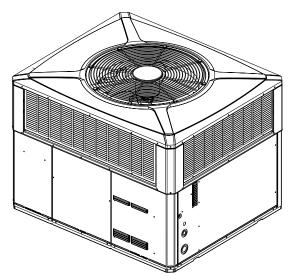
# Submittal

### Single Packaged Heat Pump 14 SEER Convertible

4WCC4042A1000A



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

June 2020

4WCC4042A-SUB-1F-EN

# **Product Specifications**

MODEL	4WCC4042A1000A
RATED Volts/PH/Hz	208-230/1/60
Performance Cooling BTUH (a)	43000
Indoor Airflow (CFM)	1367
Power Input (KW)	3.5
EER/SEER (BTU/Watt-Hr.) <sup>(b)</sup>	12.00 / 14.00
Sound Power Rating [dB(A)] <sup>(c)</sup>	71.5
PERFORMANCE HEATING	
(High Temp.) BTUH	37,600
Power Input (KW)	3.45
(Low Temp.) BTUH	22800
Power Input (KW)	1.94
HSPF (BTUH/Watt-Hr)	8.0
<b>POWER CONN</b> . – V/Ph/Hz	208-230/1/60
Min. Brch. Cir. Ampacity (d)	28.3
Fuse Size — Max. (amps)	45
Fuse Size — Recmd. (amps)	45
COMPRESSOR	SCROLL
VOLTS/PH/HZ	208-230/1/60
R.L. Amps — L.R. Amps	16.7/123.9
OUTDOOR COIL - TYPE	SPINE FIN
Rows/F.P.I	2 / 24
Face Area (sq. ft.)	20.54
Tube Size (in.)	3/8
Refrigerant Control	EXPANSION VALVE
INDOOR COIL - TYPE	PLATE FIN
Rows/F.P.I	3 / 15
Face Area (sq. ft.)	5.0
Tube Size (in.)	3/8
Refrigeration Control	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT
OUTDOOR FAN - TYPE	SWEPT

DIA. (IN.)	28.3					
DRIVE/NO. SPEEDS	DIRECT / 3					
CFM @ 0.0 in. w.g. <sup>(e)</sup>	4400					
Motor — HP/R.P.M	1/4 / 798					
Volts/Ph/Hz	208-230/1/60					
F.L. Amps/L.R Amps	1.51/3.07					
INDOOR FAN - TYPE	CONSTANT TORQUE ECM					
Dia. x Width (in.)	10.62 X 10.62					
Drive/No. Speeds	DIRECT / 3					
CFM @ 0.0 in. w.g. (f)	SEE FAN PERF TABLE					
Motor — HP/R.P.M.	3/4 / 1050					
Volts/Ph/Hz	208-230/1/60					
F.L. Amps	6					
FILTER / FURNISHED	NO					
Type Recommended	THROWAWAY					
Recmd. Face Area (sq. ft) (g)	5.3					
REFRIGERANT	R-410					
Charge (lbs.)	8.33					
CHARGING SPECIFICATIONS						
Subcooling	9°					
DIMENSIONS	HXDXW					
Crated (in.)	48 X 45 X 52					
WEIGHT						
Shipping (lbs.) / Net (lbs.)	548 / 444					
(a) Rated in accordance with AHRI Standard 210/240.						

<sup>(a)</sup> Rated in accordance with AHRI Standard 210/240.

(b) Rated in accordance with D.O.E. test procedure.

(c) Sound Power values are not adjusted for AHRI 270–95 tonal corrections.

(d) Calculated in accordance with currently prevailing Nat'l Electrical Code.

(e) Standard Air – Dry Coil – Outdoor.
 (f) Standard Air – Dry Coil – Indoor

(g) 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<sup>″</sup> W.C.

# **Outline Drawings**

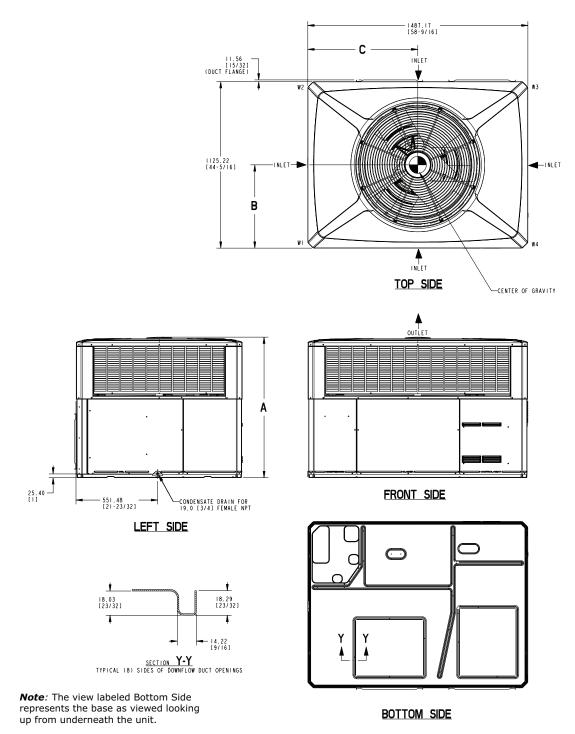
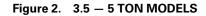
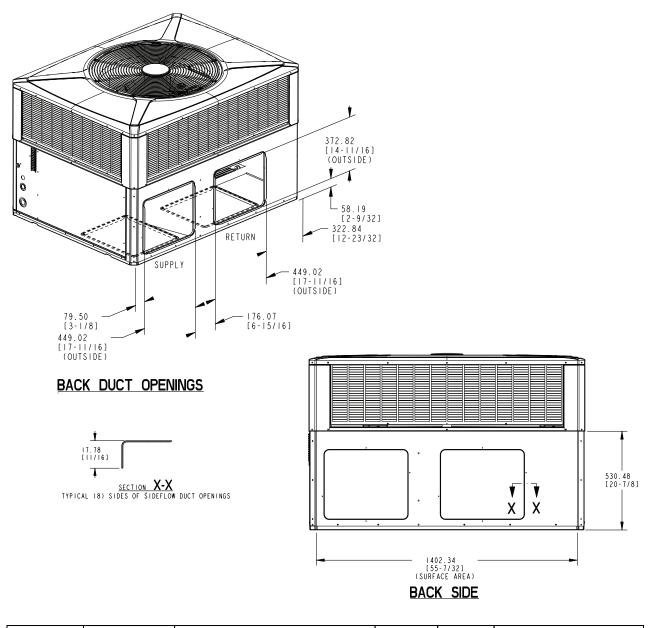
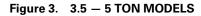


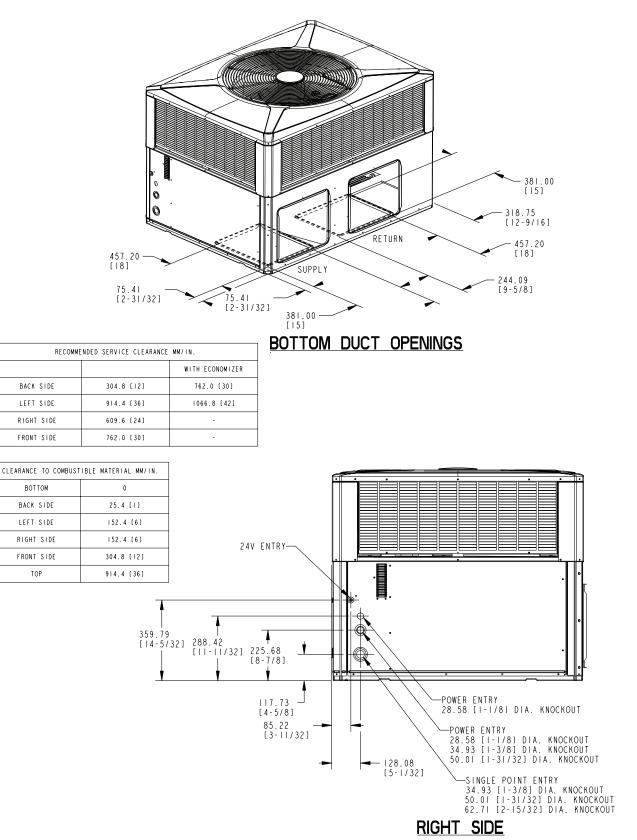
Figure 1. 3.5 - 5 TON MODELS





Model	Height MM/IN	APPRO	X. CORNEF KG / LBS		T	SHIPPING	TOTAL UNIT	CENTER OF MM/	<b>-</b>
Model	А	W1	W2	W3	W4	KG / LBS	WEIGHT KG / LBS	В	С
4TCC4042	898.53 [35-3/8]	71.8 [158]	47.2 [104]	35.2 [78]	53.6 [118]	254.5 (561)	207.3 (457)	470.0 [18.5]	731.0 [28.8]
4TCC4048		72.0 [159]	45.0 [99]	33.8 [75]	54.4 [120]	252.6 (557)	205.4 (453)	433.0 [17.0]	743.3 [29.3]
4TCC4060	1000.13 [39-3/8]	78.0 [172]	46.3 [102]	34.9 [77]	59.0 [130]	265.8 (586)	218.6 (482)	414.0 [16.3]	635.0 [25.0]
4WCC4042		64.4 [142]	47.6 [105]	39.5 [87]	49.9 [110]	248.6 (547.9)	201.4 (444)	449.6 [17.7]	641.8 [25.3]
4WCC4048		68.9 [152]	40.8 [90]	30.8 [68]	52.2 [115]	240.0 (529)	192.8 (425)	414.0 [16.3]	635.0 [25.0 <u>]</u>
4WCC4060	1050.93 [41-3/8]	79.4 [175]	47.2 [104]	35.8 [79]	59.9 [132]	269.5 (594)	222.3 (490)	414.0 [16.3]	635.0 [25.0]





# Indoor Fan Performance (230v)

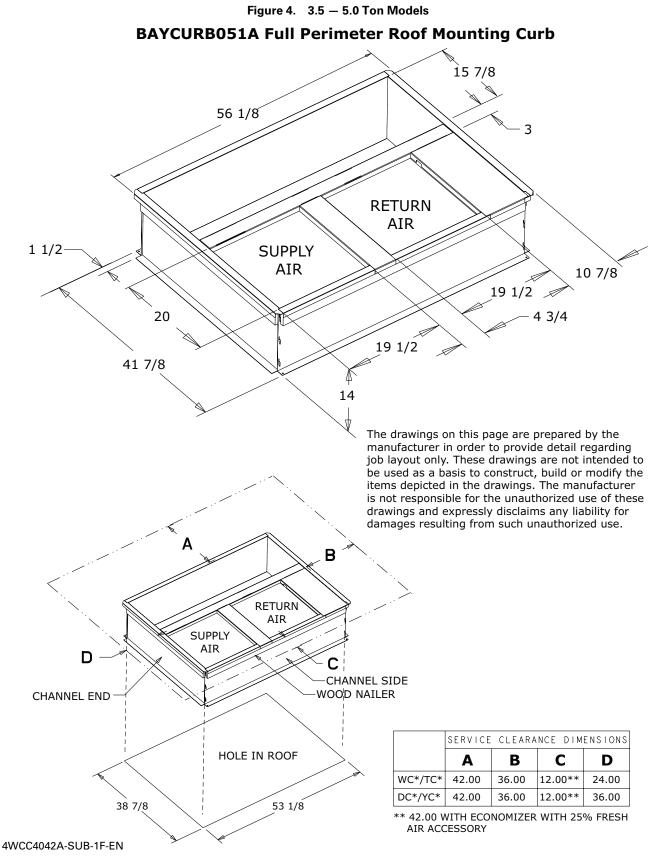
#### Table 1. Horizontal Airflow

4WCC	4042A1		EXTERNAL STATIC PRESSURE (IN. WG)									
MOTOF	R 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	257	263	272	282	292	302	311	322	-	-	-
LOW	CFM	1411	1355	1295	1239	1189	1145	1104	1060	-	-	-
MEDIUM	WATTS	370	377	386	398	410	421	431	438	-	-	-
MEDIOM	CFM	1615	1550	1495	1445	1397	1351	1312	1285	-	-	-
HIGH	WATTS	-	510	522	531	540	552	565	575	-	-	-
nigh	CFM	-	1732	1683	1628	1576	1533	1496	1458	-	-	-

#### Table 2. Down Airflow

4WCC40	)42A1		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
COOLING	WATTS	262	268	277	288	298	308	318	328	-	-	-
— LOW	CFM	1397	1342	1282	1226	1177	1134	1093	1049	-	-	-
COOLING	WATTS	378	384	394	406	418	430	439	447	-	-	-
— MED	CFM	1599	1535	1480	1430	1383	1338	1299	1272	-	-	-
COOLING	WATTS	-	520	533	541	551	563	576	586			
— HIGH	CFM	-	1715	1666	1612	1560	1518	1481	1443	-	-	-

### **Full Perimeter Roof Mounting Curb**



# **Supplementary Electric Heater**

		RATED VOLT- PHAS		AMPS	HEA CAPA		NO. OF	KW/S	STAGE	МСА	MAX. FUSE OR HACR CKT BKR	CANADA ONLY MAX.
MODEL	MODEL	AGE			ĸw	втин	STAGES	1	2		SIZE	CKT BKR SIZE
4024-4060	BAYHTRV105	208/240	1	18/21	3.76/5.0	12800/ 17100	1	3.76/ 5.0	_	23/26	25/30	25/30
4024-4060	BAYHTRV108	208/240	1	29/33	6.0/8.0	20500/ 27300	1	6.0/ 8.0	_	36/41	40/45	40/45
4024-4060	BAYHTRV110	208/240	1	36/42	7.5/10.0	25600/ 34100	1	7.5/ 10.0	_	45/52	45/60	45/60
4030-4060	BAYHTRV115	208/240	1	54/63	11.27/ 15.0	38500/ 51200	2	7.5/ 10.0	3.76/ 5.0	68/78	70/80	70/80
4048-4060	BAYHTRV120	208/240	1	72/83	15.0/ 20.0	51200/ 68300	2	7.5/ 10.0	7.5/ 10.0	90/ 104	90/110	90/110
4060	BAYHTRV125	208/240	1	90/ 104	18.78/ 25.0	64100/ 85300	2	11.26/ 15.0	7.5/ 10.0	113/ 130	125/150	125/150

#### Table 3. BAYHTRV — Supplementary Electric Heaters

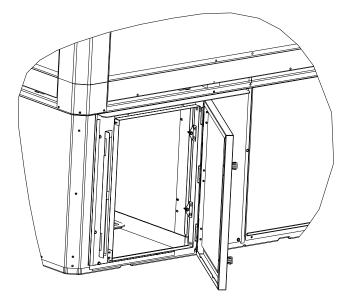
#### Table 4. BAYSPEK — Single Power Entry Kit

	SINGLE CIRCUIT POWER AMPACITY AND OVER CURRENT PROTECTION											
UNIT MODEL	SINGLE POWER ENTRY KIT	HEATER MODEL	MIN CKT AMP	MAX OVER-CURRENT DEVICE								
		BAYHTRV105	54	60								
	BAYSPEK62	BAYHTRV108	69	70								
4WCC4042A		BAYHTRV110	80	80								
	BAYSPEK63	BAYHTRV115	106	110								
	DATSPEROS	BAYHTRV120	132	150								

### **Optional Equipment — Filter Rack**

Figure 5. BAYFLTR101 Filter Rack (2.0 – 3.0 Ton Models) BAYFLTR201 (3.5 – 5.0 Ton Models) (Mounts in Filter/Coil Section)

Figure 6. BAYACCDOR1A Hinged Filter Access Door (2.0 – 3.0 Ton Models) BAYACCDOR2A (3.5 – 5.0 Ton Models) Replaces Filter/Coil Access Panel



**Note:** 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 – Economizer**



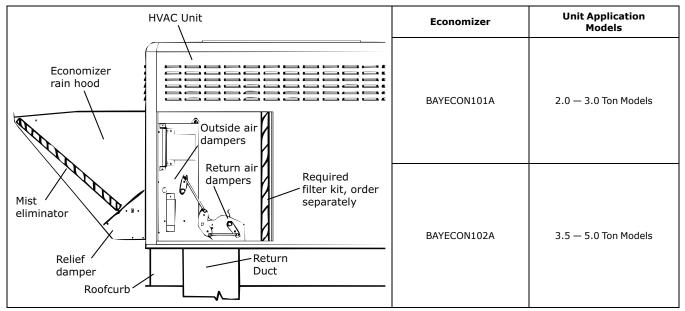
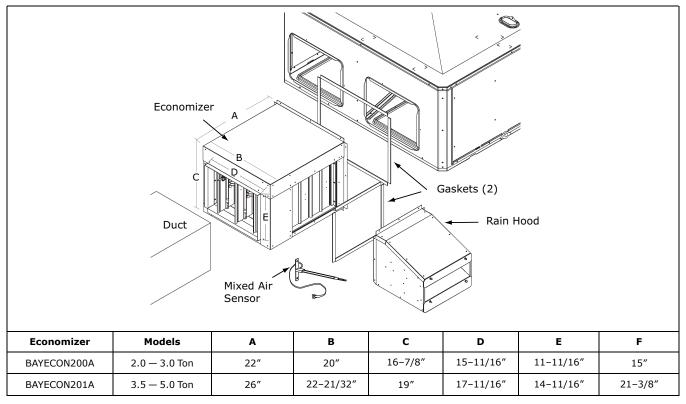


Table 6. BAYCON200, 201A Horizontal Economizer and Rain Hood



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### **Optional Equipment – Outside Air Damper**

#### Table 7. BAYOSAH001 and 002A

	Manual Fresh Air Model	Unit Application Models	A	В	с	D
D C C FULLY OPEN 2/3 1/3 d d p	BAYOSAH001A	2.0 — 3.0 Ton	22-7/16″	20-11/16″	12-3/8″	9–3/16″
B FULLY CLOSED	BAYOSAH002A	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	Α	В	с	D	E
	BAYDM- PR101A	2.0 — 3.0 Ton	15-13/16″	11-13/16″	10-1/4″	11-1/2″	12-1/4″
E	BAYDM- PR102A	3.5 — 5.0 Ton	18-3/16″	15-1/8″	10-1/4″	11-1/2″	12-1/4″

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# **Mechanical Specifications**

#### General

The units shall be horizontal airflow as shipped and convertible to downflow. All units shall be factory assembled, piped, internally wired and fully charged with refrigerant. Units shall be certified to UL Standard 1995. All units shall be factory run tested to check cooling operation, fan and blower rotation and control or TXV sequence. Units shall be designed to operate at ambient temperatures between 115°F and 55°F in cooling as manufactured. Cooling performance shall be rated in accordance with AHRI standards.

#### Unit Casing

All components shall be mounted in a weatherresistant steel cabinet with an enamel finish. Access panels shall be provided for unit controls and indoor coil and fans. Indoor air section compartment shall be completely insulated with fireproof, permanent, odorless fiber material. Knockouts shall be provided for utility and control connections. Drain connections shall be provided to accommodate indoor water runoff.

#### Compressor

The compressor shall be hermetically sealed, high efficiency scroll compressors. Internal overcurrent and over temperature protection, internal pressure relief shall be standard. Other features include centrifugal oil pump, low vibration and noise.

#### **Refrigeration System**

All units shall have refrigerant control. Service pressure tap ports and a refrigerant line filter shall be standard.

**Evaporator Coil** Internally enhanced 3/8" OD seamless copper tubing mechanically bonded to aluminum fins, factory pressure and leak tested at 480 – 650 psig. All units have TXV to control refrigerant flow.

#### **Condenser Coil**

The Spine Fin <sup>™</sup> condenser coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8″ 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

Constant Torgue, forward-curved, centrifugal wheel in a Composite Vortica ® Blower housing. Motor shall

have thermal overload protection and permanently lubricated motor bearings. Motor/blower assembly isolated from unit with rubber mounts.

#### Outdoor Fan

One direct-drive, statically and dynamically balanced propeller fan shall be used in a draw-through vertical discharge configuration. Permanently lubricated weather proof motor shall have built-in thermal overload protection.

#### System Controls

System controls include condenser fan, evaporator fan and compressor contactors.

#### Accessories Roof Curb

The roof curb shall be designed to mate with the unit and provide support and complete weathertight installation when properly installed. Adhesive back polyurethane sealing strips shall be provided to ensure an airtight seal between supply and return openings of the curb and unit. The roof curb design allows field fabricated ductwork to be connected directly to the curb. Curb ships knocked down for field assembly, and includes factory installed wood nailer strips.

#### **Electric Heaters**

Each heater assembly shall include power supply fusing if over 48 amps, automatic resetting limit switches and heat limiters for thermal protection. Heaters shall be provided with polarized plugs for quick connection to unit low voltage wiring. Electric heat modules shall be UL listed.

#### **Single Source Power Entry**

This accessory when used with electric heat accessory shall allow single source power connection to unit and heater combination. Single source power entry kits shall have specific matching heater(s). Kit shall include high voltage terminal blocks, fuse blocks and fuses, cut-to-length interconnecting wiring, and junction box (if required) to provide power sources with fuse protection as required for both the unit and accessory heater. Kit components shall install within the heater cabinet in the heater access section. Single source branch power circuit shall be protected and wired in accordance with local codes.

#### **Fully 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 pigtails 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. Economizer requires BAYRLAY004A relay kit to interface the economizer to the heat pump.

#### **Manual Outside Air Dampers**

Rain hood and screen shall be field installed. Suitable for up to 25% outside air.

#### Start Kit

Extra compressor starting capacity for single phase equipment.

#### Control Options Standard Indoor Thermostats

Two stage heating/cooling or one stage heating/ cooling thermostats shall be available in either manual or automatic changeover.

#### **Programmable Electronic Night Setting Thermostat**

Programmable electronic thermostat shall provide heating setback and cooling setup with 7–day programming capability. 1H/1C or 2H/2C models available.

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