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WAYSOS

THROUGH-WALL HEAT PUMP



COMPACT-AIRE PRO SERIES

PRO | PRO 1K | PRO 2K

KEY FEATURES

High-Efficiency Through-Wall Heat Pump with No Outdoor Unit Required

The Waysos Compact-Aire Pro Series delivers a reliable, energy-efficient, and architecturally discreet HVAC solution for multi-residential, hospitality, and retrofit applications. With a compact design, it offers year-round comfort without the need for exterior equipment or refrigerant line sets.

4-in-1 Functionality

Cooling, Heating, Dehumidification, and Fan-Only operation for versatile, year-round indoor climate control.

Compact, Self-Contained Design

No outdoor unit or mechanical room equipment required. All refrigeration components are factory sealed and contained within the indoor chassis.

Heat Pump with Optional Electric Back-Up Heat

Available with No Back-up Heat (115V) and 1kW or 2kW electric resistance heater options (208-230V models) that functions as auxiliary heat simultaneously with the compressor to support the heat pump during cold ambient conditions and on bespoke orders, electric only options where the 1kW or 2kW electric heater works independently. 1st Stage heating via compressor and 2nd stage heat via electric heat only.

Eco-Friendly R32 Refrigerant

Utilizes next-generation R32 refrigerant with Low Global Warming Potential (GWP = 675)

Whisper Quiet, Inverter-Driven Variable Speed Technology

High-efficiency DC inverter compressor and fan motor for whisper-quiet and energy-saving operations.

100% Powder-Coated Metal Design and Airflow Control

Durable all-metal casing with a motorized swing louvre for consistent, balanced room airflow.

Integrated Condensate Management System — Energy-saving, self-evaporative condensate removal in cooling mode. With a heated condensate drain pan in heat mode that prevents ice formation and an integrated overflow safety switch providing added protection to ensure reliable, year-round drainage.

Integrated Control Options

- On-board LED display with temperature control
- Handheld remote control
- Wi-Fi connectivity via Smart Life app (iOS/Android)
- Optional - third-party 24V wall thermostats available



MODEL: COMPACT-AIRE **PRO**

(No - Electric Back-up Heater)

SPECIFICATIONS

Cooling Capacity		
Rated Cooling Capacity (95°F)	BTU / H	10,000
	Watts	2,930
Cooling Capacity Range	BTU / H	3,000 - 14,000
Outdoor Cooling Operating Range	°F/°C	32F/0C ~ 113F/45C
Energy Efficiency Ratio (EER2)		9.5
Seasonal Energy Efficiency Ratio (SEER2)		15.0
Heating Capacity		
Rated Heating Capacity (47°F)	BTU / H	9,000
	Watts	2,637
Heating Capacity Range	BTU / H	3,000 - 11,200
Outdoor Heating Operating Range	°F/°C	5F/-15C ~ 75F/24C
Coefficient Of Performance (COP)	Btu/(W.h)	2.83
Heating Seasonal Performance Factor (HSPF2)	Btu/(W.h)	7.5
Heating Performance / Energy Efficiency		
Nominal Heating Capacity @47°F / 8°C Heat Pump Only	BTU / H	9,000
	COP	2.83
Nominal Heating Capacity @17°F / -8°C Heat Pump Only	BTU / H	6,500
	COP	2.24
Nominal Heating Capacity @5°F / -15°C Heat Pump Only	BTU / H	5,000
	COP	1.73
Sound Pressure Levels		
Indoor Range	dBA	32 - 46
Dehumidifier		
Moisture Removal	Kg/Hr	1.2
	Pints/Hr	2.5

Electrical		
Power Supply	V-Ph-Hz	115/120-1-60
Rated Input for Cooling (95°F)	Watts	1080
Rated Input for Heating (47°F)	Watts	930
Rated Current for Cooling	A	9.8
Rated Current for Heating	A	8.4
Total Input Current	A	9.8
Minimum Circuit Ampacity (MCA)	A	14
Maximum Overcurrent Protection (MOP)	A	22
Recommend Breaker Size	A	15
Fan		
Type	- -	DC
Speed	- -	Variable
Indoor Fan Range	CFM	200 - 320
Compressor		
Type	- -	DC Inverter
Speed Range	Hz	30 - 80
Refrigerant		
Type	- -	R32
Factory Charge	Oz	19.4
	Kg	0.55
Dimensions		
Body Size (W/H/D)	Inches	39.4x23.1x8.07
	mm	1000x585x335
Weight		
Body Weight	Kg	42.5
	lbs	93.5
Efficiency Standard		
AHRI Certified	USHP	210/240
Safety Standard		
ETL		

The manufacturer reserves the right to modify product specifications at any time without prior notice. Users are advised to consult the latest technical documentation to ensure accurate and up-to-date information.

MODEL: COMPACT-AIRE **PRO 1K**

(C/W Additional 1kW Electric Back-up Heater)

SPECIFICATIONS

Cooling Capacity		
Rated Cooling Capacity (95°F)	BTU / H	10,000
	Watts	2,930
Cooling Capacity Range	BTU / H	3,000 - 12,000
Outdoor Cooling Operating Range	°F/°C	32F/0C ~ 113F/45C
Energy Efficiency Ratio (EER2)		9.9
Seasonal Energy Efficiency Ratio (SEER2)		16.4
Heating Capacity		
Rated Heating Capacity (47°F)	BTU / H	9,000
	Watts	2,637
Heating Capacity Range	BTU / H	3,000 - 12,000
Additional Electric Heating Capacity	BTU / H	3,412
	Watts	1,000
Outdoor Heating Operating Range	°F/°C	5F/-15C ~ 75F/24C
Coefficient Of Performance (COP)	Btu/(W.h)	3.1
Heating Seasonal Performance Factor (HSPF2)	Btu/(W.h)	7.5
Heating Performance / Energy Efficiency		
Nominal Heating Capacity @47°F / 8°C Heat Pump Only	BTU / H	9,000
	COP	3.2
Nominal Heating Capacity @17°F / -8.3°C Heat Pump Only	BTU / H	6,500
	COP	2.25
Nominal Heating Capacity @5°F / -15°C Heat Pump Only	BTU / H	5,500
	COP	1.57
Sound Pressure Levels		
Indoor Sound Pressure	dBA	32 - 46
Outdoor Sound Pressure	dBA	58
Dehumidifier		
Moisture Removal	Kg/Hr	1.2
	Pints/Hr	2.5

Electrical		
Power Supply	V-Ph-Hz	208/230-1-60
Rated Input for Cooling (95°F)	Watts	1020
Rated Input for Heating (47°F)	Watts	850
Rated Current for Cooling	A	4.7
Rated Current for Heating	A	3.9
Current for Additional Electric Heater	A	4.8
Total Input Current	A	8.7
Minimum Circuit Ampacity (MCA)	A	14
Maximum Overcurrent Protection (MOP)	A	19
Recommended Breaker Size	A	15
Fan		
Type	- -	DC
Speed	- -	Variable
Indoor Fan Range	CFM	200 - 320
Compressor		
Type	- -	DC Inverter
Speed Range	Hz	30 - 80
Refrigerant		
Type	- -	R32
Factory Charge	Oz	19.4
	Kg	0.55
Dimensions		
Body Size (W/H/D)	Inches	39.4x23.1x8.07
	mm	1000x585x335
Weight		
Body Weight	Kg	42.5
	lbs	93.5
Efficiency Standard		
AHRI Certified	USHP	210/240
Safety Standard		
ETL		

MODEL: COMPACT-AIRE **PRO 2K**

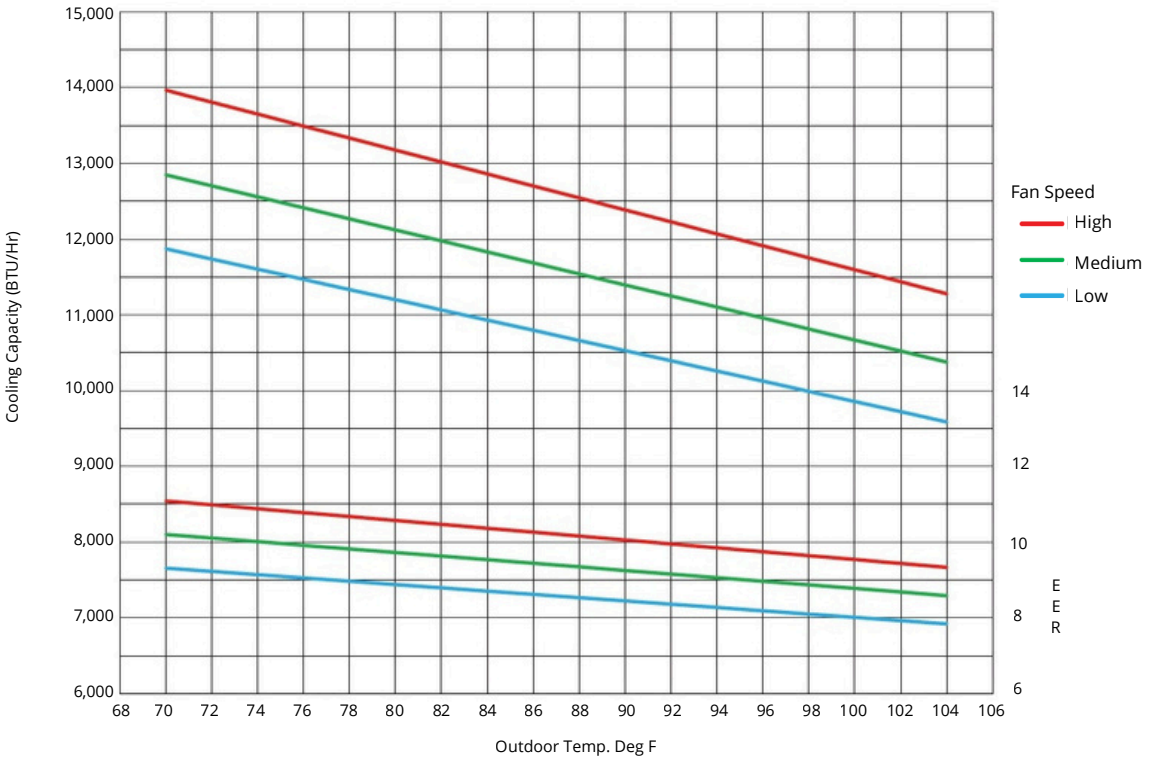
(C/W Additional 2kW Electric Back-up Heater)

SPECIFICATIONS

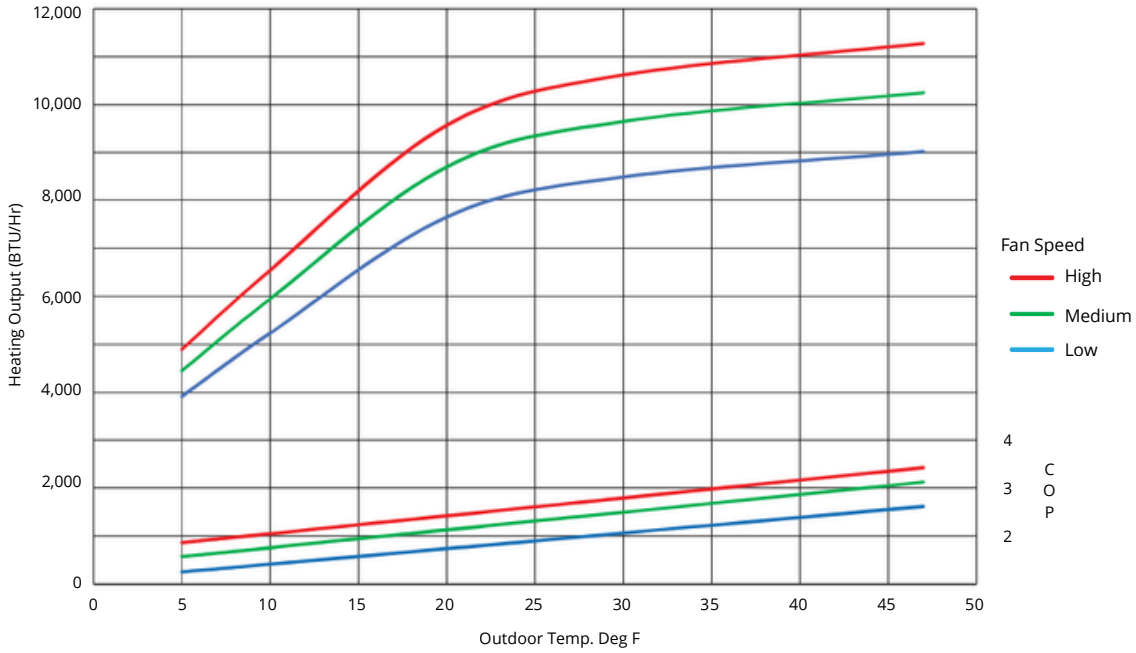
Cooling Capacity		
Rated Cooling Capacity (95°F)	BTU / H	10,000
	Watts	2,930
Cooling Capacity Range	BTU / H	3,000 - 14,000
Outdoor Cooling Operating Range	°F/°C	32F/0C ~ 113F/45C
Energy Efficiency Ratio (EER2)		9.9
Seasonal Energy Efficiency Ratio (SEER2)		16.4
Heating Capacity		
Rated Heating Capacity (47°F)	BTU / H	9,000
	Watts	2,637
Heating Capacity Range	BTU / H	3,000 - 11,200
Additional Electric Heating Capacity	BTU / H	6,824
	Watts	2,000
Outdoor Heating Operating Range	°F/°C	5F/-15C ~ 75F/24C
Coefficient Of Performance (COP)	Btu/(W.h)	3.1
Heating Seasonal Performance Factor (HSPF2)	Btu/(W.h)	7.5
Heating Performance / Energy Efficiency		
Nominal Heating Capacity @47°F / 8°C Heat Pump Only	BTU / H	9,000
	COP	3.2
Nominal Heating Capacity @17°F / -8°C Heat Pump Only	BTU / H	6,500
	COP	2.24
Nominal Heating Capacity @5°F / -15°C Heat Pump Only	BTU / H	5,000
	COP	1.73
Sound Pressure Levels		
Indoor Range	dBA	32 - 46
Dehumidifier		
Moisture Removal	Kg/Hr	1.2
	Pints/Hr	2.5

Electrical		
Power Supply	V-Ph-Hz	208/230-1-60
Rated Input for Cooling (95°F)	Watts	1020
Rated Input for Heating (47°F)	Watts	850
Rated Current for Cooling	A	4.7
Rated Current for Heating	A	3.9
Current for Additional Electric Heater	A	9.6
Total Input Current	A	14.5
Minimum Circuit Ampacity (MCA)	A	22
Maximum Overcurrent Protection (MOP)	A	27
Recommended Breaker Size (If using Plug)	A	20
Recommended Breaker Size (If Hardwired)	A	25
Fan		
Type	- -	DC
Speed	- -	Variable
Indoor Fan Range	CFM	200 - 320
Compressor		
Type	- -	DC Inverter
Speed Range	Hz	30 - 80
Refrigerant		
Type	- -	R32
Factory Charge	Oz	19.4
	Kg	0.55
Dimensions		
Body Size (W/H/D)	Inches	39.4x23.1x8.07
	mm	1000x585x335
Weight		
Body Weight	Kg	42.5
	lbs	93.5
Efficiency Standard		
AHRI	USHP	210/240
Safety Standard		
ETL		

COOLING PERFORMANCE



HEATING PERFORMANCE
(HEAT PUMP ONLY)



CONTROLS & OPERATIONS

Modes of Operation

- **Cooling Mode**
  - Adjustable between 60°F (16°C) and 86°F (30°C)
  - Fan speed selectable (Low/Med/High)
  - Silent mode available
- **Heating Mode**
  - Adjustable between 60°F (16°C) and 86°F (30°C)
  - Fan speed selectable
  - In 208-230V models, additional PTC electric heating can be activated via remote control or app
  - Silent mode available
- **Dehumidification (Dry) Mode**
  - Temperature setting is fixed; fan speed is locked for optimized moisture removal
  - Condensate is drained via the external pipe
- **Fan Mode**
  - Recirculates room air without heating, cooling, or dehumidification
  - Adjustable fan speed (Low/Med/High)
  - Temperature setting is disabled in this mode
- **Fan Speed Control**
  - Fan speed is adjustable between Low, Medium, and High in Cooling, Heating, and Fan modes
  - Speed control is unavailable in Dry and Silent modes

Additional Functions

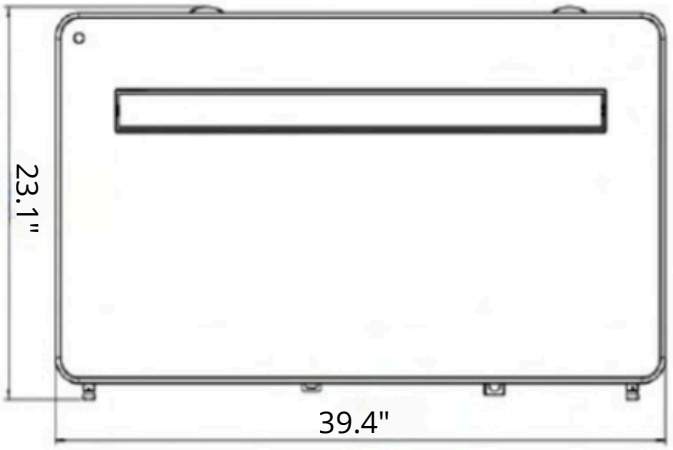
- **Silent Mode**
  - Activated via app or remote
  - Available in Cooling and Heating modes only
  - Lowers fan speed and compressor frequency for quieter operation
- **Swing Louvre Control**
  - Motorized louvre can be enabled via remote control or mobile app to automatically distribute airflow evenly throughout the space
- **Temperature Setting**
  - Adjustable using UP and DOWN controls on the unit, remote, or app within each mode's range
  - Display can toggle between °F and °C by pressing UP and DOWN buttons together
- **24-Hour Timer Function**
  - Programmable Shutdown Timer (while unit is running) and Delayed Start Timer (while in standby), adjustable in 1-hour increments from 1 to 24 hours
  - When timer reaches zero, the unit starts or stops based on the user's setting
- **LED Display Light Control**
  - Display backlight can be turned on or off via remote control or app for sleep mode

"PTC" Electric Heating Function

The Compact-Aire Pro 1K & Pro 2K models have an additional PTC electric heating element. The system starts with the PTC turned off by default and needs to be manually turned on via the remote or app. The system will reset to default mode whenever the unit is turned off or changed to other modes (Cooling/Dehumidifier/Fan).

DIMENSIONS

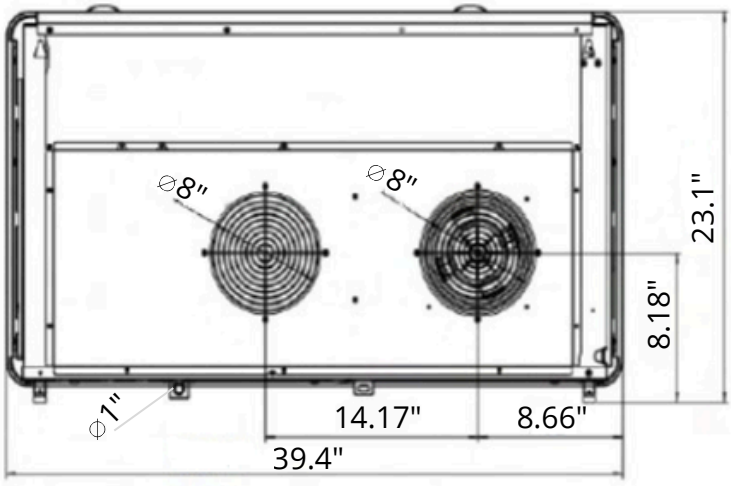
Front View



Side View



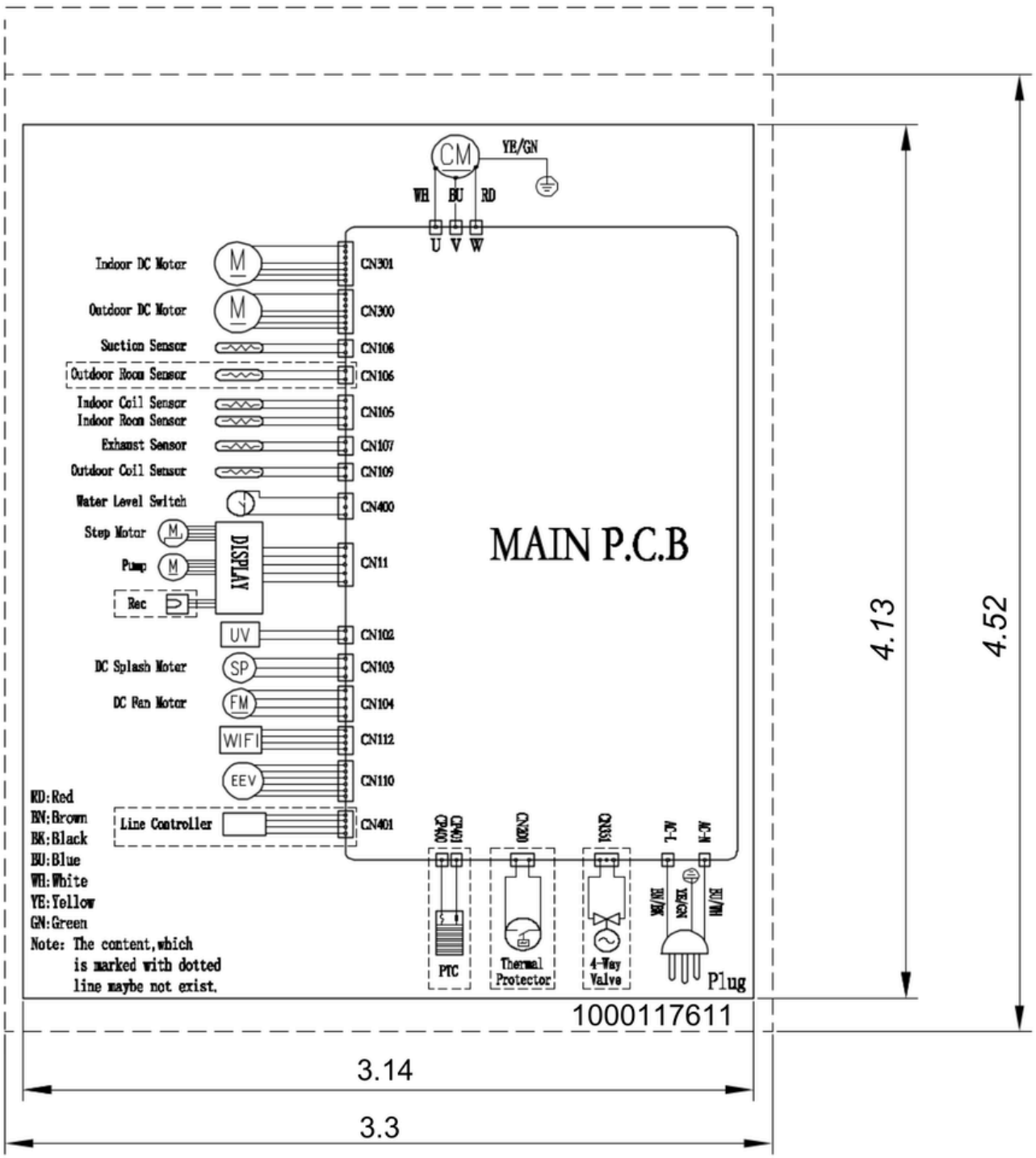
Rear View



Side View

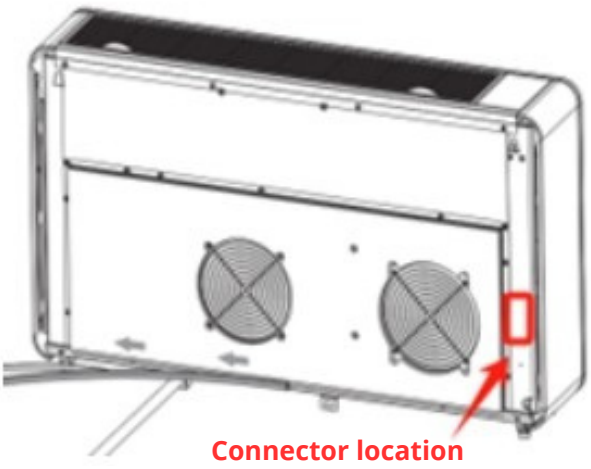


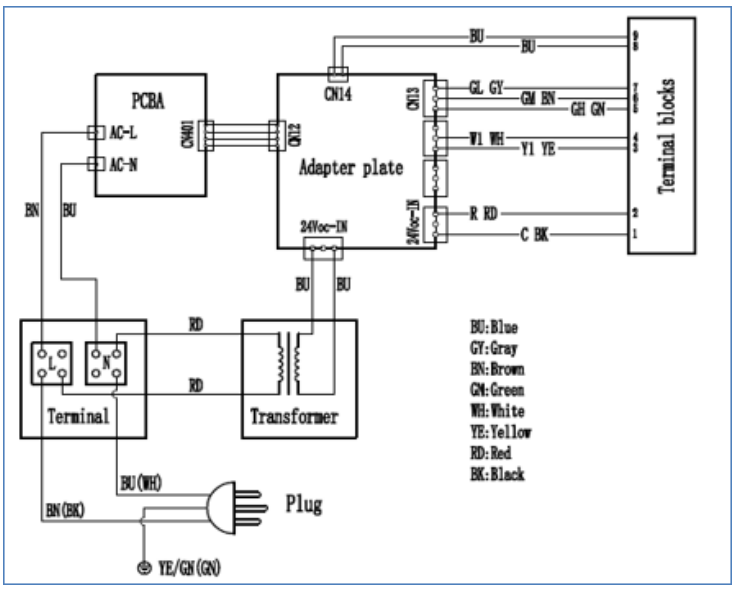
WIRING DIAGRAM



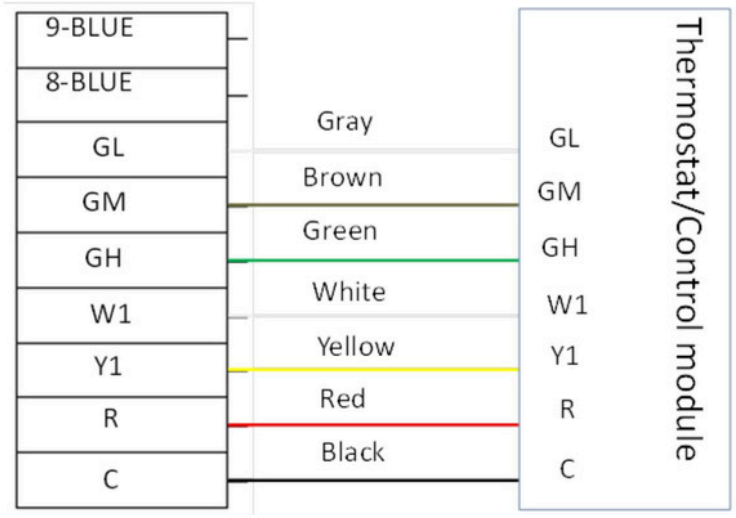
THIRD PARTY 24V AC THERMOSTAT CONNECTOR WIRE DIAGRAM

**Note: The controller must be wired as a required, otherwise the heat pump may be damaged.*





Code	Description
C	24VAC common wire
R	Power supply AC24V
Y1	Cooling mode operation
W1	Heating mode operation
GH	High speed fan operation
GM	Middle speed fan operation
GL	Low speed fan operation
8.9	Switch for normal mode and thermostat mode





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