Submittal

Single Packaged Heat Pump 13.4 SEER2 Convertible

4WCC4030E1000A



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

August 2022

4WCC4030E-SUB-1A-EN

Product Specifications

MODEL	4WCC4030E1000A					
RATED Volts/PH/Hz	208-230/1/60					
Performance Cooling BTUH (a)	29800					
Indoor Airflow (CFM)	985					
Power Input (KW)	2.55					
EER2/SEER2 (BTU/Watt-Hr.) ^(b)	11.00 / 13.40					
Sound Power Rating [dB(A)] (c)	70					
PERFORMANCE HEATING						
(High Temp.) BTUH	28600					
Power Input (KW)	2.31					
(Low Temp.) BTUH	17200					
Power Input (KW)	2.16					
HSPF2 (BTUH/Watt-Hr)	7.0					
POWER CONN . – V/Ph/Hz	208-230/1/60					
Min. Brch. Cir. Ampacity (d)	22.6					
Fuse Size — Max. (amps)	35					
Fuse Size — Recmd. (amps)	35					
COMPRESSOR	SCROLL					
VOLTS/PH/HZ	208-230/1/60					
R.L. Amps — L.R. Amps	14.1/68.2					
OUTDOOR COIL – TYPE	SPINE FIN					
Rows/F.P.I	2 / 24					
Face Area (sq. ft.)	13.32					
Tube Size (in.)	3/8					
Refrigerant Control	EXPANSION VALVE					
INDOOR COIL – TYPE	PLATE FIN					
Rows/F.P.I	4/15					
Face Area (sq. ft.)	3.5					
Tube Size (in.)	3/8					
Refrigeration Control	EXPANSION VALVE					
Drain Conn. Size (in.)	3/4 FEMALE NPT					
OUTDOOR FAN - TYPE	SWEPT					

DIA. (IN.)	23.4
DRIVE/NO. SPEEDS	DIRECT / 1
CFM @ 0.0 in. w.g. ^(e)	3270
Motor — HP/R.P.M	1/6/842
Volts/Ph/Hz	208-230/1/60
F.L. Amps/L.R Amps	0.85 / 1.65
INDOOR FAN - TYPE	CONSTANT TORQUE ECM
Dia. x Width (in.)	10.62 X 10.68
Drive/No. Speeds	DIRECT / 4
CFM @ 0.0 in. w.g. ^(f)	SEE FAN PERF TABLE
Motor — HP/R.P.M.	1/2 / 1050
Volts/Ph/Hz	208-230/1/60
F.L. Amps	4
FILTER / FURNISHED	NO
Type Recommended	THROWAWAY
Recmd. Face Area (sq. ft) (g)	4.0
REFRIGERANT	R-410A
Charge (Ibs.)	7.2
CHARGING SPECIFICATIONS	
Subcooling	14°
DIMENSIONS	HXDXW
Crated (in.)	48 X 45 X 52
WEIGHT	
Shipping (lbs.) / Net (lbs.)	430 / 355

^(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 Code.

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

(9) 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





FF

497.8 [19-5/8]

576.00 [22-11/16]



		Corner Weig	ghts KG/LBS		SHIPPING WEIGHT		Center Of Gravity mm[inch]		
	W1	W2	W3	W4	KG/LBS	UNIT WEIGHT KG/LBS	BB	cc	
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]	

244.09

[9.61]

318.75

[12.55]

381.00

[15]

79.50

[3.13]

449.02

[17.68]

176.07

[6.93]

322.84

[12.71]

372.82

[14.68]

1402.34

[55.21]

Figure 2. 2 - 5 Ton Models

4WCC4042

4WCC4048

4WCC4060

1000.13 [39.38]

1050.93 [41.38]

457.20

[18]

75.41

[2.97]

75.41

[2.97]

381.00

[15]

Indoor Fan Performance

4WCC4	030E1	EXTERNAL STATIC PRESSURE (IN.WG) Horizontal Airflow [Down Airflow]										
Motor S	Speed	0.0	0.0 0.1 0.2 0		0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
LOW	Watts	119 [120]	128 [128]	136 [137]	145 [145]	-	-	-	-	-	-	-
	CFM	1065 [1054]	1012 [1002]	951 [942]	894 [855]	-	-	-	-	-	-	-
	Watts	-	157 [158]	167 [167]	175 [176]	186 [186]	196 [197]	-	-	-	-	-
MED-LOW	CFM	-	1102 [1091]	1046 [1035]	993 [983]	938 [928]	877 [868]	-	-	-	-	-
	Watts	-	-	-	-	240 [242]	252 [253]	263 [264]	273 [274]	-	-	-
MED-HIGH	CFM	-	-	-	-	1085 [1074]	1032 [1022]	978 [969]	934 [925]	-	-	-
HIGH	Watts	-	-	-	-	-	308 [308]	319 [319]	329 [329]	340 [340]	350 [350]	-
	CFM	-	-	-	-	-	1116 [1105]	1069 [1058]	1031 [1021]	968 [958]	926 [917]	-

Note: Airflow must not exceed 1125 CFM due to condensate blowoff.

Full Perimeter Roof Mounting Curb



Supplementary Electric Heater

UNIT	ELECTRIC HEATER	RATED VOLT-	PHASE	AMPS	HEATER CAPACITY		NO. OF	KW/STAGE		МСА	MAX. FUSE OR HACR	CANADA ONLY MAX.
MODEL	MODEL	AGE			KW	BTUH	STAGES	1	2		MAX. FUSE OR HACR CKT BKR SIZE 25/30 40/45 45/60 70/80 90/110	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 1. BAYHTRV — Supplementary Electric Heaters

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				
4WCC4030E	BAYSPEK60	BAYHTRV105	49	50				
	RAVEREVED	BAYHTRV108	64	70				
	DATSPEROZ	BAYHTRV110	75	80				
	BAYSPEK63	BAYHTRV115	101	110				

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 4. BAYCON200, 201A Horizontal Economizer and Rain Hood



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 – Outside Air Damper

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

A	I	Manual Fresh Air Model	Unit Application Models	Α	В	с	D
D C FULLY OPEN	^{2/3} 1/3	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 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
	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″

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.

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 [™] 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.

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.



The AHRI Certified mark indicates company participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory.org.

The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

4WCC4030E-SUB-1A-EN 31 Aug 2022 Supersedes (New)