

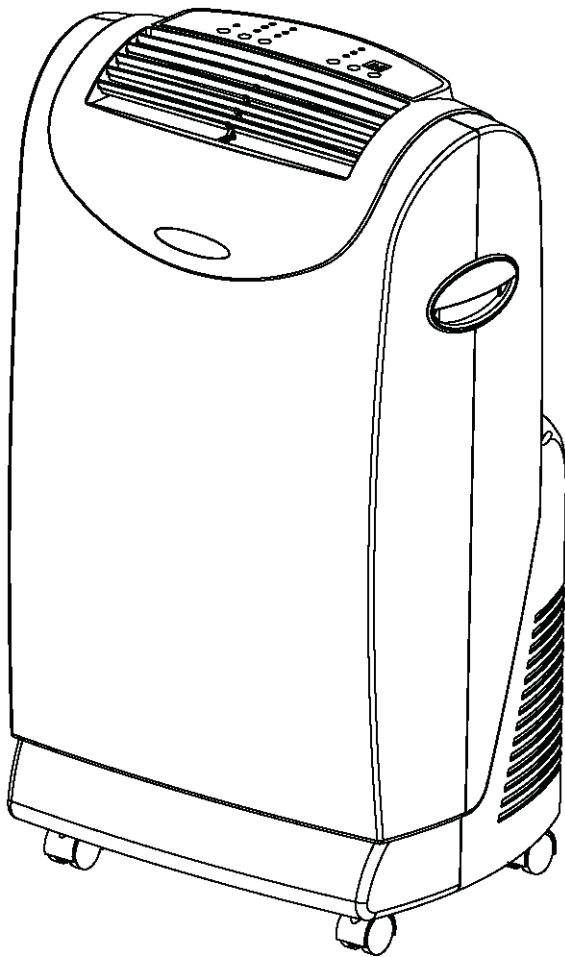


FRIEDRICH

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## Service & Parts Manual - 2012

Portable Air Conditioner  
Models PH14B



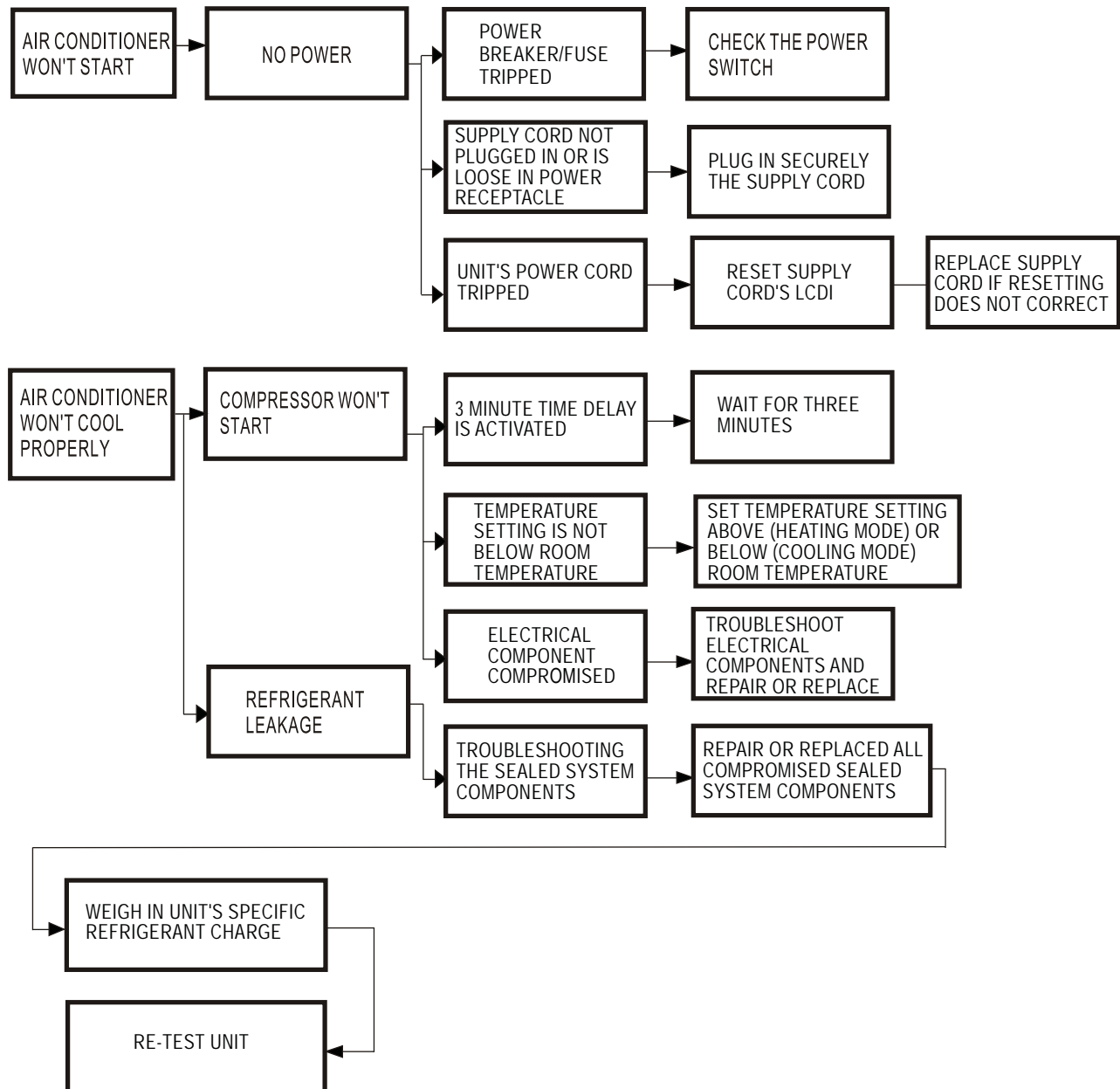
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# IMPORTANT POINTS ON SERVICE OPERATING SAFETY

## Please follow these instructions carefully:

- Unplug the unit to avoid any danger from electric shock before disassembling the unit for repair.
- If you need to perform any welding or soldering, be sure you are in a well ventilated area
- Only a qualified professional should perform any repair service(s).
- When repairing the unit, the specifications listed in this manual must be strictly adhered to when replacing any components.
- When replacing any electrical components they should be OEM factory components.
- Be sure that any electrical components are properly wired and secured.

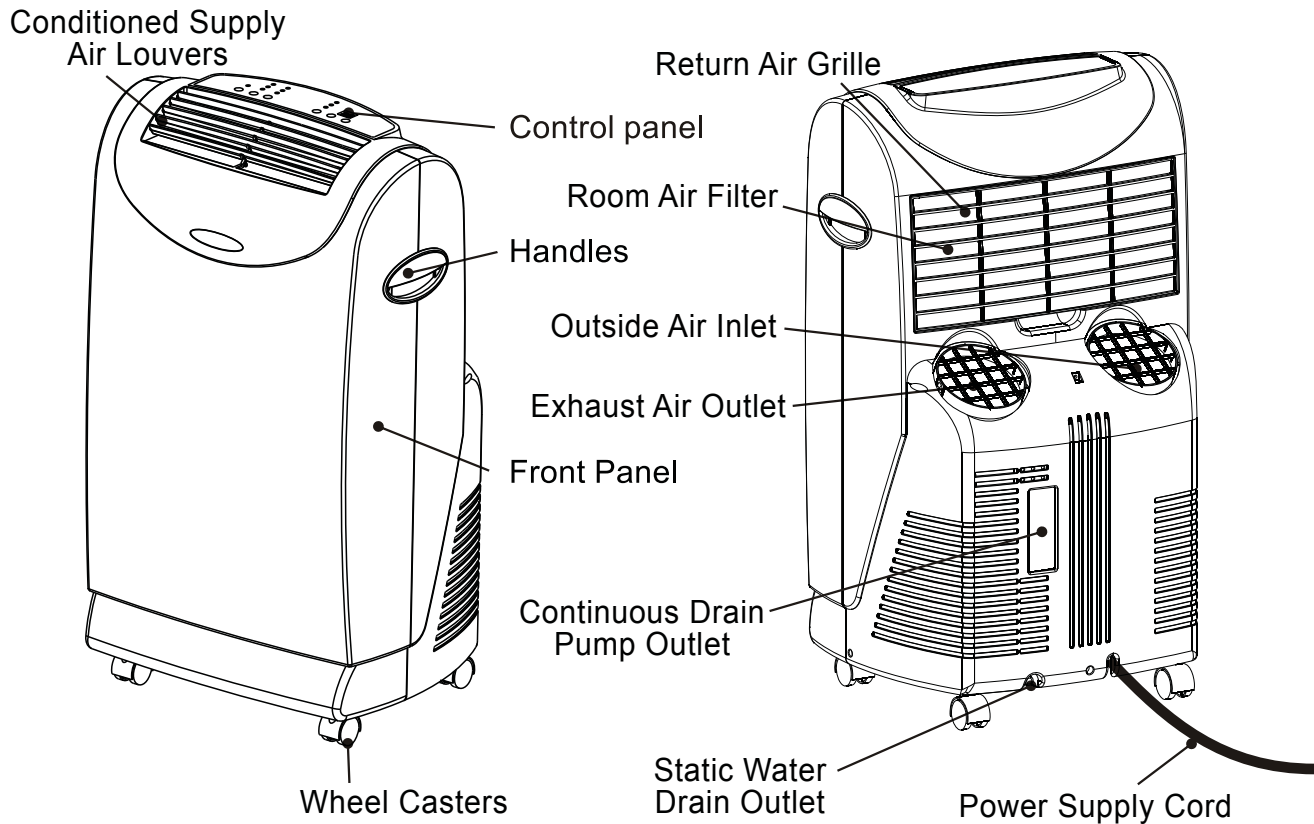
## FLOW CHART FOR TROUBLESHOOTING OF THE UNIT



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## APPEARANCE

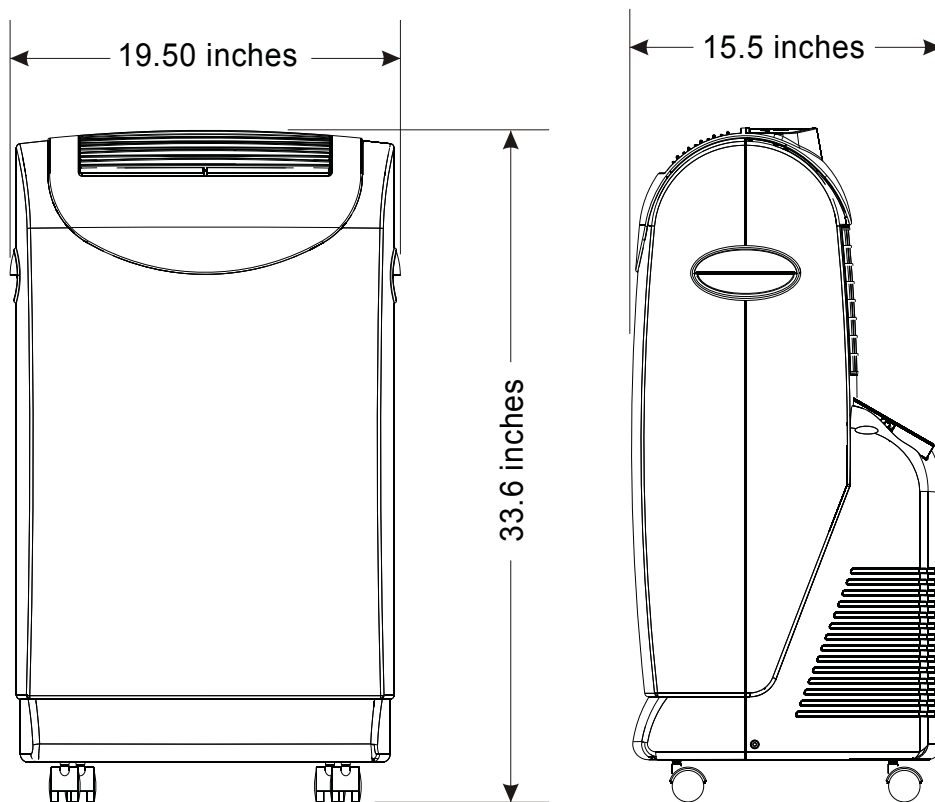
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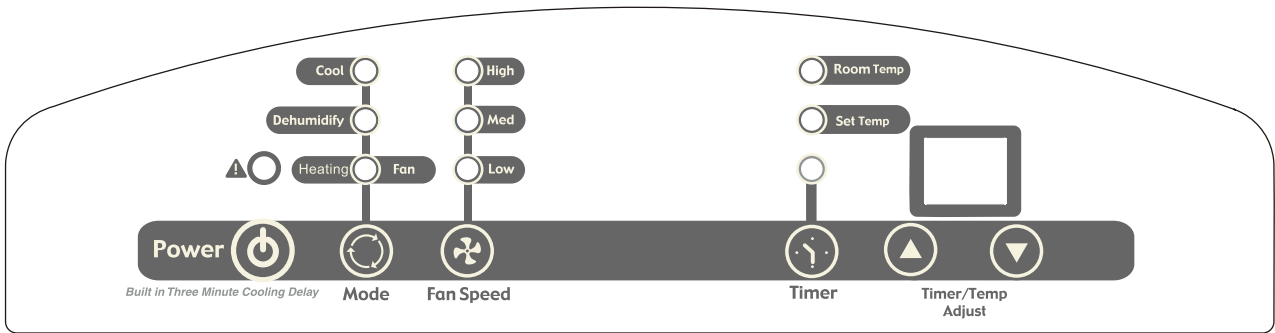
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## UNIT DIMENSIONAL

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# OPERATION



## Power Control

The power control turns the unit on and off.

## Warning Light ▲

Condensed water may accumulate in the unit. If the internal tank becomes full, the Warning Light will shine and the unit will not operate until the unit has been drained.

## Mode Control

The Mode Control has 4 settings:

### ● Cool ● Dehumidify ● Fan ● Heating

The settings are adjusted with Mode Control button. A light will indicate which setting is currently being used.

#### ● Cooling Mode

When cool mode is selected, the indicator light will shine green. During the cooling mode the air is cooled and hot air is exhausted to the outside air through the exhaust tube. Adjust fan speed air through the temperature to suit your desired comfort level. Temperature setting range is 60°F - 90°F.

**Note : The two air exchange hoses must vent outside the room when using cool mode.**

#### ● Dehumidify Mode

When dehumidify mode is selected, the indicator light will shine orange. Air is dehumidified as it passes through the unit, without being in full cooling mode. If room temperature is 75 degrees F, fan speed is fixed to "low".

**Note : The air exchange hoses must vent inside the room when using Dehumidify Mode, not outside as it does when cooling.**

**If the air exchange hoses left vented to the outside area will provide some cooling.**

#### ● Fan Mode

When fan mode is selected the indicator light will shine yellow. Air is circulated throughout the room with no cooling.

#### ● Heating Mode

Heating is activated only when the ambient temperature is below less than 80 F. In this mode, the desired temperature can be set between 60°F and 80°F.

**Note: When in heating mode, both air exhaust hoses must be connected and to the outside.**

## Fan Speed Control

The Fan Speed Control has 3 settings: High, Medium, and Low.

## Timer (12 Hour Timer - 1 setting On or Off)

### Auto turn off :

With unit powered on, press timer button to select number of hours to run in air conditioning mode until it automatically shuts off.

### Auto turn on :

With unit powered off, press timer button to select number of hours until you would like the unit to automatically turn unit ON in air conditioning mode.

## Timer / Temp set controls

- Used for adjusting the timer and thermostat.
  - The default display is room temperature.
  - In cooling mode, when "▲" or "▼" button is pressed, the set temperature is displayed and may be adjusted. After 15 seconds the display will revert back to room temperature. The temperature is adjustable in cool mode. The Timer Setting is adjustable between 1~12 hours.
- Note : By pressing both "▲" / "▼" set buttons at the same time, the display will toggle between Celsius and Fahrenheit.**

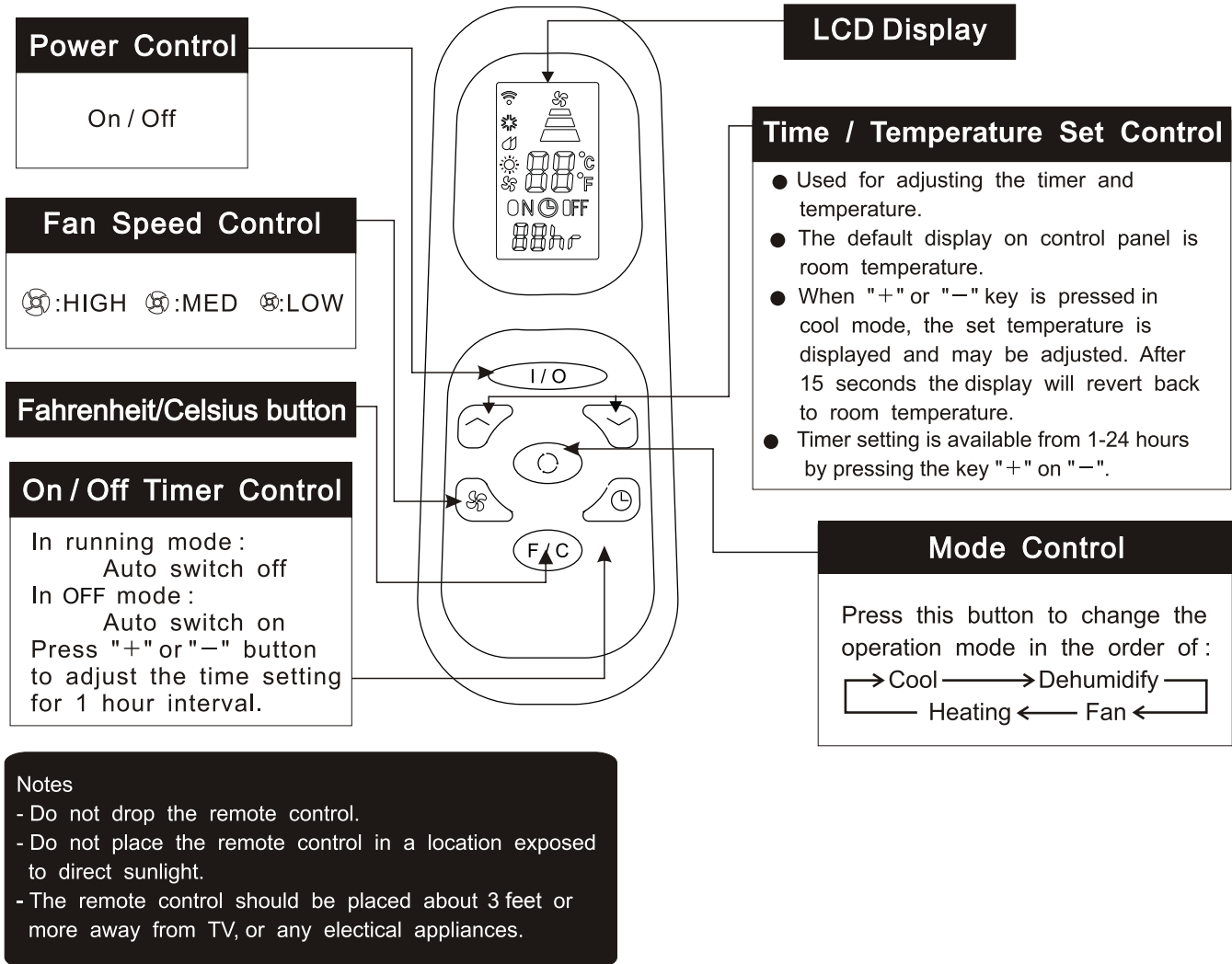
**After switching the air conditioner off, you must wait 3 minutes before switching it back on again.**

# OPERATION

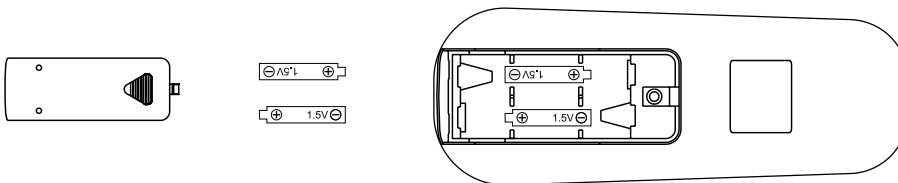
## Air Conditioner Remote Control

The functions work the same as your air conditioner's touch controls. All key function can be accessed from the remote control.

## CONTROL PANEL



**Battery replacement :** Remove the cover on the back of the remote control and insert the batteries with the (+) and (-) poles pointing in the proper direction.



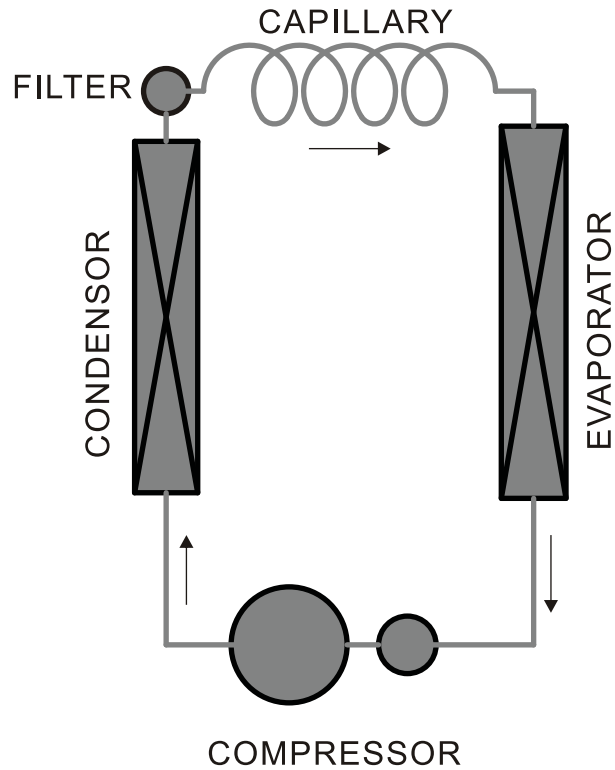
### CAUTION

- Use only AAA or IEC R03 1.5V batteries.
- Remove the batteries if the remote control is not used for a month or longer.
- Do not attempt to recharge the supplied batteries.
- All batteries should be replaced at the same time, do not mix old battery .
- Do not dispose of the batteries in a fire as they may explode.

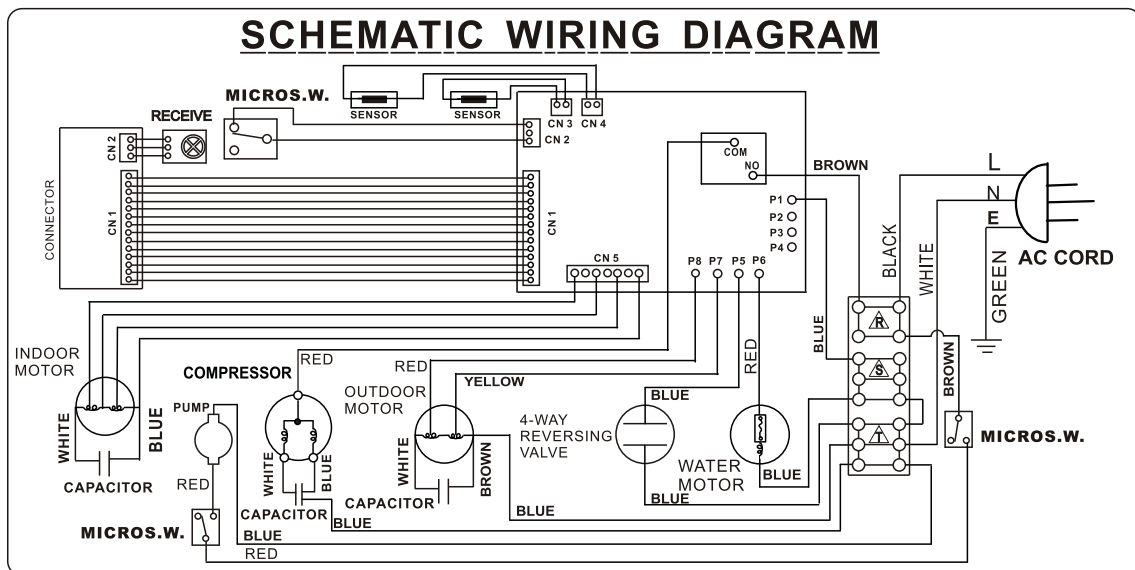
# TECHNICAL SPECIFICATIONS

ITEM	UNIT	PH14B	
OUTER DIMENSION	inches	19.5 x 33.6 x 15.5	
REFERENTIAL USING AREA	ft <sup>2</sup>	140 sq ft - 204 sq ft	
RATED VOLTAGE	V/Hz	115/60	
COOLING CAPACITY	B.T.U.	14000	
HEATING CAPACITY	B.T.U.	11000	
DEHUMIDIFYING CAPACITY	P	3.8 pints/H	
RUNNING CURRENT	A	10.8	
POWER CONSUMPTION	W	207	
COMPRESSOR	MODEL	44N100-A2-BCAD	
	INPUT POWER	volts/hz	115/60
	OPERATING CYCLE	uF/V	55/300
	PROTECTOR		B470-135-241C
INDOOR MOTOR	MODEL	LS-23T3-6P	
	OUTPUT POWER	volts/hz	115/60
	OPERATING CYCLE	uF/V	8/250
OUTDOOR MOTOR	MODEL	LS-53T1-4P	
	OUTPUT POWER	volts/hz	115/60
	OPERATING CYCLE	uF/V	9/250
TURBINE FAN MOTOR	MODEL	WT-15T1-02	
	OUTPUT POWER	volts/hz	115/60
CAPILLARY	inches	.086 OD x .039 ID x 27.5 in	
EVAPORATOR		3R14S19FPI	
CONDENSER		(2+1)R17S19FPI	
REFRIGERANT	oz	27.5 ounces	
WEIGHT	lbs	80	

# REFRIGERATOR SYSTEM DIAGRAM

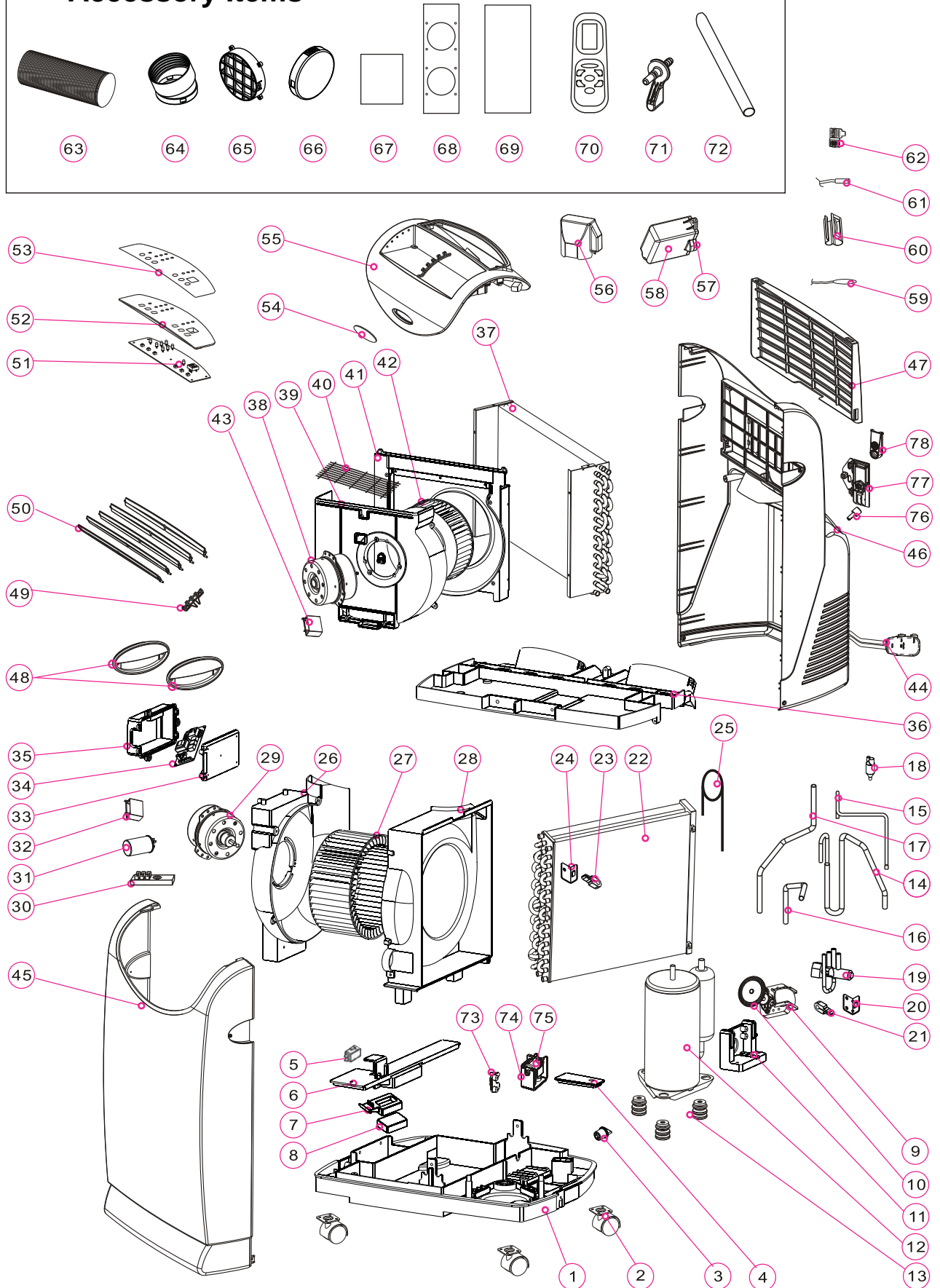


# SCHEMATIC WIRING DIAGRAM



# EXPLODED VIEW

## Accessory Items





# PARTS LIST

PH14B

NO	PART#	PARTS NAME	QUANTITY
1	67904000	BASEPAN	1
2	67904001	CASTERS (WHEELS)	4
3	67904002	DRAIN PLUG	1
4	67900404	DRAIN BUCKET COVER-B	1
5	67904100	MICRO SWITCH	3
7	67900405	FLOAT	1
8	67900406	FLOAT	1
9	67904300	PUMP FAN MOTOR	1
10	67900409	PUMP FAN WHEEL	1
11	67900410	PUMP HOUSING	1
19	67904301	4-WAY REVERSING VALVE ASS'Y	1
26	67904017	CONDENSER BLOWER HOUSING	1
27	67904018	CONDENSER BLOWER WHEEL	1
28	67904020	CONDENSER SHROUD	1
29	67904302	CONDENSER MOTOR	1
30	67904303	TERMINAL BLOCK	1
31	67904067	CAPACITOR (55uF/300V)(FOR COMPRESSOR (12)	1
32	67904021	CAPACITOR (9uF/250V)(FOR FAN MOTOR (29)	1
33	67904033	CONTROL BOARD HOUSING	1
34	67904305	CONTROL BOARD	1
35	67904031	COVER	1
36	67904023	TOP PLATE FOR EVAPORATOR ASSLY	1
38	67904027	EVAPORATOR MOTOR	1
39	67904025	EVAPORATOR BLOWER HOUSING	1
41	67904028	EVAPORATOR SHROUD	1
42	67904304	EVAPORATOR BLOWER WHEEL	1
43	67904030	CAPACITOR (8uF/250V)(FOR FAN MOTOR (38)	1
44	67904078	POWER SUPPLY CORD COMPLETE	1
45	67904036	FRONT PANEL	1
46	67904306	REAR PANEL	1
47	67904039	AIR FILTER	1
48	67904037	HANDLE	2
49	67904040	SUPPLY AIR LOUVER CONNECTOR	1
50	67904041	SUPPLY AIR LOUVERS	5

