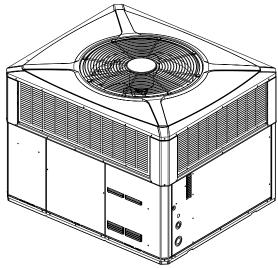
# **Submittal**

### Single Packaged Heat Pump 13.4 SEER2 Convertible

4WCC4060E1000A



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

## **Product Specifications**

MODEL	4WCC4060E1000A
RATED Volts/PH/Hz	208-230/1/60
Performance Cooling BTUH (a)	57000
Indoor Airflow (CFM)	1835
Power Input (KW)	4.85
EER2/SEER2 (BTU/Watt-Hr.) (b)	11.00 / 13.40
Sound Power Rating [dB(A)] (c)	77.3
PERFORMANCE HEATING	
(High Temp.) BTUH	55000
Power Input (KW)	4.71
(Low Temp.) BTUH	35400
Power Input (KW)	4.34
HSPF2 (BTUH/Watt-Hr)	7.0
POWER CONN. — V/Ph/Hz	208-230/1/60
Min. Brch. Cir. Ampacity (d)	39.0
Fuse Size — Max. (amps)	60
Fuse Size — Recmd. (amps)	60
COMPRESSOR	SCROLL
VOLTS/PH/HZ	208-230/1/60
R.L. Amps — L.R. Amps	24.4/ 144.2
OUTDOOR COIL — TYPE	SPINE FIN
Rows/F.P.I	2 / 24
Face Area (sq. ft.)	22.99
Tube Size (in.)	3/8
Refrigerant Control	EXPANSION VALVE
INDOOR COIL — TYPE	PLATE FIN
Rows/F.P.I	4/15
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 / 1				
CFM @ 0.0 in. w.g. (e)	5500				
Motor — HP/R.P.M	1/3 / 825				
Volts/Ph/Hz	208-230/1/60				
F.L. Amps/L.R Amps	1.7 / 3.5				
INDOOR FAN — TYPE	CONSTANT TORQUE ECM				
Dia. x Width (in.)	11.87 X 10.68				
Drive/No. Speeds	DIRECT / 4				
CFM @ 0.0 in. w.g. (f)	SEE FAN PERF TABLE				
Motor — HP/R.P.M.	1 / 1050				
Volts/Ph/Hz	208-230/1/60				
F.L. Amps	6.9				
FILTER / FURNISHED	NO				
Type Recommended	THROWAWAY				
Recmd. Face Area (sq. ft) (g)	5.3				
REFRIGERANT	R-410A				
Charge (lbs.)	11.0				
CHARGING SPECIFICATIONS					
Subcooling	6°				
DIMENSIONS	HXDXW				
Crated (in.)	52 X 47 X 62				
WEIGHT					
Shipping (lbs.) / Net (lbs.)	594 / 490				
· · · · · · · · · · · · · · · · · · ·					

- (a) 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
- (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" W.C.

## **Outline Drawings**

- EE CC INLET 17.78 [11/16] SECTION X-X
TYPICAL (8) SIDES OF SIDEFLOW DUCT OPENINGS DD → NLET--INLET 18.03 [23/32] 18 29 [23/32] BB 14.2<sup>2</sup> [9/16] SECTION Y-Y TYPICAL (8) SIDES OF DOWNFLOW DUCT OPENINGS INLET TOP SIDE CENTER OF GRAVITY  $\blacksquare$ OUTLET -CONDENSATE DRAIN FOR 19.0 [3/4] FEMALE NPT FRONT SIDE LEFT SIDE 2 - 3 TON Units 3.5 - 5 TON Units RECOMMENDED SERVICE CLEARANCE mm [Inches] W/ ECONOMIZER W/ ECONOMIZER BACK SIDE 305 [12] 762 [30] 762 [30] LEFT SIDE 762 [30] 914 [36] 914 [36] 1067 [42] RIGHT SIDE 610 [24] 610 [24] FRONT SIDE 1067 [42] 762 [30] CLEARANCE TO COMBUSTIBLE MATERIAL mm [Inches] BOTTOM 25 [1] 25 [1] BACK SIDE LEFT SIDE 152 [6] 152 [6] **RIGHT SIDE** 152 [6] 152 [6] FRONT SIDE 305 [12] 305 [12] TOP 914 [36] 914 [36] DIMENSIONS mm [Inches]
HEIGHT OF UNIT - TABLE NEXT PAGE Α ВВ CENTER OF GRAVITY - TABLE NEXT PAGE CC CENTER OF GRAVITY - TABLE NEXT PAGE **BOTTOM SIDE** DD -Depth 1049.02 [41-5/16] 1125.22 [44-5/16] EE -Width 1487.17 [58-9/16] 1240.28 [48-27/32] FF 497.8 [19-5/8] 576.00 [22-11/16]

Figure 1. 2 - 5 Ton Models

4WCC4060E-SUB-1A-EN 3

Μ В 58.19 [2-9/32] SUPPLY **BOTTOM DUCT OPENINGS** BACK DUCT OPENINGS 24V ENTRY-530.49 [20-7/8] 359.79 [14-5/32] Χ Χ 288.42 [||-|<sub>1</sub>|/32] 225.68 [8-7/8] 117.73 [4-5/8] 85.22 [3-11/32] – N --POWER ENTRY 28.58 [I-I/8] DIA. KNOCKOUT (SURFACE AREA) -POWER ENTRY 28.58 [1-1/8] DIA. KNOCKOUT 34.93 [1-3/8] DIA. KNOCKOUT 50.01 [1-31/32] DIA. KNOCKOUT 128.08 [5-1/32] BACK SIDE RIGHT SIDE

Figure 2. 2 - 5 Ton Models

	Height mm[in]		PHYSICAL DIMENSIONS mm[In]											
	A -Height	В	С	D	E	F	G	Н	I	J	K	L	М	N
4WCC4024	898.53 [35.38]	204.00	75.41	75.41	406.40	167.00	172.46	204.00	70.50	200.22	176.07	177.55	206.62	1155.45
4WCC4030	949.33 [37.38]	304.80 [12]	75.41 [2.93]	75.41 [2.93]	406.40 [16]	167.89 [6.61]	173.46 [16]	304.80 [6.8]	79.50 [3.13]	398.22 [15.68]	176.07 [6.93]	177.55 [6.99]	296.62 [11.68]	1155.45 [45.49]
4WCC4036	949.33 [37.36]	[12]	[2.93]	[2.93]	[10]	[0.01]	[10]	[0.0]	[5.13]	[13.08]	[6.93]	[0.99]	[11.08]	[45.49]
4WCC4042	1000 12 [20 20]	457.20	75.41	75.41	201.00	244.00	210.75	201.00	70.50	440.02	176.07	222.04	272.02	1402.24
4WCC4048	1000.13 [39.38]	457.20	75.41	75.41	381.00	244.09	318.75	381.00	79.50	449.02	176.07	322.84	372.82	1402.34
4WCC4060	1050.93 [41.38]	[18]	[2.97]	[2.97]	[15]	[9.61]	[12.55]	[15]	[3.13]	[17.68]	[6.93]	[12.71]	[14.68]	[55.21]

		Corner Weig	ghts KG/LBS		SHIPPING WEIGHT	LINIT WEIGHT VC // DC	Center Of Gravity mm[inch]			
	W1	W2	W3	W4	KG/LBS	UNIT WEIGHT KG/LBS	ВВ	сс		
4WCC4024	52.9 [117]	33.3 [73]	24.1 [53]	38.3 [84]	182.3 [402]	148.6 [328]	430 [16.9]	565.3 [22.3]		
4WCC4030	55.3 [122]	50.3 [110]	16.6 [37]	39.2 [86]	195.0 [430]	161.3 [355]	413.5 [16.3]	581 [22.9]		
4WCC4036	59.6 [131]	37.3 [82]	26.6 [59]	41.7 [92]	199 [439]	165.3 [364]	430 [16.9]	535 [21.1]		
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 [529]	192.8 [425]	414.0 [16.3]	414.0 [16.3]		
4WCC4060	79.4 [175]	47.2 [104]	35.8 [79]	59.9 [132]	269.5 [594]	222.3 [490]	414.0 [16.3]	414.0 [16.3]		

## **Indoor Fan Performance**

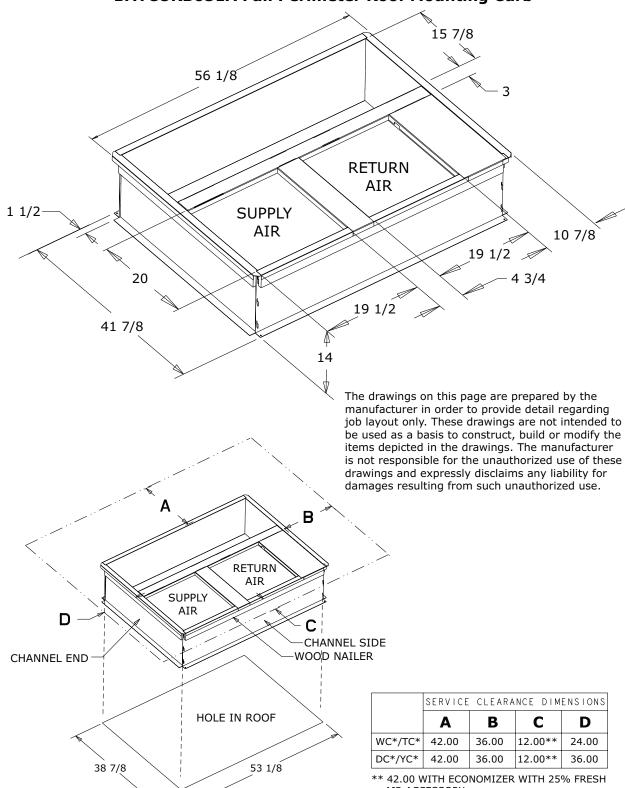
4WCC4	060E1		EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]											
Motor 9	Speed	0.0	0.1 0.2		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1		
LOW	Watts	515 [511]	523 [521]	533 [533]	544 [546]	554 [558]	-	-	-	-	-	-		
	CFM	1857 [1875]	1831 [1841]	1800 [1805]	1766 [1766]	1737 [1730]	-	-	-	-	-	-		
MED-LOW	Watts	-	632 [631]	644 [643]	655 [654]	666 [665]	677 [676]	689 [687]	699 [697]	714 [712]	728 [726]	741 [739]		
	CFM	-	2059 [2070]	2020 [2031]	1990 [2001]	1960 [1971]	1928 [1939]	1895 [1905]	1871 [1881]	1828 [1838]	1786 [1796]	1748 [1758]		
MED-HIGH	Watts	-	759 [758]	769 [771]	779 [786]	788 [801]	803 [815]	816 [829]	830 [839]	845 [849]	860 [858]	874 [872]		
MED-HIGH	CFM	-	2058 [2063]	2032 [2034]	2003 [1999]	1974 [1965]	1943 [1931]	1911 [1894]	1877 [1869]	1843 [1846]	1807 [1795]	1771 [1759]		
нісн	Watts	-	910 [908]	921 [919]	932 [930]	941 [942]	956 [960]	969 [971]	983 [988]	997 [997]	1010 [1001]	1021 [1018]		
HIGH	CFM	-	2177 [2184]	2152 [2150]	2127 [2104]	2105 [2073]	2071 [2027]	2041 [1998]	2009 [1961]	1975 [1937]	1940 [1905]	1903 [1890]		

**Note:** Airflow must not exceed 2250 CFM due to condensate blowoff.

## **Full Perimeter Roof Mounting Curb**

Figure 3. 3.5 - 5.0 Ton Models

#### **BAYCURB051A Full Perimeter Roof Mounting Curb**



AIR ACCESSORY

# **Supplementary Electric Heater**

Table 1. BAYHTRV — Supplementary Electric Heaters

UNIT	ELECTRIC HEATER	RATED VOLT-				PHASE	AMPS		TER	NO. OF	KW/S	STAGE	мса	MAX. FUSE OR HACR CKT BKR	CANADA ONLY MAX. CKT BKR
MODEL	MODEL	AGE			кw	BTUH	STAGES	1	2		SIZE	SIZE			
4024-4060	BAYHTRV105	208/240	1	18/21	3.76/5.0	12800/ 17100	1	3.76/ 5.0	ı	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	1	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	I	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 2.
 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	65	80					
	BAYSPEK62	BAYHTRV108	80	90					
4WCC4060E		BAYHTRV110	91	100					
	BAYSPEK63	BAYHTRV115	117	125					
	DATSPEROS	BAYHTRV120	143	150					

## **Optional Equipment — Filter Rack**

Figure 4. BAYFLTR101 Filter Rack (2.0 – 3.0 Ton Models) BAYFLTR201 (3.5 – 5.0 Ton Models) (Mounts in Filter/Coil Section)

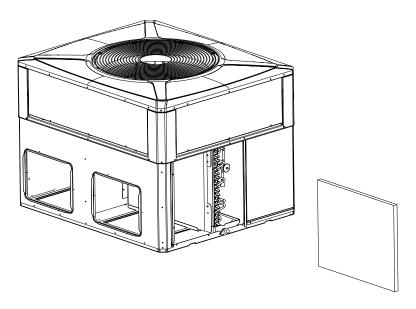
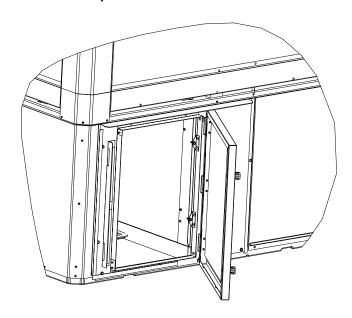


Figure 5. BAYACCDOR1A Hinged Filter Access Door (2.0 – 3.0 Ton Models)

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 3. BAYECON101,102A Down Discharge Economizer and Rain Hood (Mounts Over Horizontal Return Air Opening)

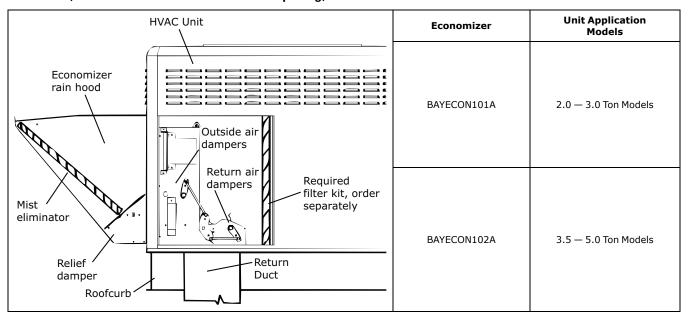
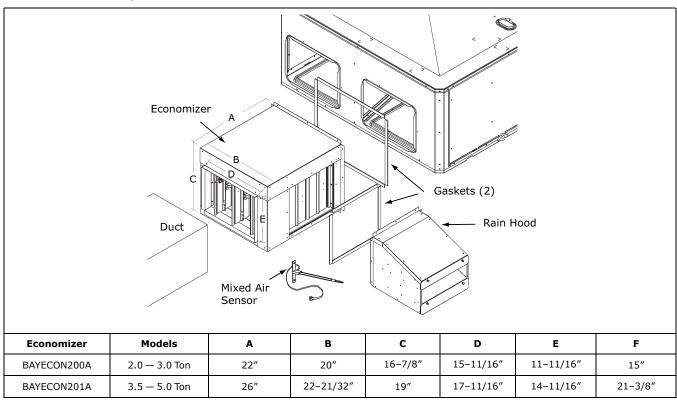


Table 4. BAYCON200, 201A Horizontal Economizer and Rain Hood



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### Optional Equipment — Outside Air Damper

Table 5. BAYOSAH001 and 002A Outside Air Damper (Replaces Filter/Coil Access Panel

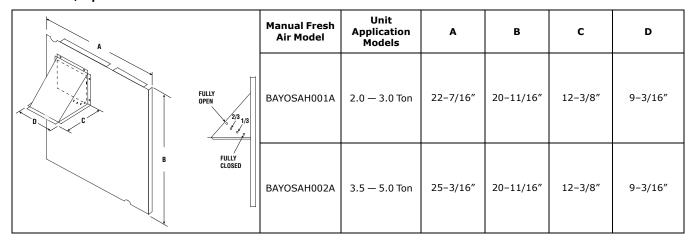


Table 6. BAYDMPR101 and 102A, 25% Motorized Outside Air Damper (Mounts Over Horizontal Return Air Opening)

. A		Manual Fresh Air Model	Unit Application Models	A	В	С	D	E
	C B	BAYDM- PR101A	2.0 — 3.0 Ton	15-13/16"	11-13/16"	10-1/4"	11-1/2"	12-1/4"
		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 weather-resistant 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 ™ 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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