WAYSOS

THROUGH-WALL HEAT PUMP



COMPACT-AIRE SERIES

3K | 1.4K | HP

SUBMITTAL

COMPACT-AIRE SERIES

SUBMITTAL INFORMATION

PROJECT INFORMATION

Project	
Location	
Date	
Architect	
Engineer	
Mechanical contractor	
Submitted by	
Unit tags	

EQUIPMENT SCHEDULE

Select	Model	Power	Cooling BTU/h (95°F)	Heating BTU/h (47°F)	Electric heat	MCA / MOP	W × H × D	Weight	Qty
☐	3K	208/230V-1-60	11,800	10,900	3 kW, replaces compressor	20 / 20 A	39.4 × 22.8 × 8.6″	117 lb	
☐	1.4K	208/230V-1-60	11,800	10,900	1.4 kW, replaces compressor	11 / 15 A	39.4 × 22.8 × 8.6″	117 lb	
☐	HP *(coming soon)*	115V-1-60	7,080	7,120	600 W, with compressor	13.4 / 15 A	36.81 × 21.38 × 7.8″	86 lb	

INCLUDED IN THIS SUBMITTAL

- Key features
- Specifications: Compact-Aire 3K, 1.4K and HP
- Controls & operations: 3K and 1.4K
- Wall mounting templates
- Wiring diagrams

REVIEW

Reviewer's stamp

☐ Reviewed, no exceptions
☐ Reviewed, as noted
☐ Revise and resubmit

By: _____ Date: _____

Each model page is reproduced from its 2026 WAYSOS spec sheet. Supply and exhaust: two 8″ wall openings per unit. The manufacturer reserves the right to modify product specifications at any time without prior notice. Confirm against the latest WAYSOS documentation before ordering.

KEY FEATURES

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

The Waysos Compact-Aire series delivers a reliable, energy-efficient, and architecturally discreet HVAC solution for multi-residential, hospitality, and retrofit applications. With a simple compact design, these heat pumps offer 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.

Front Digital Display

Clearly visible on the unit's face for easy temperature and setting checks.

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 Electric Back-Up Heat

- **Compact-Aire 3K and 1.4K:** 3kW or 1400W back-up electric resistance heater that, when turned on, replaces the compressor and produces electric heat only.
- **Compact-Aire HP:** 600W electric resistance heater supports the heat pump by operating simultaneously (compressor + electric heater).

Eco-Friendly R32 Refrigerant

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

Quiet Operations with Inverter-Driven Variable Speed Technology

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

100% Powder-Coated Metal Design with Fixed Mesh Grille

Durable all-metal casing with a fixed mesh grille design for consistent airflow distribution and a balanced, even room temperature.

Integrated Condensate Management System

Energy-saving, self-evaporative condensate removal in cooling mode.

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 **3K**

(C/W Independent 3kW Electric Back-up Heater)

SPECIFICATIONS

Cooling Capacity		
Rated Cooling Capacity (95°F)	Btu/h	11,800
	Watts	3,458
Cooling Capacity Range	Btu/h	6,600 - 11,800
Outdoor Cooling Operating Range	°F/°C	64F/18C ~ 109F/43C
Energy Efficiency Ratio (EER2)	Btu/(W.h)	10.1
Seasonal Energy Efficiency Ratio (SEER2)	Btu/(W.h)	15.55
Heating Capacity		
Rated Heating Capacity (47°F)	Btu/h	10,900
	Watts	3,194
Heating Capacity Range	Btu/h	6,200 - 10,970
*Electric Heating Capacity	Btu/h	10,236
	Watts	3,000
Coefficient Of Performance (COP)	Btu/(W.h)	3.1
Heating Seasonal Performance Factor (HSPF2)	Btu/(W.h)	8.2
Heating Performance / Energy Efficiency		
Nominal Heating Capacity @47°F / 8°C Heat Pump Only	Btu/h	10,900
	COP	3.4
Nominal Heating Capacity @17°F / -8°C Heat Pump Only	Btu/h	7,180
	COP	2.3
Nominal Heating Capacity @5°F / -15°C Heat Pump Only	Btu/h	4,370
	COP	1.64
Sound Pressure Levels		
Indoor Range	dBA	42 - 48
Dehumidifier		
Moisture Removal	Kg/Hr	1.5
	Pints/Hr	2.6

Electrical		
Power Supply	V-Ph-Hz	208/230-1-60
Rated Input for Cooling (95°F)	Watts	1209
Rated Input for Heating (47°F)	Watts	947
Rated Input for Electric Heating	Watts	3000
Rated Current for Cooling	A	6.1
Rated Current for Heating	A	4.8
Rated Current for Electric Heating	A	13.6
Minimum Circuit Ampacity (MCA)	A	20
Maximum Overcurrent Protection (MOP)	A	20
Fan		
Type	- -	DC Variable
Speed	- -	3
Indoor Fan Range	CFM	215 - 330
Compressor		
Type	- -	DC Inverter
Speed Range	Hz	30 - 62
Refrigerant		
Type	- -	R32
Factory Charge	Oz	22.9
	Kg	0.65
Dimensions		
Body Size (W/H/D)	Inches	39.4/22.8/8.6
	mm	1000/579/218
Intake/Exhaust Core	Inches	8
Weight		
Body Weight	Kg	53
	lbs	117
Safety Standard		
ETL		

*When electric heat is switched on manually, this will switch off the heat pump compressor to run as electric heat only.

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 **1.4K**

(C/W Independent 1.4kW Electric Back-up Heater)

SPECIFICATIONS

Cooling Capacity		
Rated Cooling Capacity (95°F)	Btu/h	11,800
	Watts	3,458
Cooling Capacity Range	Btu/h	6,600 - 11,800
Outdoor Cooling Operating Range	°F/°C	64F/18C ~ 109F/43C
Energy Efficiency Ratio (EER2)	Btu/(W.h)	10.1
Seasonal Energy Efficiency Ratio (SEER2)	Btu/(W.h)	15.55
Heating Capacity		
Rated Heating Capacity (47°F)	Btu/h	10,900
	Watts	3,194
Heating Capacity Range	Btu/h	6,200 - 10,970
*Electric Heating Capacity	Btu/h	4,776
	Watts	1,400
Coefficient Of Performance (COP)	Btu/(W.h)	3.1
Heating Seasonal Performance Factor (HSPF2)	Btu/(W.h)	8.2
Heating Performance / Energy Efficiency		
Nominal Heating Capacity @47°F / 8°C Heat Pump Only	Btu/h	10,900
	COP	3.4
Nominal Heating Capacity @17°F / -8°C Heat Pump Only	Btu/h	7,180
	COP	2.3
Nominal Heating Capacity @5°F / -15°C Heat Pump Only	Btu/h	4,370
	COP	1.64
Sound Pressure Levels		
Indoor Range	dBA	42 - 48
Dehumidifier		
Moisture Removal	Kg/Hr	1.5
	Pints/Hr	2.6

Electrical		
Power Supply	V-Ph-Hz	208/230-1-60
Rated Input for Cooling (95°F)	Watts	1209
Rated Input for Heating (47°F)	Watts	947
Rated Input for Electric Heating	Watts	1400
Rated Current for Cooling	A	6.1
Rated Current for Heating	A	4.8
Rated Current for Electric Heating	A	6.0
Minimum Circuit Ampacity (MCA)	A	11
Maximum Overcurrent Protection (MOP)	A	15
Fan		
Type	- -	DC Variable
Speed	- -	3
Indoor Fan Range	CFM	215 - 330
Compressor		
Type	- -	DC Inverter
Speed Range	Hz	30 - 62
Refrigerant		
Type	- -	R32
Factory Charge	Oz	22.9
	Kg	0.65
Dimensions		
Body Size (W/H/D)	Inches	39.4/22.8/8.6
	mm	1000/579/218
Intake/Exhaust Core	Inches	8
Weight		
Body Weight	Kg	53
	lbs	117
Safety Standard		
ETL		

*When electric heat is switched on manually, this will switch off the heat pump compressor to run as electric heat only.

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 **HP**

(C/W Additional 600W Electric Back-up Heater)

SPECIFICATIONS

Cooling Capacity		
Rated Cooling Capacity (95°F)	Btu/h	7,080
	Watts	2,074
Cooling Capacity Range	Btu/h	1,000 - 7,120
Energy Efficiency Ratio (EER2)	Btu/(W.h)	10.5
Seasonal Energy Efficiency Ratio (SEER2)	Btu/(W.h)	13.9
Heating Capacity		
Rated Heating Capacity (47°F)	Btu/h	7,120
	Watts	2,086
Heating Capacity Range	Btu/h	1,000 - 7,120
*Electric Heating Capacity	Btu/h	2,047
	Watts	600
Outdoor Heating Operating Range	°F/°C	5F/-15C ~ 75F/24C
Coefficient Of Performance (COP)	Btu/(W.h)	3.4
Heating Seasonal Performance Factor (HSPF2)	Btu/(W.h)	7.4
Heating Performance / Energy Efficiency		
Nominal Heating Capacity @47°F / 8°C Heat Pump Only	Btu/h	7,120
	COP	3.0
Nominal Heating Capacity @17°F / -8°C Heat Pump Only	Btu/h	4,405
	COP	1.8
Nominal Heating Capacity @5°F / -15°C Heat Pump Only	Btu/h	2,825
	COP	1.2
Sound Pressure Levels		
Indoor Range	dBA	30 - 39
Dehumidifier		
Moisture Removal	Kg/Hr	1.5
	Pints/Hr	2.6

Electrical		
Power Supply	V-Ph-Hz	115-1-60
Rated Input for Cooling (95°F)	Watts	846
Rated Input for Heating (47°F)	Watts	703.4
Rated Input for Electric Heating	Watts	600
Rated Current for Cooling	A	6.6
Rated Current for Heating	A	6.37
Rated Current for Electric Heating	A	5.56
Total Input Current	A	11.93
Minimum Circuit Ampacity (MCA)	A	13.4
Maximum Overcurrent Protection (MOP)	A	15
Fan		
Type	- -	DC Variable
Speed	- -	3
Indoor Fan Range	CFM	165 - 235
Compressor		
Type	- -	DC Inverter
Speed Range	Hz	33 - 60
Refrigerant		
Type	- -	R32
Factory Charge	Oz	12.7
	Kg	0.65
Dimensions		
Body Size (W/H/D)	Inches	36.81/21.38/7.8
	mm	940/533/203
Intake/Exhaust Core	Inches	8
Weight		
Body Weight	Kg	39
	lbs	86
Safety Standard		
ETL		

*Electric heating is manually switched on and works in combination with the compressor to provide heat in colder climates.

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 **3K**

CONTROLS & OPERATIONS

Modes of Operation

- **Cooling Mode**
  - Selectable via remote or onboard control
  - Adjustable setpoint temperature from 64°F to 86°F
  - Fan speeds: Low / Medium / High / Auto
- **Heating Mode**
  - Operated via remote or onboard control
  - Electric heater can be activated to replace compressor heating
  - Setpoint range: 64°F to 86°F
  - Fan speeds: Low / Medium / High / Auto
- **Dehumidification (Dry) Mode**
  - Fixed low fan speed for effective moisture removal
  - Cannot change fan speed during operation
- **Fan Mode**
  - Circulates air without heating or cooling
  - Fan speeds: Low / Medium / High / Auto
- **Auto Mode**
  - Automatically selects heating, cooling, or fan mode
  - Based on the room temperature range:
    i. <68°F: Heating
    ii. 68–77°F: Fan
    iii. >77°F: Cooling

Additional Functions

- **Timer Functions**
  - On and Off timer programmable in 10-minute and 1-hour increments
  - Timers can be set independently for automated start/stop
- **Onboard Controls**
  - Includes Mode, Fan Speed, Heater, and Temperature Adjustments
  - LED lights indicate selected fan speed and operation
- **Display & Indicators**
  - Front display shows ambient and set temperature alternately
  - Sleep mode dims or shuts off the display
  - Wi-Fi, compressor, and mode indicators present
- **Sleep Mode**
  - Gradually adjusts temperature for optimal night-time comfort
  - Reduces fan speed for quieter operation

"PTC" Electric Heating Function

The Compact-Aire 3K includes a 3,000W auxiliary electric heater (PTC heater) that operates independently from the heat pump system. The heat pump and electric heater do not operate simultaneously. By default, the unit operates in standard Heat Pump Heating Mode when a call for heating is received. The electric heater must be activated separately using the unit controls or a compatible 24V wall thermostat.

Electric Heat Only Mode:
The electric heater can be manually activated by pressing and holding the Electric Heater button on the unit touchscreen, or by using a compatible 24V wall thermostat connected to the AUX terminal.

When Electric Heat Only Mode is enabled:
The unit will remain in Electric Heat Only Mode until the electric heater is manually switched off, another operating mode is selected, or the heating demand is satisfied through thermostat control.

PTC Heater Protection Logic
The PTC heater incorporates built-in safety and protection functions. The electric heater will be disabled if any of the following conditions are detected:

Unit is not operating in Heating Mode.
Unit enters Defrost Mode.
Indoor fan stops operating or a fan fault is detected.
4-way reversing valve fault or disconnection occurs.
Indoor coil temperature reaches or exceeds 54°C (129°F).
Temperature sensor fault is detected.

The electric heater will automatically resume operation once the fault condition has been cleared and a valid call for electric heat is present.

- 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 **1.4K**

CONTROLS & OPERATIONS

Modes of Operation

- **Cooling Mode**
  - Selectable via remote or onboard control
  - Adjustable setpoint temperature from 64°F to 86°F
  - Fan speeds: Low / Medium / High / Auto
- **Heating Mode**
  - Operated via remote or onboard control
  - Electric heater can be activated to replace compressor heating
  - Setpoint range: 64°F to 86°F
  - Fan speeds: Low / Medium / High / Auto
- **Dehumidification (Dry) Mode**
  - Fixed low fan speed for effective moisture removal
  - Cannot change fan speed during operation
- **Fan Mode**
  - Circulates air without heating or cooling
  - Fan speeds: Low / Medium / High / Auto
- **Auto Mode**
  - Automatically selects heating, cooling, or fan mode
  - Based on the room temperature range:
    i. <68°F: Heating
    ii. 68–77°F: Fan
    iii. >77°F: Cooling

Additional Functions

- **Timer Functions**
  - On and Off timer programmable in 10-minute and 1-hour increments
  - Timers can be set independently for automated start/stop
- **Onboard Controls**
  - Includes Mode, Fan Speed, Heater, and Temperature Adjustments
  - LED lights indicate selected fan speed and operation
- **Display & Indicators**
  - Front display shows ambient and set temperature alternately
  - Sleep mode dims or shuts off the display
  - Wi-Fi, compressor, and mode indicators present
- **Sleep Mode**
  - Gradually adjusts temperature for optimal night-time comfort
  - Reduces fan speed for quieter operation

"PTC" Electric Heating Function

The Compact-Aire 1.4K includes a 1,400W auxiliary electric heater (PTC heater) that operates independently from the heat pump system. The heat pump and electric heater do not operate simultaneously. By default, the unit operates in standard Heat Pump Heating Mode when a call for heating is received. The electric heater must be activated separately using the unit controls or a compatible 24V wall thermostat.

Electric Heat Only Mode:
The electric heater can be manually activated by pressing and holding the Electric Heater button on the unit touchscreen, or by using a compatible 24V wall thermostat connected to the AUX terminal.

When Electric Heat Only Mode is enabled:
The unit will remain in Electric Heat Only Mode until the electric heater is manually switched off, another operating mode is selected, or the heating demand is satisfied through thermostat control.

PTC Heater Protection Logic
The PTC heater incorporates built-in safety and protection functions. The electric heater will be disabled if any of the following conditions are detected:

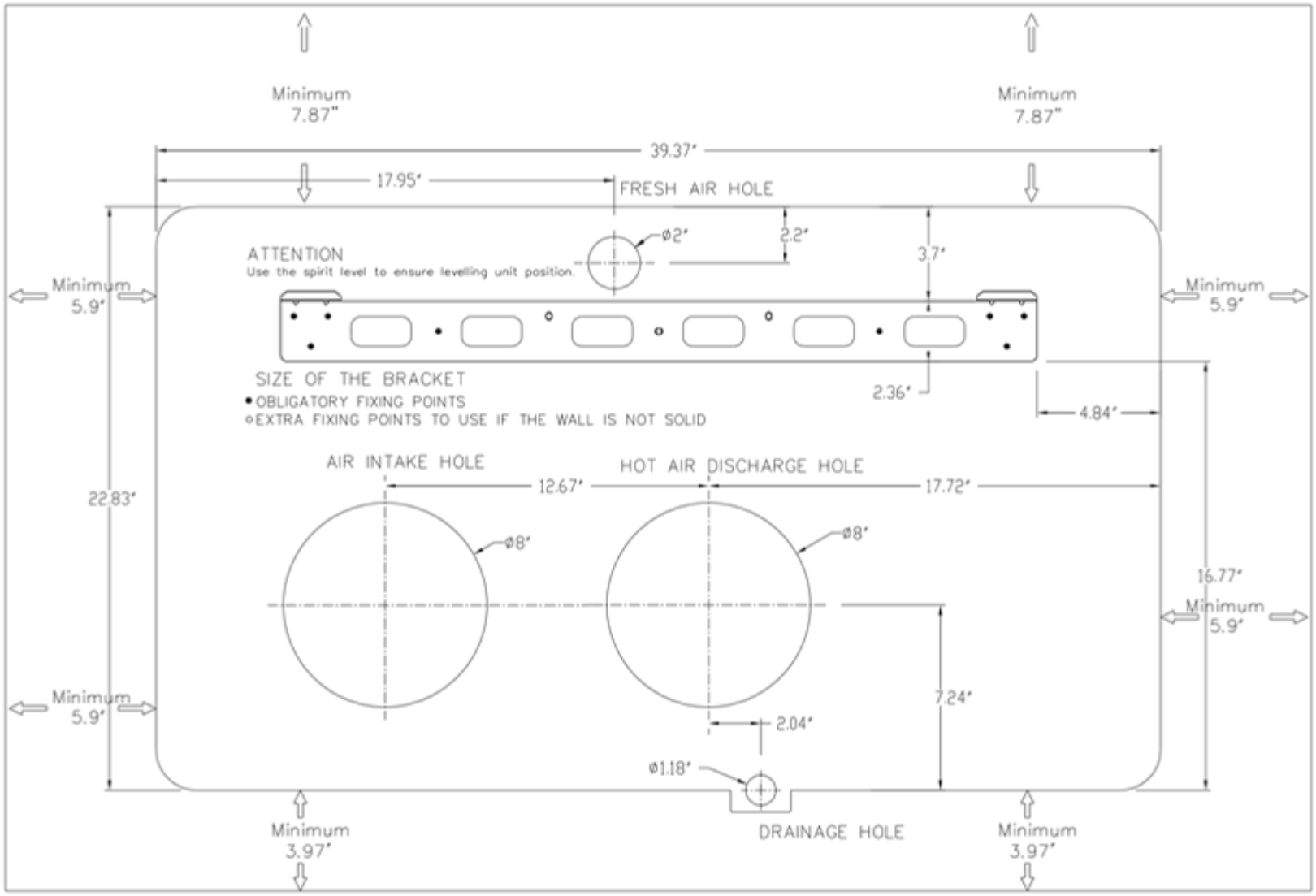
Unit is not operating in Heating Mode.
Unit enters Defrost Mode.
Indoor fan stops operating or a fan fault is detected.
4-way reversing valve fault or disconnection occurs.
Indoor coil temperature reaches or exceeds 54°C (129°F).
Temperature sensor fault is detected.

The electric heater will automatically resume operation once the fault condition has been cleared and a valid call for electric heat is present.

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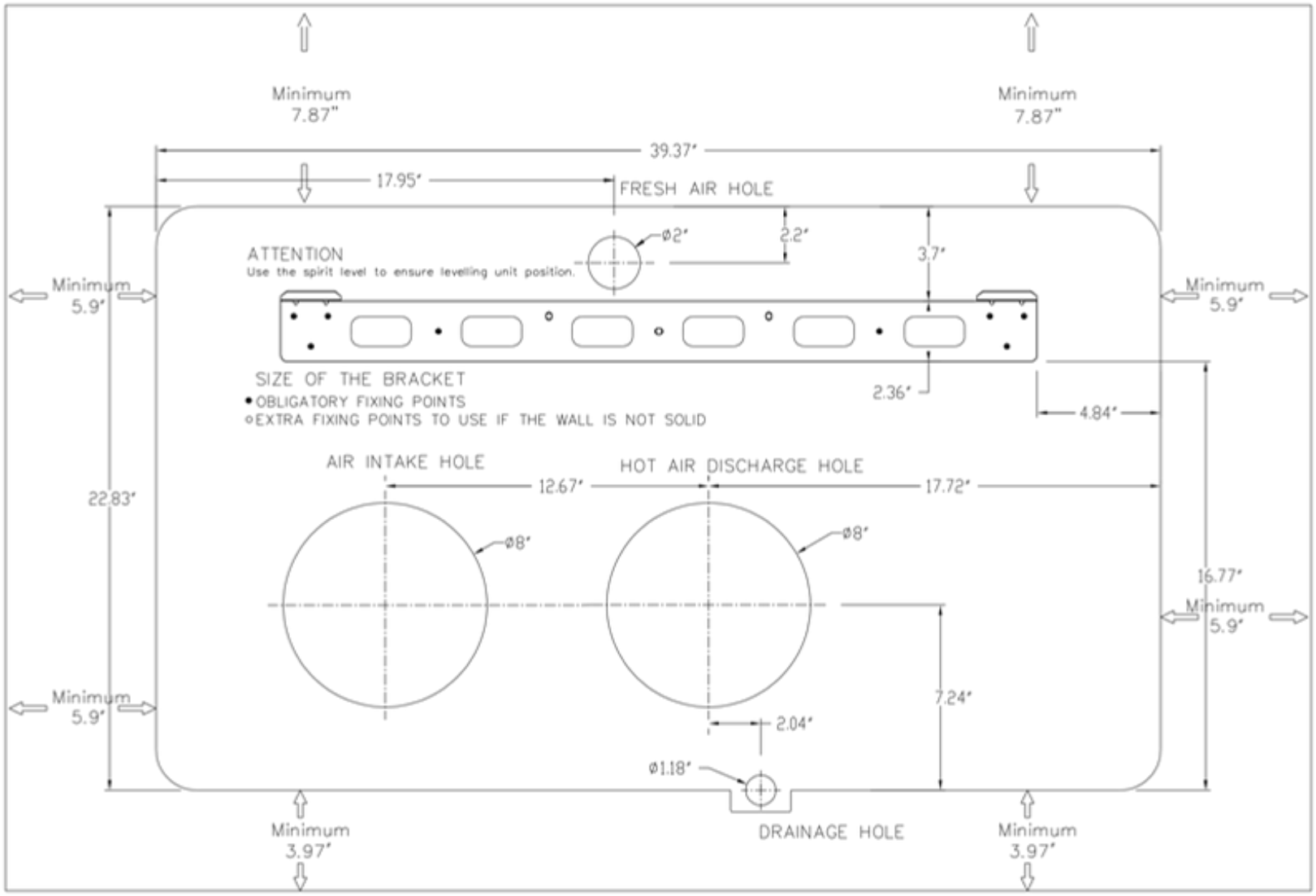
MODEL: COMPACT-AIRE **3K**

WALL MOUNTING TEMPLATE



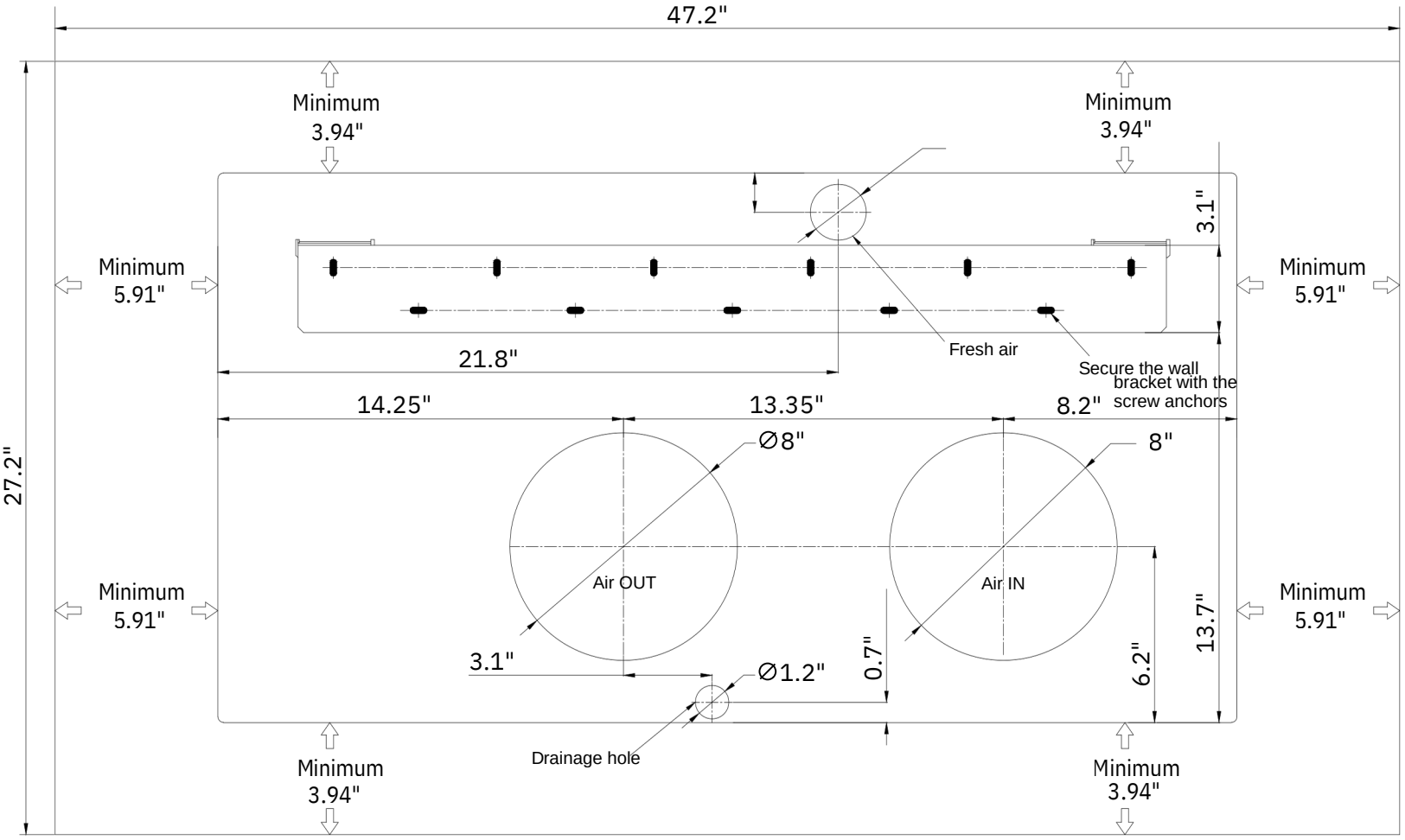
MODEL: COMPACT-AIRE **1.4K**

WALL MOUNTING TEMPLATE



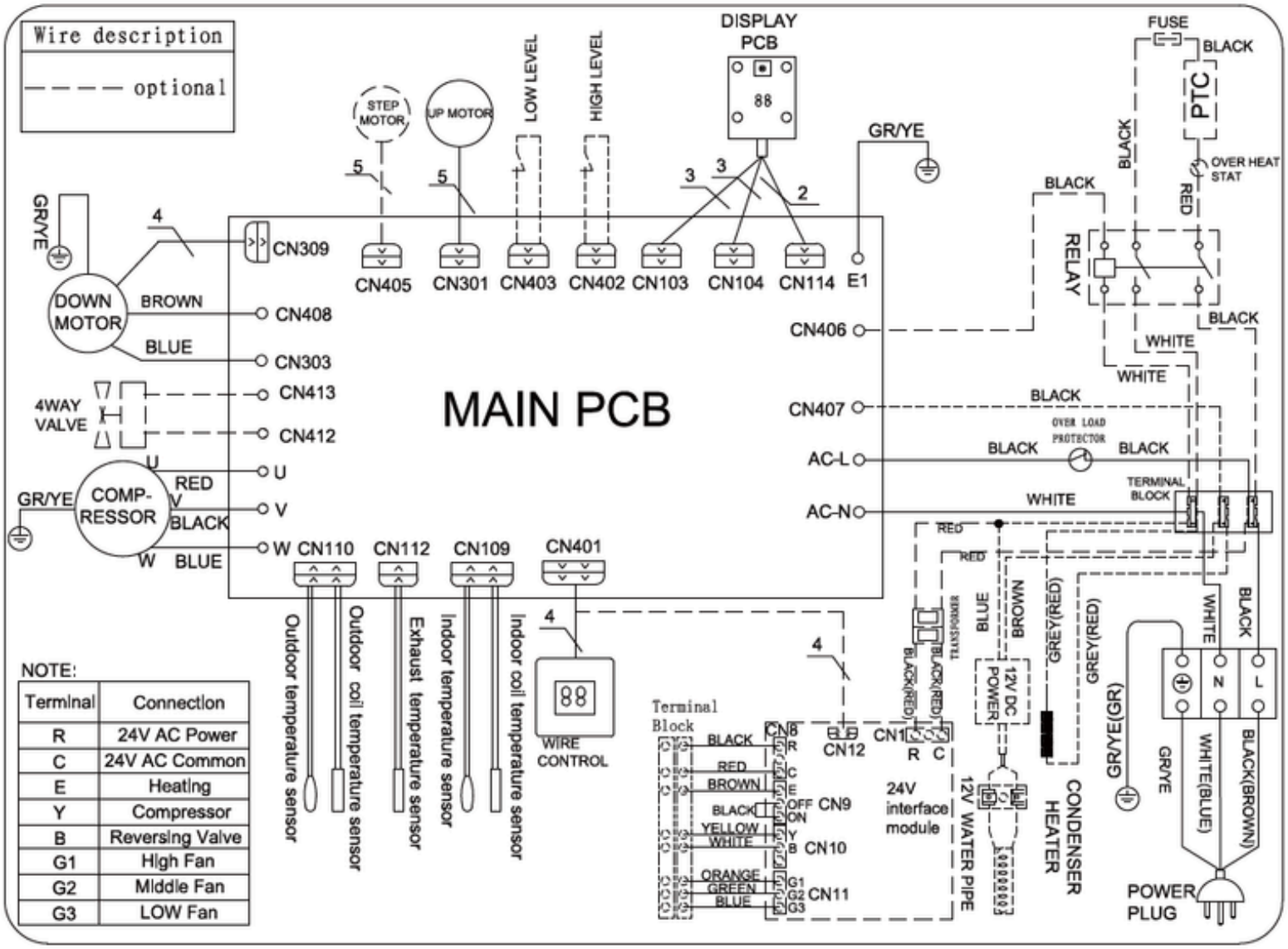
MODEL: COMPACT-AIRE **HP**

WALL MOUNTING TEMPLATE



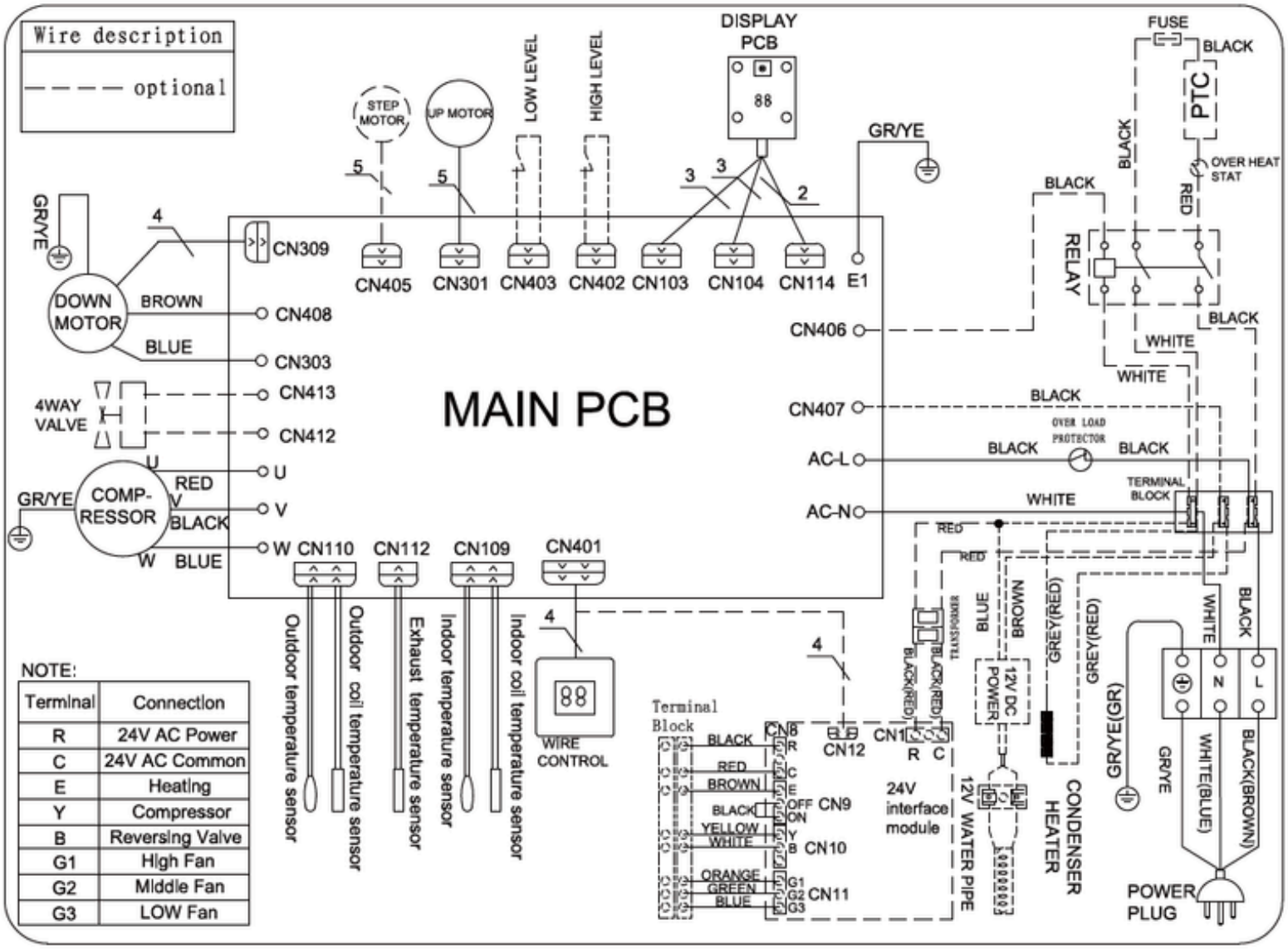
MODEL: COMPACT-AIRE **3K**

WIRING DIAGRAM



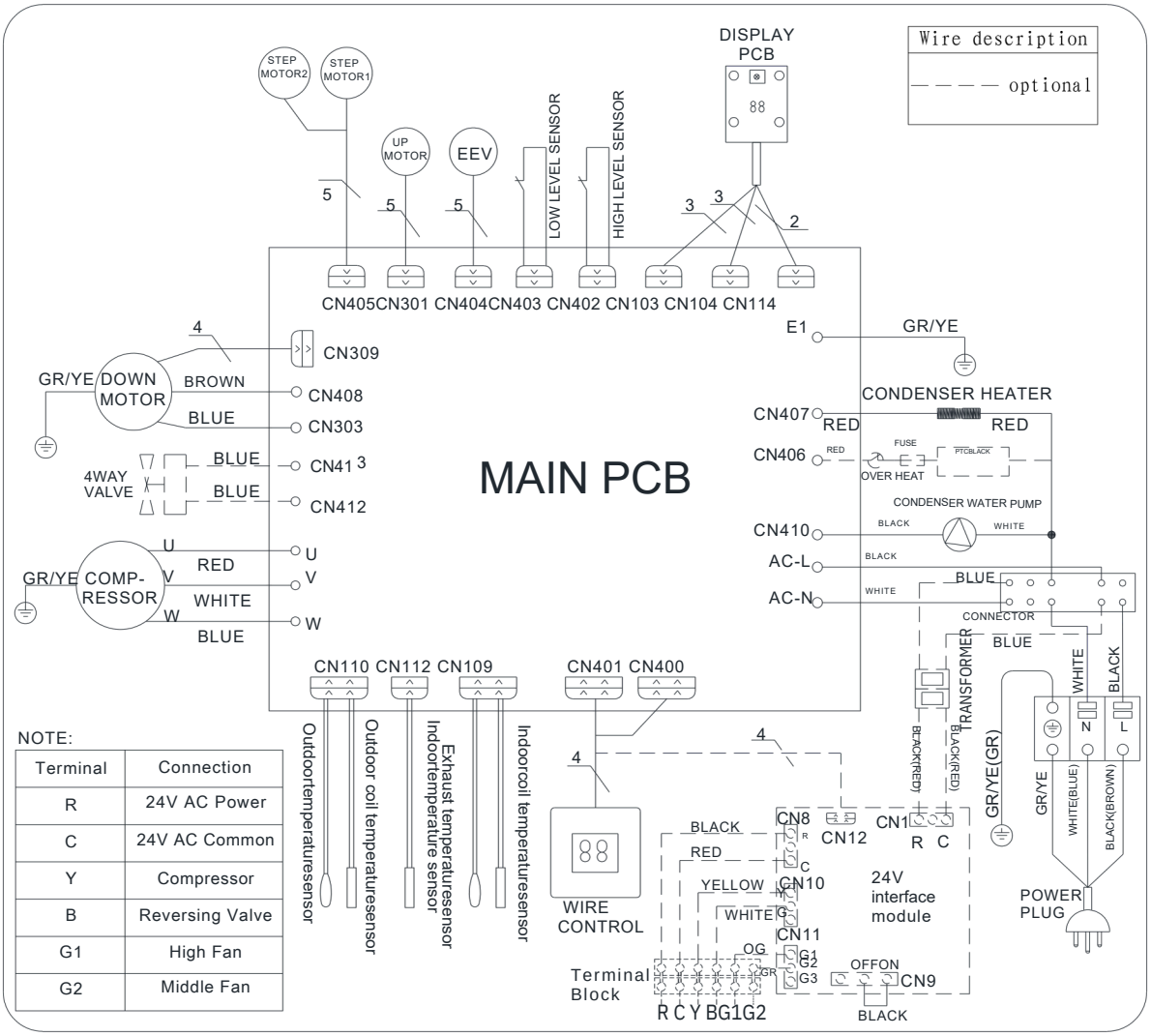
MODEL: COMPACT-AIRE **1.4K**

WIRING DIAGRAM



MODEL: COMPACT-AIRE **HP**

WIRE DIAGRAM



NOTE:

Terminal	Connection
R	24V AC Power
C	24V AC Common
Y	Compressor
B	Reversing Valve
G1	High Fan
G2	Middle Fan



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www.waysos.com