.0]
5YCZ5036*1 (070)	62.6 [140]	36.3 [80]	30.4 [67]	50.3 [111]	223.2 [492]	179.6 [396]	388.6 [15.3]	558.8 [22.0]
5YCZ5036*1 (090)	63.1 [141]	36.7 [81]	30.8 [68]	51.3 [113]	225.4 [497]	181.9 [401]	388.6 [15.3]	558.8 [22.0]
5YCZ5042*1	66.5 [147]	50.8 [112]	45.8 [101]	68.5 [151]	289.7 [639]	231.6 [511]	444.5 [17.5]	698.5 [27.5]
5YCZ5048*1 (090)	78.8 [174]	50.8 [112]	45.8 [101]	68.5 [151]	301.9 [666]	243.9 [538]	444.5 [17.5]	698.5 [27.5]
5YCZ5048*1 (115)	83.7 [185]	46.3 [102]	42.2 [93]	73.5 [162]	303.8 [670]	245.7 [542]	419.1 [16.5]	706.1 [27.8]
5YCZ5060*1 (115)	81.5 [180]	46.3 [102]	43.1 [95]	76.7 [168]	305.6 [674]	247.6 [546]	401.3 [15.8]	711.2 [28.0]
5YCZ5036*3 (070)	61.4 [135]	36.3 [80]	30.4 [67]	50.3 [111]	222.0 [489]	178.4 [393]	388.6 [15.3]	558.8 [22.0]
5YCZ5036*3 (090)	61.9 [136]	36.7 [81]	30.8 [68]	51.3 [113]	224.3 [494]	180.7 [398]	388.6 [15.3]	558.8 [22.0]
5YCZ5048*3 (090)	77.1 [170]	50.8 [112]	45.8 [101]	68.5 [151]	300.3 [662]	242.2 [534]	444.5 [17.5]	698.5 [27.5]
5YCZ5048*3 (115)	82.9 [183]	46.3 [102]	42.2 [93]	73.5 [162]	303.0 [668]	244.9 [540]	419.1 [16.5]	706.1 [27.8]
5YCZ5060*3 (115)	79.9 [176]	46.3 [102]	43.1 [95]	76.7 [168]	304.0 [670]	246.0 [542]	401.3 [15.8]	711.2 [28.0]



# Mechanical Specifications

## 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 Climatuff® two-stage compressor features internal over temperature and pressure protector, total dipped hermetic motor. Other features include: centrifugal oil pump, and low vibration and noise.

### Evaporator Coil —

**(2-4 Ton Models)** All aluminum micro channel, extruded tubes, mechanically bonded to aluminum fins and factory pressure tested at 480 PSIG and leak tested at 250 to 300 PSIG. All units have TXV to control refrigerant flow.

**(5 Ton Models)** Internally enhanced 3/8" OD seamless copper tubing mechanically bonded to aluminum fins, factory pressure tested at 480 PSIG and leak tested at 250 to 300 PSIG. All units have TXV to control refrigerant 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 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, 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 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.



## Mechanical Specifications

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**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. Multi-port 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 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.



## **Notes**

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