

**Henny Penny
Cold Bases**

Model CBC/CBR-103

Model CBC/CBR-104

Model CBC/CBR-105

Model CBC/CBR-106

Model CBC/CBR-107

OPERATOR'S MANUAL

LIMITED WARRANTY FOR HENNY PENNY APPLIANCES

Subject to the following conditions, Henny Penny Corporation makes the following limited warranties to the original purchaser only for Henny Penny appliances and replacement parts:

NEW EQUIPMENT: Any part of a new appliance, except lamps and fuses, which proves to be defective in material or workmanship within two (2) years from date of original installation, will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor. To validate this warranty, the registration card for the appliance must be mailed to Henny Penny within ten (10) days after installation.

REPLACEMENT PARTS: Any appliance replacement part, except lamps and fuses, which proves to be defective in material or workmanship within ninety (90) days from date of original installation will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor.

The warranty for new equipment and replacement parts covers only the repair or replacement of the defective part and does not include any labor charges for the removal and installation of any parts, travel or other expenses incidental to the repair or replacement of a part.

EXTENDED FRYPOT WARRANTY: Henny Penny will replace any frypot that fails due to manufacturing or workmanship issues for a period of up to seven (7) years from date of manufacture. This warranty shall not cover any frypot that fails due to any misuse or abuse, such as heating of the frypot without shortening.

0 TO 3 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for parts, labor, or freight. Henny Penny will either install a new frypot at no cost or provide a new or reconditioned replacement fryer at no cost.

3 TO 7 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for the frypot only. Any freight charges and labor costs to install the new frypot as well as the cost of any other parts replaced, such as insulation, thermal sensors, high limits, fittings, and hardware, will be the responsibility of the owner.

Any claim must be presented to either Henny Penny or the distributor from whom the appliance was purchased. No allowance will be granted for repairs made by anyone else without Henny Penny's written consent. If damage occurs during shipping, notify the sender at once so that a claim may be filed.

THE ABOVE LIMITED WARRANTY SETS FORTH THE SOLE REMEDY AGAINST HENNY PENNY FOR ANY BREACH OF WARRANTY OR OTHER TERM. BUYER AGREES THAT NO OTHER REMEDY (INCLUDING CLAIMS FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES) SHALL BE AVAILABLE.

The above limited warranty does not apply (a) to damage resulting from accident, alteration, misuse, or abuse; (b) if the equipment's serial number is removed or defaced; or (c) for lamps and fuses. THE ABOVE LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS, AND ALL OTHER WARRANTIES ARE EXCLUDED. HENNY PENNY NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY.

TABLE OF CONTENTS

Section	Page
Section 1. INTRODUCTION	1-1
1-1. Henny Penny Cold Bases	1-1
1-2. Features	1-1
1-3. Proper Care	1-1
1-4. Assistance	1-1
1-5. Safety	1-2
Section 2. INSTALLATION	2-1
2-1. Introduction	2-1
2-2. Unpacking	2-1
2-3. Electrical	2-2
2-4. Location	2-3
2-5. Refrigerant Information	2-3
2-6. Drain Connection	2-3
2-7. Compressor Size and Load	2-4
2-8. Foot Print Drawing	2-4
2-9. Fluorescent Lighting and lamp Replacement	2-5
2-10. Hot or Cold Top on a Cold Base Installation Instructions	2-6
Section 3. OPERATION	3-1
3-1. Introduction	3-1
3-2. Operating Controls	3-1
3-3. Basic Operation	3-3
3-4. Cleaning	3-3
3-5. Programming	3-5
Wiring Diagram	3-7

SECTION 1. INTRODUCTION

1-1. COLD BASES

The Henny Penny cold bases are self-serve units, designed to hold chilled, or refrigerated products. The units are electronically controlled for easy use and for consistent operation.

1-2. FEATURES

- Can be matched with hot or cold merchandisers in all lengths
- Electronic controls
- Stackable units
- Low speed air circulation
- Easily maintained
- T8 fluorescent lighting with electronic ballast (CE-magnetic ballast)
- Built-in dry storage area on remote units
- Self-serve units
- Remote or self-contained condenser models
- Insulated-well with high pressure injected polyurethane foam
- Automatic defrost cycles

1-3. PROPER CARE

As in any unit of food service equipment, the Henny Penny cold bases does require care and maintenance. Requirements for the maintenance and cleaning are contained in this manual and must become a regular part of the operation of the unit at all times.

1-4. ASSISTANCE

Should you require outside assistance, just call your local independent Henny Penny distributor in your area, or call Henny Penny Corp. 1-800-417-8405 toll free or 1-937-456-8405.

1-5. SAFETY

The Henny Penny cold bases have many safety features incorporated. However, the only way to ensure a safe operation is to fully understand the proper installation, operation, and maintenance procedures. The instructions in this manual have been prepared to aid you in learning the proper procedures. Where information is of particular importance or safety related, the words NOTICE, CAUTION, and WARNING, are used. Their usage is described below.



SAFETY ALERT SYMBOL is used with DANGER, WARNING, or CAUTION which indicates a personal injury type hazard.



NOTICE is used to highlight especially important information.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



CAUTION used with the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

SECTION 2. INSTALLATION

2-1. INTRODUCTION

This section provides the installation and unpacking instructions for the Henny Penny cold bases.

NOTICE

Installation of this unit should be performed only by a qualified service technician.



Do not puncture the unit with any objects such as drills or screws, or component damage or electrical shock could result.

2-2. UNPACKING

The Henny Penny cold base has been tested, inspected, and expertly packed to insure arrival at its destination in the best possible condition. The grids are packed separately inside the unit. The cabinet rests on a wooden skid and is then packed inside a heavy cardboard carton with sufficient padding to withstand normal shipping treatment.

CAUTION

To avoid damage to the components, do not lay the unit on its side. If the unit has been on its side, the unit must be in an upright position for at least 4 hours before power is applied to the unit.

Check all components, for signs of being loose or damaged, and make sure the system has refrigerant.

When moving the cold base be careful not to damage the refrigerant circuit.

NOTICE

Any shipping damage should be noted in the presence of the delivery agent and signed prior to his or her departure.

To remove the Henny Penny cold base from the carton:

1. Carefully cut banding straps.
2. Lift the carton off the unit.
3. Lift the unit off the skid.

2-2. UNPACKING
(Continued)



Take care when moving the unit to prevent personal injury or damage to the refrigeration system. The units weigh between 400 (182 kg) and 580 lbs. (263 kg).

4. Peel off any protective covering from exterior of the cabinet.
5. Install the grids into unit.
6. Your cold base is now ready for operation.

2-3. ELECTRICAL

The cold base is available as a 120 VAC, 60 Hz. or 230VAC, 50Hz, single phase unit, both for domestic and international use. The data plate, located beside the power cord, specifies the correct electrical supply. The cold bases are shipped with cord and plug, and requires a grounded receptacle with a separate electrical line protected by a fuse or circuit breaker of the proper rating. Position the unit so the power cord receptacle is accessible.



To avoid electrical shock, this appliance must be equipped with an external circuit breaker which will disconnect all ungrounded (unearthed) conductors.

Refer to the table below for electrical ratings:

Model No.	Volts	Amps	Phase	Max. Fuse Size
CBC-103	120	8.1	1	15
CBC-103	230	5.8	1	15
CBC-104	120	8.1	1	15
CBC-104	230	7.3	1	15
CBC-105	120	9.5	1	15
CBC-105	230	7.5	1	15
CBC-106	120	9.5	1	15
CBC-106	230	7.5	1	15
CBC-107	120	9.5	1	15
CBC-107	230	7.7	1	15

2-4. LOCATION

Place the cold bases in an area where product can be loaded and unloaded without interruption. For proper operation, level the unit by adjusting the bolts under the base, and leave 3 feet (91.44 cm) clearance behind the unit for ventilation and service.

For maximum efficiency, units should be operated in an air-conditioned environment, with maximum air temperature of 75° F (24° C), and 55% relative humidity.

CAUTION

Wait at least 4 hours before plugging the unit into an electrical supply. The gases and oils in the refrigeration system need to settle before operating the compressor, or damage to the compressor could result.

2-5. REFRIGERATION INFORMATION

UL Specs

	Refrigerant Type	Amount of Refrig.	Design Pressure	
			High	Low
CBC-103	R22	2.5 lbs (1.134 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-104	R22	2.5 lbs (1.134 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-105	R22	2.5 lbs (1.134 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-106	R22	2.5 lbs (1.134 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-107	R22	2.5 lbs (1.134 kg)	440psig (30.3 bar)	162 psig (11.2 bar)

CE Specs

CBC-103	R134A	1.76 lbs (0.800 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-104	R134A	2.20 lbs (1.00 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-105	R134A	2.65 lbs (1.200 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-106	R134A	3.09 lbs (1.400 kg)	440psig (30.3 bar)	162 psig (11.2 bar)
CBC-107	R134A	3.53 lbs (1.600 kg)	440psig (30.3 bar)	162 psig (11.2 bar)

2-6. DRAIN CONNECTION

The cold bases-remote (CBR), require 1 inch (25.4 mm) drain connection. Cold bases with condensing units (CBC) do not require a plumbed drain.

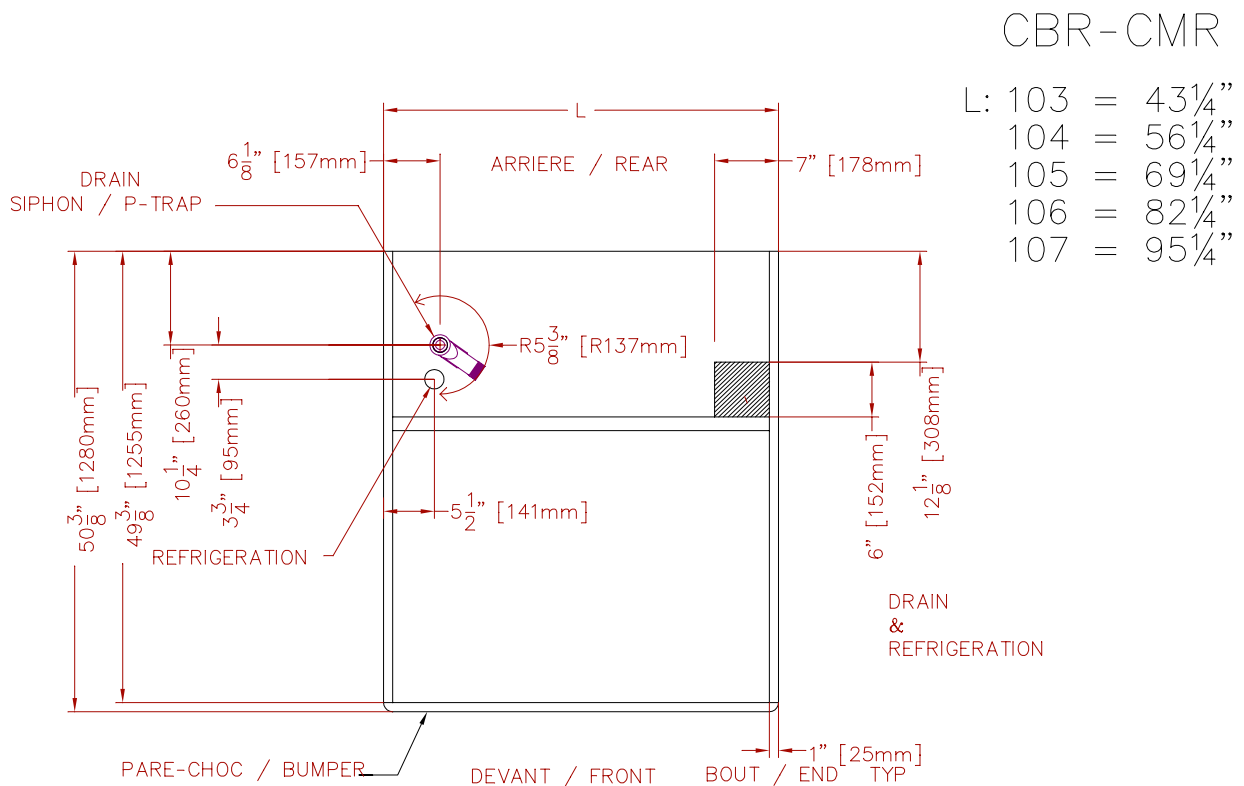
**2-7. COMPRESSOR SIZE
AND LOAD**

Model CBC/ CBR	BTU Load	CBC Motor HP		CBR Motor HP	
		UL R-22	CE R-134a	UL R-22	CE R-134a
103	2830	1/3	1/2	Remote Compressor Supplied By Other	
104	2830	1/3	1/2		
105	3840	1/2	1/2		
106	3840	1/2	1/2		
107	3840	1/2	1/2		

BTU load sized at evaporator temperature + 20 F or -6 C.

2-8. FOOT PRINT DRAWING

**CBR MODELS
DRAIN & REFRIGERATION CONNECTIONS**



**2-9. FLUORESCENT LIGHTING
AND LAMP REPLACEMENT**

Model	No. of Lights	Size
CBR/CBC-103	1	36 in. (.914 m)
CBR/CBC-104	1	48 in. (1.22 m)
CBR/CBC-105	1	24 in. (.610 m)
	1	36 in. (.914 m)
CBR/CBC-106	2	36 in. (.914 m)
CBR/CBC-107	1	36 in. (.914 m)
	1	48 in. (1.22 m)

Replacement:

UL Units

1. Pull the lamp out of the sockets.
2. Remove the lamp guard caps.
3. Install new fluorescent bulb in reverse order.

CE Units

1. Remove the lamp cover.
2. Rotate the lamp.
3. Pull the lamp out of the sockets.
4. Install new fluorescent lamp in reverse order.

**2-10. HOT or COLD TOP ON A
COLD BASE INSTALLA-
TION INSTRUCTIONS**

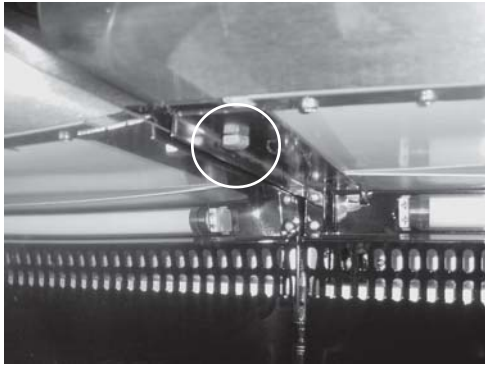


Figure 2-1



Figure 2-2

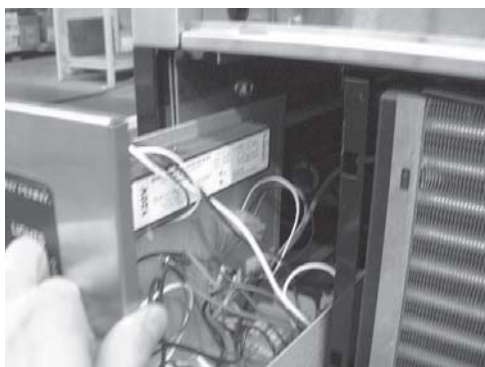


Figure 2-3

1. Remove bolts securing the top to the skid, and save bolts for later use.
2. Carefully set top on top of the cold base.



Take care when moving the unit to prevent personal injury or damage to the refrigeration system. The units weigh between 400 (181 kg) and 580 lbs. (263 kg).

3. Line up the 2 front holes and secure the top to the base using the bolts from step 1. Figure 2-1.
4. Locate mounting hole in right, rear corner of the units and secure the corner using one of the bolts from step 1. Figure 2-2.
5. Pull the control panel out from unit and locate the mounting hole in the left, rear corner. Secure corner with one of the screws from step 1. Figure 2-3.

6. Installation is now complete.

SECTION 3. OPERATION

3-1. INTRODUCTION









This section provides explanations of all controls, along with operating procedures and daily maintenance. Read the Introduction, Installation and Operation Sections before operating the unit.

CAUTION

Wait at least 4 hours before plugging the unit into an electrical supply. The gases and oils in the refrigeration system need to settle before operating the compressor, or damage to the compressor could result.

3-2. OPERATING CONTROLS

Refer to figure 3-1.

Fig. No.	Item No.	Description	Function
3-1	1	Power Switch	A rocker switch that turns electrical power off and on to the unit; located on the bottom of the control panel
3-1	2	Digital Display	Shows the temperatures and the information in the Technical Mode
3-1	3		The up and defrost button is used to increase setpoint values, as well as programming values; also, automatic defrost cycles are programmed in the controls, but to manually start a defrost cycle, press and hold  for 3 seconds to start a manual defrost cycle (“DEF/SET” shows in display)
3-1	4		The down button is used to decrease setpoint values, as well as programming values
3-1	5		Press the set button to view the setpoint temperature, or hold it for it for 4 seconds to enter the Program Mode; once in the Program Mode, press  to view other parameter setpoints; press  , along with  and  to change the parameters.

3-2. OPERATING CONTROLS
(Continued)

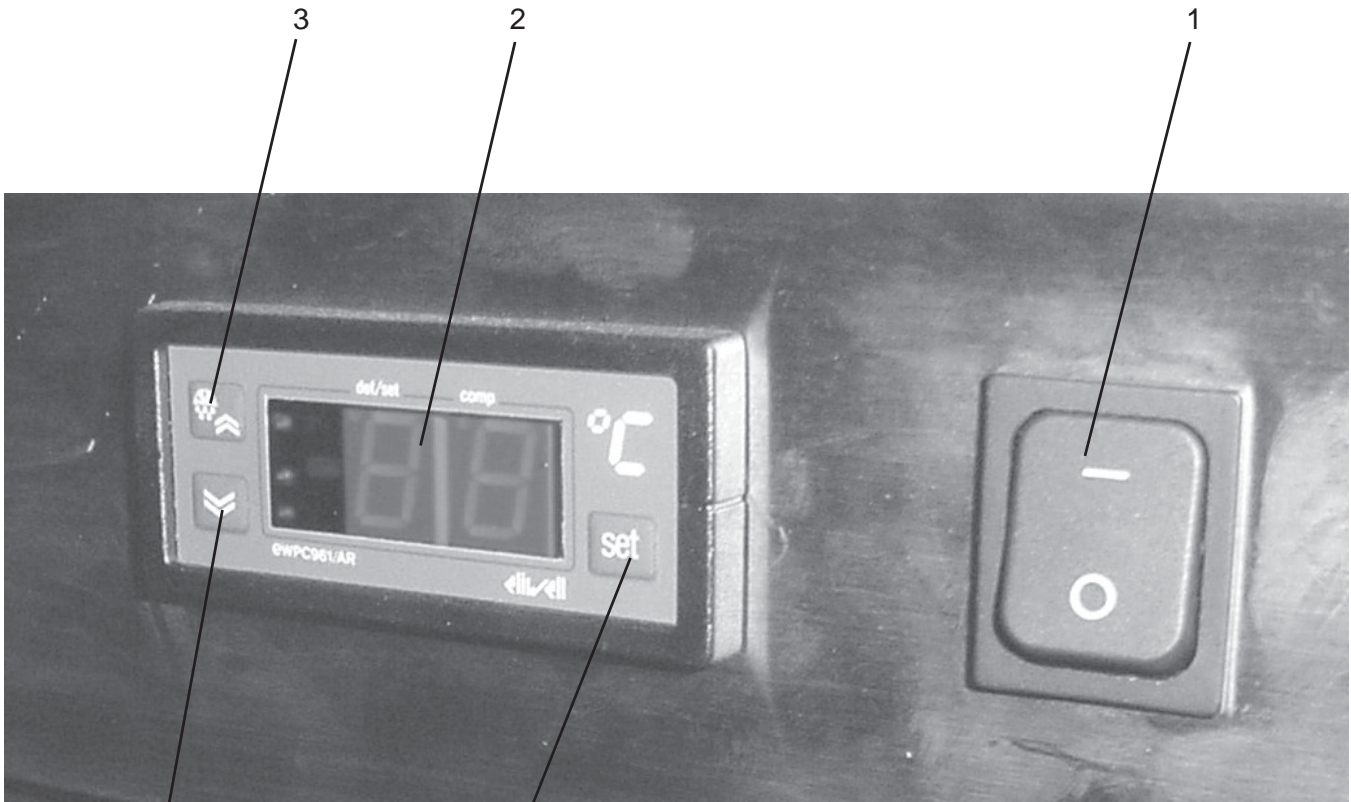


Figure 3-1

3-3. BASIC OPERATION

1. Turn power switch to ON position.
2. Wait for temperature to reach operating temperature, 36 to 38° F (2.2 to 3.3° C).
3. Place chilled, prepackaged product into case.



Do not stock product in the case beyond the load height limit of 9 inches (23 cm), or over the front edge. Product temperatures may become unsafe, and increase operating costs.

CAUTION

Do not use mechanical devices or other means to quicken the defrosting process, other than those recommended by the manufacturer, or damage to the unit could result.

Do not use electrical appliances inside the food storage areas of the unit, unless they are of the type recommended by the manufacturer, or damage to the unit could result.

3-4. CLEANING

Weekly:

1. Remove all electrical power supplied to the unit by unplugging the power cord from the wall, or by turning off the wall circuit breaker.
2. Clean interior and exterior surfaces with a soft cloth, soap and water.

CAUTION

Do not use steel wool, other abrasive cleaners or cleaners/sanitizers containing chlorine, bromine, iodine or ammonia chemicals, as these will deteriorate the stainless steel, and glass material, and shorten the life of the unit.

Do not use a water jet (pressure sprayer) to clean the unit, or component failure could result.

3. Clean around the electronic controls with a soft, damp cloth.
4. Reconnect the electrical power to the unit and unit is now ready for operation.

3-4. CLEANING
(Continued)

Every 3 Months:

1. Remove all electrical power supplied to the unit by unplugging the power cord from the wall, or by turning off the wall circuit breaker.
2. Remove all product from the unit.
3. Remove the riser and trays from the unit and clean with soap and water at a sink.
4. Clean interior surfaces with a soft cloth, soap and water.

CAUTION

Do not use steel wool, other abrasive cleaners or cleaners/sanitizers containing chlorine, bromine, iodine or ammonia chemicals, as these will deteriorate the stainless steel, and glass material, and shorten the life of the unit.

Do not use a water jet (pressure sprayer) to clean the unit, or component failure could result.

5. Clean around light fixtures with a soft, damp cloth.
6. Reconnect the electrical power to the unit and unit is now ready for operation.





If the power cord is damaged, have a qualified service technician replace it to prevent electrical shock or property damage.



3-5. PROGRAMMING

1. Press and hold  for 4 seconds. The “DEF/SET” light flashes in display.

Temperature Setpoint

2. Press the  or  to change the temperature setpoint, within 5 seconds. After 5 seconds, the last entered setpoint stays in memory.

Other Parameters

3. Press  to access the other parameters. Each press of the  accesses the next parameter. The parameters are:

d: (differential) (-15...15 range)

LS: lower set; lower user-access setpoint limit
(-55...99 range)

CAUTION

The units are programmed to defrost 3 times a day, at 8 hour intervals, lasting 30 minutes. Do not program the setpoint temperature below 33° F (1° C), or ice build-up will decrease efficiency.

HS: (higher set) upper user-access setpoint limit
(-55...99 range)

CA: (calibration) temperature readout offset to allow for possible error due to probe location. (-15...15 range)

rP: (relay protection) elect relay status in case of probe defect.
“on” = compressor ON in case of probe defect
“of” = compressor OFF in case of probe defect

PS: (protection system-short cycle) select type of compressor protection desired (the actual time delay is set with the next parameter):

“0”=delay before start - in seconds

“1”=delay before start - in minutes

“2”=delay after stop - in minutes

“3”=delay between starts - in minutes

Pt: (protection time) select the time delay setting for compressor protection. (0...31 range)

3-5. PROGRAMMING
Continued

- dS:** (defrost system (computation)) dF=digifrost feature; defrost start time based on total compressor running time. rt=real time; defrost start frequency, based on real time
- dI:** (defrost interval) defrost frequency in hours, based on the selection of “dS”
- dE:** (defrost endurance) total (maximum) length of a defrost cycle, expressed in minutes. (1..99 range)
- dL:** (display lock) temperature display is locked during a defrost cycle. (0...31 range)
“n”=no (readout continues to display the actual temperature, even during a defrost cycle)
“y”=yes (readout is locked)
- dr:** (display read-out) select the type of visualization in case of temperature display lock during defrost (see parameter **dL**)
“C”=the temperature displayed at the start of a defrost is locked and does not change during this cycle
“dF”=during the defrost “dF” is displayed
- do:** (defrost at power on) selects whether or not, the system goes through the defrost cycle at start-up (or after power failure)
“n”=no
“y”=yes
- dd:** (defrost delay at power on) delay of defrost cycle, in minutes. (0...99 range)

Error Code “E1”

This is the only error code in these controls. It indicates a temperature sensor failure, such as, a shorted sensor, a sensor break, or absence of sensor.

It can also indicate an under-range in the system temperature (-55).

In case of an over-range in the system temperature, “99” shows first in the display, followed by “E1”.

DIAGRAM FOR CBC MODEL

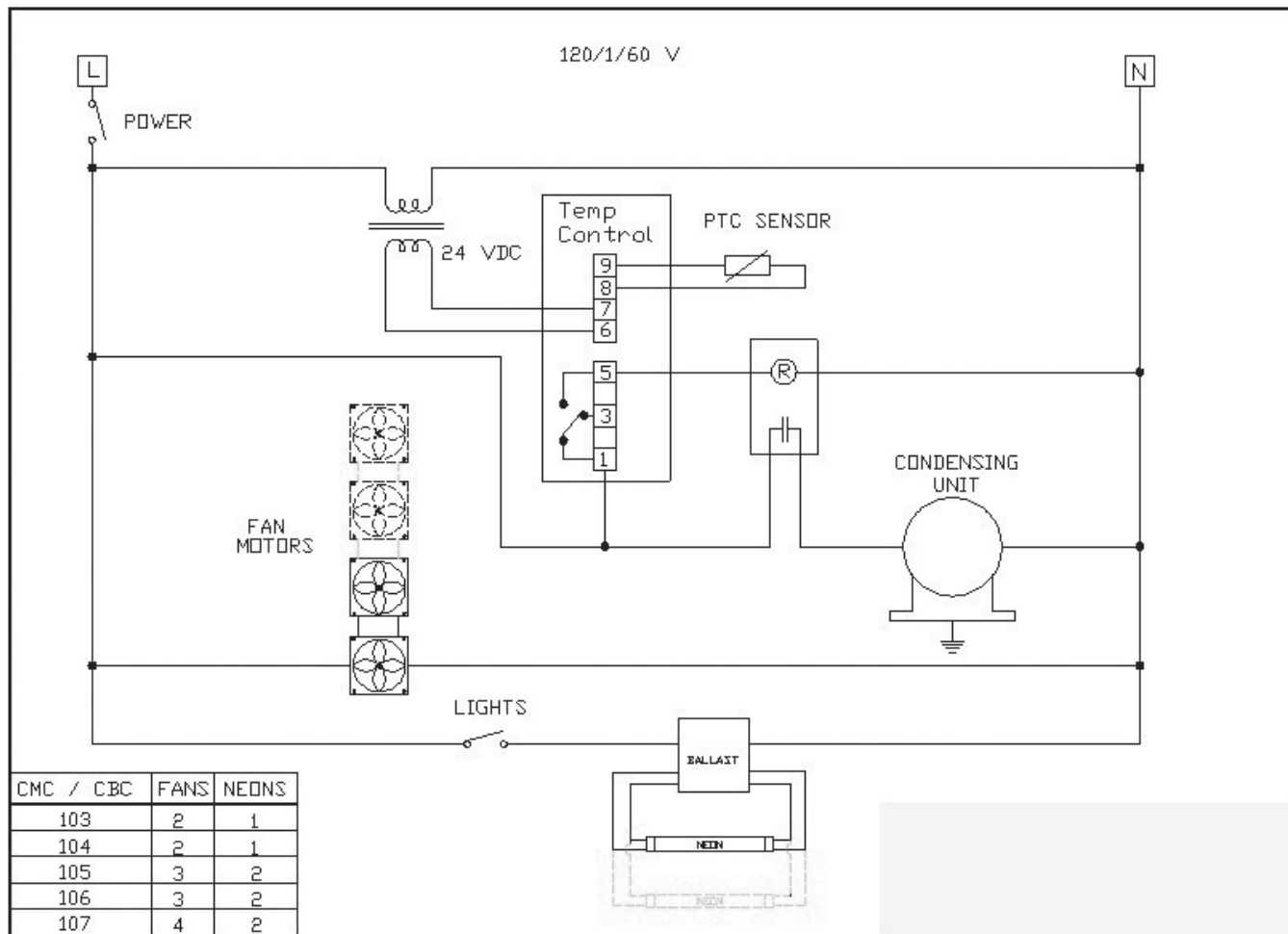
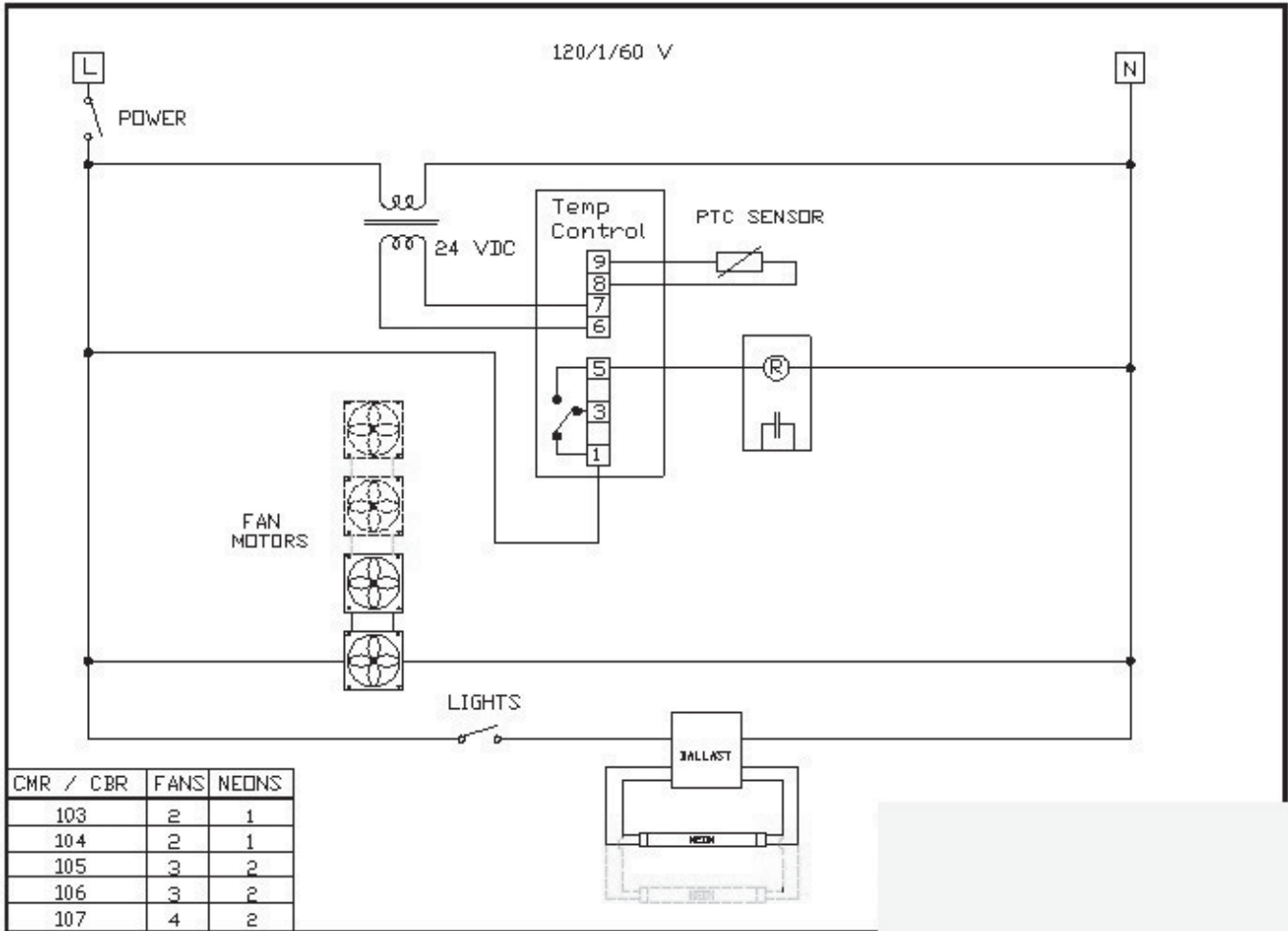
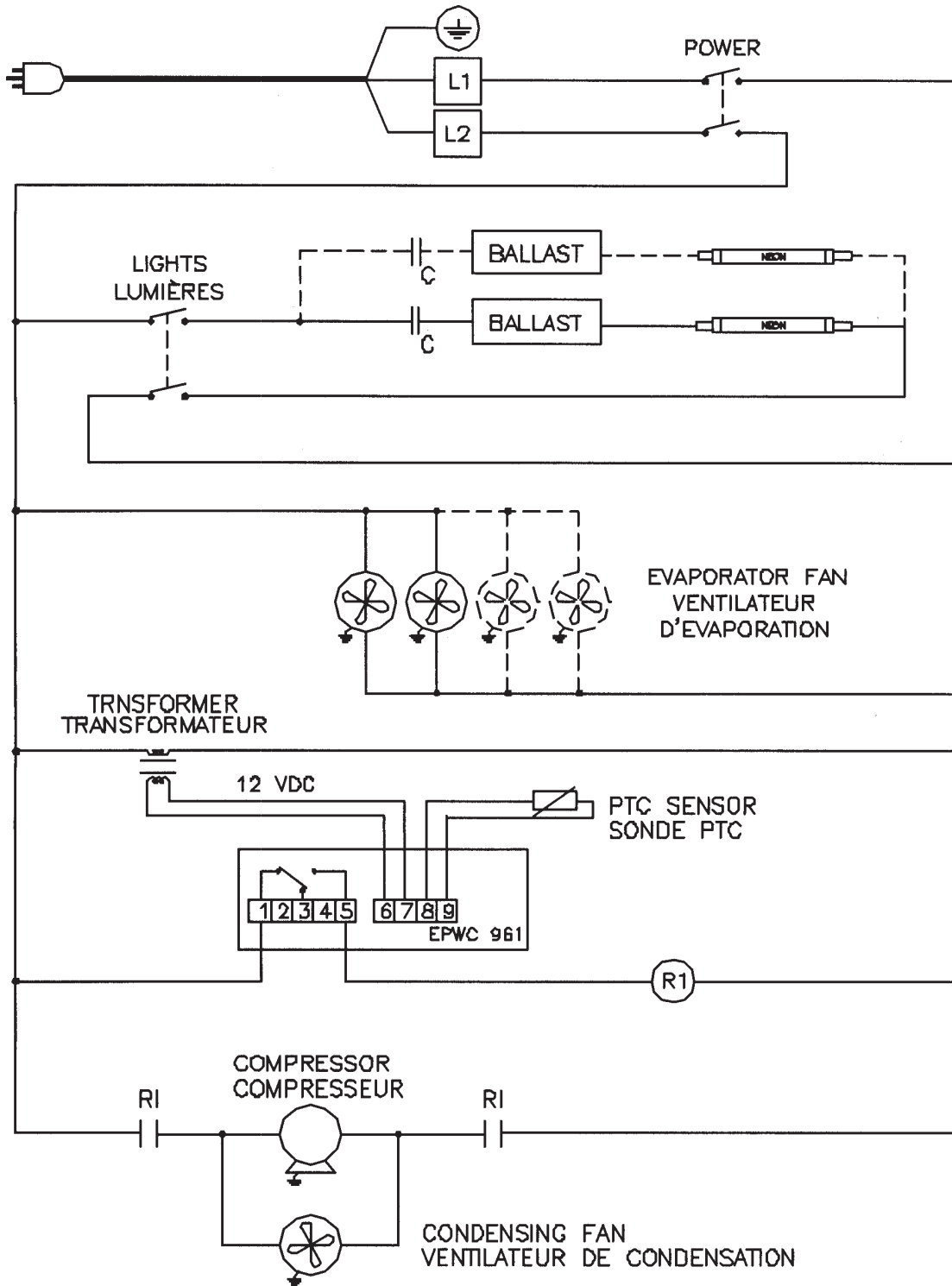


DIAGRAM FOR CBR MODEL





CMC / CBC	FANS	NEONS
103	2	1
104	2	1
105	3	2
106	3	2
107	4	2

230V-50Hz-1ph-CE

RECOMMENDED PARTS LIST

Item No.	Part No.	Description	Quantity				
			103	104	105	106	107
1	23969	Refrigeration/Condensing unit 1/3 HP - CBC-103/104-UL	1	1	-	-	-
1	23968	Refrigeration/Condensing unit 1/2 HP - CBC-103/104-CE	-	-	1	1	1
1	23968	Refrigeration/Condensing unit 1/2 HP - CBC-105/106/107	-	-	1	1	1
2	23978	Evaporator - CBC/CBR-103	1	-	-	-	-
2	23977	Evaporator - CBC/CBR-104	-	1	-	-	-
2	23976	Evaporator - CBC/CBR-105	-	-	1	-	-
2	23975	Evaporator - CBC/CBR-106	-	-	-	1	-
2	23974	Evaporator - CBC/CBR-107	-	-	-	-	1
√ 3	23979	Thermostatic Expansion Valve (R22)-CBC/CBR-103/104	1	1	-	-	-
√ 3	23980	Therm. Expansion Valve (R22)-CBC/CBR - 105/106/107	-	-	1	1	1
√ 4	23981	Filter Drier	1	1	1	1	1
5	23982	Moisture & Liquid Indicator - 1/4"-SAE-male	1	1	1	1	1
√ 6	23997	Fan Motor - GE - 120V-6W	1	2	2	2	2
7	23984	Fan Blade - 8"- 20 degree pitch, CW-Hubless	1	2	2	2	2
8	23986	Electronic Control-Eliwell-Complete-12V-EWPC961	1	1	1	1	1
√	23985	Electronic Control-Eliwell-Only	1	1	1	1	1
	65045	Front cover & Bezel-Eliwell Control - F	1	1	1	1	1
√	65046	Sensor/Probe-Eliwell-120V/12V	1	1	1	1	1
√	65047	Transformer-Eliwell-120V12V	1	1	1	1	1
	65048	Control & Bracket-Eliwell-120V/12V	1	1	1	1	1
√ 9	23986	Sylvania Quicktronic Ballast	1	1	1	1	1
√ 10	23991	Fluorescent Light F32T8-SP35 - 48" - CBC/CBR-104/107	-	1	-	-	-
√ 10	23998	Fluorescent Light F25T8-835 - 36"-CBC/CBR-103/105/106/107	-	-	1	2	1
√ 10	23992	Fluorescent Light F17T8-SP35 - 24" - CBC/CBR-105	-	-	1	-	-
11	23993	White Socket for Neon Light	2	2	4	4	4
12	23994	Power Cord - 14/3	1	1	1	1	1
√ 13	23995	Contactator - 120V-20A-2 pole - CBC/CBR-103	1	-	-	-	-
√ 13	24146	Magnetic Contactator-120V-20A-2 pole-104/105/106/107	-	1	1	1	1
√ 14	24147	Power Switch - Fan/Light - 125V	1	1	1	1	1
15	23999	Plastic Protector-Fluorescent Light - 48" - CBC/CBR-104/107	-	1	-	-	1
15	24144	Plastic Protector-Fluorescent Light - 36"-103/105/106/107	1	-	1	2	1
15	24145	Plastic Protector-Fluorescent Light - 24"-CBC/CBR-105	-	-	1	-	-
16	39058	Rear Access Panel - CBC/CBR-107	-	-	-	-	1
17	67215	Cap - Protective End - Fluorescent Light	2	2	4	4	4

√recommended parts

