



# Blast Chiller Operator's Manual

*Reach-In Models: VBC-35, VBC-70, VBC-75 & VBC-100*

*Roll-In Models: VBC-175, VBC-220, VBC-350, VBC-480 & VBC-660*



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PART OF AGA FOODSERVICE GROUP

# **T H A N K Y O U**

Thank you for purchasing a Victory Refrigeration Reach-In or Roll-In Blast Chiller! This unit has passed our strict Quality Control Inspection and meets the high standards set by Victory Refrigeration. You have made a quality investment that with proper maintenance will give you years of service.

Please read the following installation and maintenance instructions before installing or using your unit. If you have any questions, please call our Customer Service Department at (856) 428-4200.

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## ***IMPORTANT INFORMATION - PLEASE READ***

- *Please read these instructions carefully before installing or using. If recommended procedures are not followed, warranty claims will be denied.*
- *Your Warranty Registration information is located on the next page of this manual. Please complete the card and submit it to Victory Refrigeration within 10 days of installation. Failure to properly register equipment can void the warranty.*
- *Victory Refrigeration reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.*
- *A detailed Owners Manual with a troubleshooting guide, parts lists and additional information can be ordered from the factory or may be downloaded free from the website at [www.victory-refrig.com](http://www.victory-refrig.com).*

# Warranty

(Continental USA Only)

The Seller warrants to the original purchaser, equipment manufactured by Seller to be free from defects in material and workmanship for which it is responsible. The Seller's obligation under this warranty shall be limited to replacing or repairing at Seller's option, without charge, F.O.B. Seller's factory, any part found to be defective and any labor and material expense incurred by Seller in repairing or replacing such part, such warranty to be limited to a period of one year from date of purchase or thirteen months from date of shipment from Seller's factory, whichever is earlier, provided terms of payment have been fully met. All labor shall be performed during regular working hours. Overtime premium charges will be at Buyer's expense.

Proof of purchase must be supplied to Seller to validate warranty. This warranty is valid only if equipment is properly installed, started-up and inspected by the dealer or authorized Victory Service agent.

Removal or alteration of the serial/data plate from any equipment shall be deemed to release Seller from all warranty obligations or any other obligations, expressed or implied.

This warranty does not cover Thermostat or Defrost Timer calibration and/or adjustment, freight damage, normal maintenance items outlined in Owner's Manual, adjustment of door mechanisms or replacement of light bulbs, fuses or batteries.

Any repairs or replacement of defective parts shall be performed by Seller's authorized service personnel. Seller shall not be responsible for any costs incurred if the work is performed by other than Seller's authorized service personnel. Reimbursement claims for part(s) or labor service costs must be made in writing. Model, cabinet serial numbers and installation location must be shown on the claim. A receipted bill from the servicing agency must accompany the claim, together with full details of the service problems, diagnosis and work performed. Victory reserves sole discretion whether further documentation on a claim is to be submitted.

Seller shall not be liable for consequential damages of any kind which occur during the course of installation of equipment, or which result from the use or misuse by Buyer, its employees or others of the equipment supplied hereunder, and Buyer's sole and exclusive remedy against Seller for any breach of the foregoing warranty or otherwise shall be for the repair or replacement of the equipment or parts thereof affected by such breach.

The foregoing warranty shall be valid and binding upon Seller if and only if Buyer loads, operates and maintains the equipment supplied hereunder in accordance with the instruction manual provided to Buyer. Seller does not guarantee the process of manufacture by Buyer or the quality of product to be produced by the equipment supplied hereunder and Seller shall not be liable for any prospective or lost product or profits of Buyer.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER. SPECIFICALLY THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

The foregoing shall be Seller's sole and exclusive obligation and Buyer's sole and exclusive remedy for any action, whether in breach of contract or negligence. In no event shall Seller be liable for a sum in excess of the purchase price of the item.

You may register online at [www.victory-refrig.com](http://www.victory-refrig.com), fax this completed page to (856) 428-7299, or copy and mail form below to Victory.

\*NOTE: The following mail-in form or online registration must be filled out and forwarded to Victory by the installer or customer within 10 days after start-up. Failure to do this will invalidate the warranties. Retain this information for your records.



110 WOODCREST ROAD  
CHERRY HILL, NJ 08003-3648  
TEL: (856) 428-4200 • FAX: (856) 428-7299

Cabinet Model No. \_\_\_\_\_

Cabinet Serial No. \_\_\_\_\_

(Data plate information located inside cooler on the upper left wall)

**WARRANTIES NOT VALID UNLESS REGISTERED AT FACTORY WITHIN 10 DAYS AFTER START-UP DATE.**

ORIGINAL DATE OF INSTALLATION \_\_\_\_\_

INSTALLATION COMPANY NAME \_\_\_\_\_

STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

DISTRIBUTOR'S NAME \_\_\_\_\_

STREET \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_



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**Proper installation is the first step to operation. We recommend that your refrigerator or freezer be installed by an authorized Victory Certified Installer.**

## **RECEIVING SHIPMENT**

All units are performance tested and thoroughly inspected prior to shipment. Upon leaving the factory, all units are in perfect condition. Upon receipt, examine the exterior of the shipment packaging for any signs of rough handling. If the cabinet is damaged, it should be noted on the delivery slip or bill of lading and signed. A claim must be filed immediately against the carrier indicating the extent and estimated cost of damage incurred.

## **UNPACKING**

Remove all external and interior packing and accessories. Ensure all packaging is disposed of safely.

## **INSTALLATION**

The cabinet should stand level to ensure correct operation of self closing doors and proper drainage of condensate from the evaporator.

Models fitted with casters are non-adjustable, therefore a level platform/floor should be provided where the cabinet is to be located. On models fitted with adjustable legs leveling may be achieved by adjustment of the bottom section of the legs. For marine specification models with flanged feet for deck fixing and bulkhead fixings, installation should be carried out by a specialist marine company.

For top mounted refrigeration systems please ensure there is 20" [500mm] between the top of the cabinet and ceiling for service technician access and ventilation.

If the cabinet has been laid on its back or tipped, **DO NOT** switch on immediately. Leave the cabinet in the upright position for at least 12 hours before switching on.

## **ELECTRICAL SUPPLY**

Wiring should be done by a qualified electrician in accordance with local electrical codes. All models, with the exception of the VBC-100 and all Roll-In VBC's, come fitted with a NEMA plug for safety and must be grounded. We recommend that if the plug or cable fail, contact Victory's parts department for a replacement part.

The VBC-100 and Roll-In VBC's are 3-phase and requires connection to a suitable supply.

## **START-UP**

### **MAIN CONTROL BREAKERS**

Should the equipment fail to run on initial connection, please check that all Main Control Breakers (MCBs) are in the "ON" position at the back of cabinet. (\***Note:** The "ON" position is confirmed by red indicators on the MCBs.)

### **INITIAL START-UP ERROR CODES & CHECKS**

An "a7" error code (indicating a loss of power) with an audible alarm sound off will always occur during an initial start-up of a blast chill cabinet. Press the "**CANCEL**" button (red with **X** symbol), the error code and audible alarm will discontinue.

A "**Battery Failure Configuration Suspect**" error message ticket will always print during an initial start-up. Do not be alarmed when the error message prints; it is only indicating that the back-up batteries that hold the cabinets data during a power failure is not fully charged. Full battery charge should be within 24 hours after start-up.

Check the time and date on the printed tickets. If the ticket has printed an incorrect time and date or the printer logger paper is not feeding properly, see page 7 for further instruction.

## PRINCIPLES OF OPERATION

Victory blast chillers have been designed to quickly reduce the temperature of food in accordance with Department of Health guidelines on the chilling of cooked foods. All operators should be conversant with Department of Health publication, Chilled and Frozen Guidelines on Cook-Chill and Cook-Freeze Catering Systems.

Fast temperature reduction is not brought about by placing the food in a very cold cabinet like a deep freeze. This would only dry the food badly and take a very long time to reduce its temperature to the required level. The secret of fast temperature reduction is in delivering the correct blast of air and ensuring correct and unobstructed horizontal air flow inside the cabinet.

This is why Victory has the option of soft and hard facility on blast chill.

**Exceptions: depending on the density types and sizes of the portions the chiller might not be capable of achieving the required guidelines, therefore, the load and/or depth of the food layers should be reduced. You may find it necessary to experiment with different amounts of food and loading methods in order to achieve the optimum performance with your blast chiller.**

## LOADING AND PACKING

Regulations state that product should be placed in the Blast Chiller within 30 minutes from completion of cooking. The packaging of food and the way in which it is loaded or placed within the apparatus can have a significant effect on the time within which the temperature can be reduced to the required level and the amount of food which can be processed in each chilling batch.

When blast chilling always use metal or foil containers which are good conductors. Plastic or polyurethane containers insulate the food from the cold air. When chilling unportioned food we recommend the use of the appropriate pan that is at least 2-1/2" [63.5mm] in depth. Likewise, placing lids or covers on food will also increase the chilling time but may be of some use when processing some delicate foods to avoid dehydration.

Always load your machine in such a way that it is possible for the cold air to contact all sides of the containers. Avoid stacking containers directly on top of one another as this will drastically extend the chilling time and take special care not to block the air ducts.

Always load the machine before selecting the blast cycle. Unless it is unavoidable do not open the door of the machine while the blast cycle is engaged.

In the case of roll-in rack models, bumper bars are fitted to the walls inside the machine. This assists in the correct positioning of the rack(s) so as to avoid blocking the air flow.

## FOOD STORAGE TIME

Chilled foods can be stored for up to 5 days at between 32°F/0°C and 38°F/+3°C.

## OPERATION OF BLAST CHILLERS

Your machine has been set-up at the factory and no further adjustments should be necessary.

**Note: The control systems employed are micro-processor based and contain no user serviceable components. Instructions on setting up the control panel thermostats are available from the manufacturer. These should only be reset by a qualified service technician.**

### Normal Storage:

This is the storage temperature at which food can be held and the Blast Chiller automatically switches into this mode at the end of each cycle.

### Storage Mode

On some chillers there is more than one fan installed these may not all operate during the storage mode giving a reduced air circulation within the chiller. All other models have one or more Aerofoil fans. The unit cycles on the store thermostat, the sensor of which is placed in the air.

### **Blast Chill Cycle:**

All machines have the facility for the operator to use any of the 4 pre-programmed timed cycles and a probe control blast chilling cycle, with the option of soft or hard blast.

The probe controlled blast cycle functions via the food core probe supplied. The probe monitors the core temperature of the food and will not permit the blast cycle to stop until the default temperature (37°F\3°C) is reached. When controlling the cycle with the food probe make certain that the probe or probes are located in the product before the blast cycle is started.

Pressing the selections automatically adopt the previous settings on the first push. So the repeating of blast is just pushing buttons **1- 2- 3 & Blast** .

### **Blast Chill Cycle (Hard or Soft):**

During the blast chill hard cycle the air temperature inside the cabinet should go down to approximately 14°F (-10°C). This is for the timed chilling cycle only. During soft chill cycle the air temperature stays above 32°F (0°C).

All blast chillers have 3 basic modes:

1. Normal storage: 34°F (1°C) to 37°F (3°C)
2. Blast Chill Hard: 14°F (-10°C)
3. Blast Chill Soft: 34°F (1°C)

### **DEFROST**

At the end of each cycle, a defrost will automatically clear any ice from the evaporator ready for the next cycle.

During the operation in storage mode a defrost will be performed automatically at the factory preset intervals of 6 hours.

Furthermore, if a blast cycle is cancelled and the defrost thermostat is measuring 34°F (+1°C) or less, the machine will automatically proceed to defrost.

When the machine is in the defrost mode the '**Cabinet Temp**' window of the control panel will display '**DEF**'. When the defrost cycle is finished the compressor will run for approximately 90 seconds before the fans cut in.

Following every defrost period there is a 3 minute period during which a blast cycle cannot be selected. This short interval is to allow defrost water to drip away from the evaporator.

The cabinet is now ready to start another cycle if desired. During the defrost operation it is safe to leave products inside the machine.

### **ROLL- IN BLAST CHILLERS WITH STORAGE POD**

On roll-in chillers fitted with storage refrigeration pods, the roll-in blast chiller will function as a small cold storage room when the chiller is in store mode. A defrost will occur every six hours for 20 minutes.

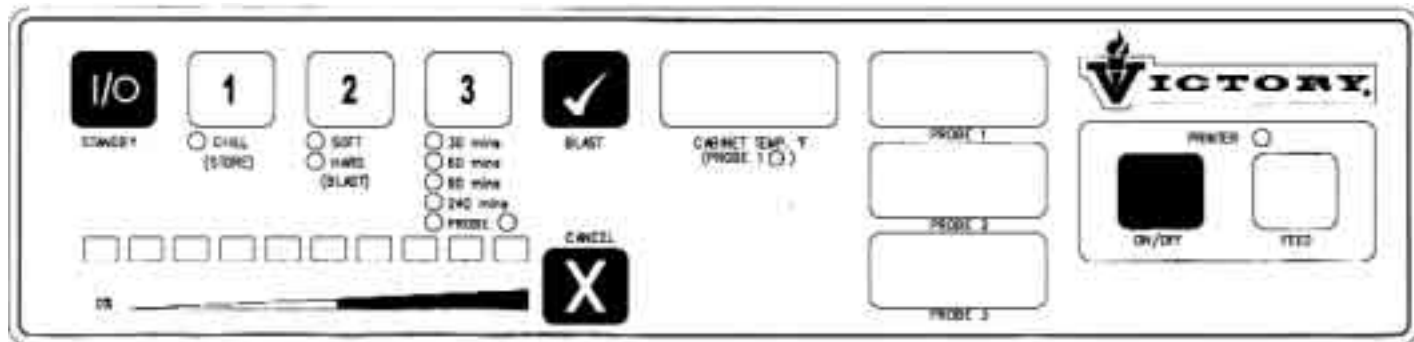
When the blast facility is engaged, the storage pod will be disengaged and the main compressor and main evaporator fan will take over until the end of the blast cycle. Immediately following the blast cycle, a main defrost period will occur. When the defrost period is complete the main compressor will start up again, followed 1-2 minutes later by the main evaporator fan for a period of 10 minutes. After 10 minutes the blast chiller will revert to storage mode until the blast facility is once more engaged.

### **THE CONTROLS**

The control panel enables the display of detailed information about the machine and its performance. If the machine is also fitted with a printer (standard on roll in machines, optional on reach in cabinets), detailed historical information can be printed out for immediate use or archived.



1. The '**Cabinet Temp**' display window can be used:
  - ❖ To show the cabinet wall temperature.
  - ❖ As a count up timer in probe blast.
2. The '**Probe**' window can show:
  - ❖ Temperature during a blast cycle, (blank during store).
  - ❖ During a blast if a food probe fails it will display '**pf**' in its own window. At the end of a blast cycle it will indicate alarm code in Probe 1 window.
3. For a timed blast, the green row of LEDs show the progress of the blast. Each LED indicates another 1/10 of the total blast time has started. When there is only approximately 50 seconds left to blast, the right hand LED will flash. For a probed blast, the green LEDs again show the blast progress, but this time each LED indicates 1/10 of the temperature excursion between the products starting temperature and the target end temperature. Cabinet temperature window also acts as a count up timer showing in minutes the duration of the probed blast.



## PROGRAMMING A BLAST CHILL CYCLE:

1. Switch on the chiller at least half an hour before use.
2. Check that the chiller is operating at storage temperature.
3. Load the products to be chilled (see notes on loading).
4. By pressing button '1' select the '**Chill**' mode.
5. By pressing button '2' select the desired type of blast, hard or soft.
6. By pressing button '3' select the timer for the desired duration, or probed blast.
7. When you are content with your selected program press the ✓ to start the blast cycle.
8. If you are not content with your selection press the X button to cancel your 1/2/3 selection.

As each selection is made, the indicator LED will illuminate to show what is chosen. Press ✓ to accept, or X to cancel.

On completion of a cycle, there will be an audible alarm which will cancel automatically after 15 minutes or may be cancelled with the X button. '**DEF**' will then be displayed in the '**Cabinet Temp**' window of the control panel and the chiller will then revert to a store mode appropriate to the blast just completed.

During the defrost operation the temperature in the chiller will not exceed 38°F (+3°C) and it is therefore safe to leave products in the chiller during the defrost cycle.

To save time for repeated identical blast operations, the blast selections are remembered, so when 1 2 3 are pressed the selections automatically adopt the previous settings on the first push. So the repeat a blast, just push 1 2 3 ✓.

## ALARM AND WARNING LEVELS

For the following alarm and warning conditions, an audible alarm will be activated and a warning ticket will be printed if the printer is fitted. A faulty sensor alarm will be initiated if a sensor fault condition is detected. If there is an alarm condition, probe 1 window will display an alarm number **a0** to **a7** during store (\*see alarm table at the top of the next page), but will show the probe temperature during blast.

## **7-SEG DISPLAY**

<b>a0</b>	Air on sensor failure
<b>a1</b>	Wall sensor failure
<b>a2</b>	Fin sensor failure
<b>a3</b>	Food probe 1 failure
<b>a4</b>	Food probe 2 failure
<b>a5</b>	Food probe 3 failure
<b>a6</b>	Spare
<b>a7</b>	Power cut detected

## **ALARM CONDITION**

**Note:** *If a wall sensor fails it will also read -50.*

For each probe only one audible alarm and alarm printout is allowed to be issued each day. This is to prevent excessive paper use and noise nuisance in the event of an intermittent probe failure. However, repeated probe failures are displayed on the probe display window, (top window in the case of 3 probe panels).

To cancel the audible alarm press the **X** button. If the alarm condition still exists the display will continue to indicate there is a fault.

THERE IS NO RE-SET FACILITY.

## **THE PRINTER**

If fitted and "ON", the printer is activated after each blast cycle. The printer provides hard copy historical data of cabinet performance or warning tickets to archive or act upon.

The formats available are:

### **Midnight Ticket (if programmed)**

At midnight a ticket is automatically printed for archiving in the morning. The midnight ticket provides the following information:

- ❖ Time and date of printout and cabinet number
- ❖ Cabinet temperature at time of printout
- ❖ A graph of cabinet temperature over the preceding 24 hours

### **Demand Ticket**

A ticket may be requested from the control panel by holding the printer '**On/Off**' button for 5 seconds. This ticket provides the same information as the midnight ticket except that up to seven days of historical data are printed.

### **Alarm or Warning Ticket**

A ticket is automatically printed if any condition is detected by the micro controller which may need attention.

The print function may be terminated by pressing the printer '**On/Off**' button.

### **Mains Power Failure Ticket**

If mains power fails for more than 5 seconds a ticket is automatically printed which gives the time of power failure and the time at which power is restored.

### **Sensor Failure Ticket**

If the controller detects that one of its sensors has failed then a warning ticket will be printed.

## PRINTER SET UP

(CAUTION!!! : DO NOT CHANGE any other parameters when setting the date & time! If additional parameters are changed, there is a great possibility that the VBC Cabinet will not function properly and will void warranty!)

### TIME AND DATE SET UP

A. Enter the Engineering Switch Mode by doing the following:

1. Turn control panel "off" by pressing the "standby" button.
2. Press and hold the "1" button.
3. While continuing to hold the "1" button, press and release "standby" button.

B. Press the "2" or "3" button to step through the engineering settings. When the display shows "ute", you have reached the time and date settings.

**\*Note:** The setting functions (i.e. "ute", "hr") are only displayed when the "3" button is depressed. When the button is released, the actual setting value will appear and can then be set.

- Minute (shown as "ute") ➔ Press "✓" to increase or "✗" decrease minute
- Hour (shown as "hr") ➔ Press "✓" to increase or "✗" decrease hour
- Day (shown as "day") ➔ Press "✓" to increase or "✗" decrease day
- Month (shown as "nth") ➔ Press "✓" to increase or "✗" decrease month
- Year (shown as "yr") ➔ Press "✓" to increase or "✗" decrease year

**\*Note:** When entering the year, there could be only one character displayed. Examples are below:

- 1 = the year 2001
- 2 = the year 2002
- 3 = the year 2003, etc.

C. When entry is complete, press "standby" once to exit the Engineering Switch Mode. Then press "standby" again to turn on the cabinet.

D. Print demand ticket by holding printer "on/off" button for five (5) seconds. A printout will be produced to confirm new information entered.

**\*Special Note:** If there is information entered by error, wait approximately two (2) minutes before starting the process over.

## LOGGER PAPER INSTALLATION

Logger paper should be installed as shown. It is best to tear the end of a new roll at a 90 degree angle for easy installation.

Once logger paper roll has been inserted into the printer, use the "feed" button on the control panel to automatically bring paper forward.



"Paper Installation"

## PRINT CARTRIDGE REMOVAL & INSTALLATION

- Remove printer cover and logger paper.
- Press the end of print cartridge that calls out "PUSH" & "EJECT".
- Once cartridge is pressed at "PUSH" & "EJECT" end, simply remove cartridge from the printer.
- Place new cartridge by carefully putting at designated location. Turn

**\*Note:** (1) If printer does not work, check the print cartridge and logger paper for proper installation. (2) Exposed print cartridge ribbon can dry out. Adjust to printable fresh ink by turning the wheel in the direction indicated by the arrow. Change out print cartridge with the spare provided if adjusting the ribbon does not work. (3) All blast chillers are shipped with a spare print cartridge and logger paper. Print cartridges and logger paper can be purchased from a local office supply store.



"Print Cartridge Removed"

## POWER FAILURE

A power cut does not cause the loss of any accumulated historical data and no re-programming is necessary. The controller's battery is continually charged and provides emergency back up under normal power failure conditions.

## MAINTENANCE

The cabinets are fully automatic in operation. Cleaning, loading printer paper, and changing out the print cartridge is the only maintenance required. Read the following topics.

### CLEANING

**Exterior:** The exterior of the cabinet is stainless steel and if cared for correctly will keep its 'as new' finish for many years. Normal day to day cleaning should be carried out with a soft cloth and soapy water. Always wipe the cabinet vertically in the same direction as the grain in the stainless steel. Whilst stainless steel is a very strong and robust material, the stain smooth finish can be spoiled by wiping against the grain. Never use abrasive materials or cleaners, or chemical cleaners, as they can damage the surface and cause corrosion. Occasionally, the exterior should be polished with a good stainless steel polish to protect the surface.

Do not use abrasive cleaners, chemicals or scouring pads on the control panel. Clean the control panel only with a soft damp cloth. Avoid excess water on the control panel, and other areas where electrical components are fitted.

**Interior:** The racking can be removed for easy cleaning (see Fig 1). This should be done on a regular basis with warm water and a soft cloth, dry thoroughly afterwards. To remove the racking and shelf supports follow this procedure: First remove the shelves, then remove the shelf supports by grasping firmly in the center and lifting slightly. Turn the shelf support towards the interior of the cabinet by pushing it in the center as you twist the support through 90°. The shelf support will be released. (Note: the supports are designed to be anti-tilt and you may therefore experience some resistance at first which will be overcome with practice). When all shelves have been removed, remove the racking by lifting up and over the nylon retaining blocks.

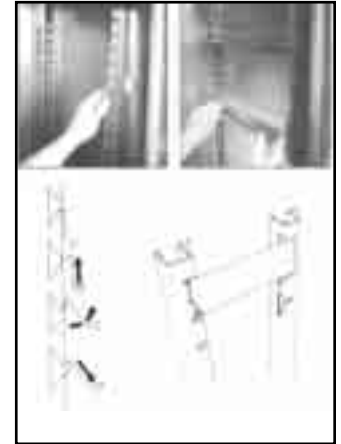


Fig 1

### Door Gasket

Clean the gasket weekly with warm soapy water and a soft cloth taking care not to damage it. **DO NOT** use a sharp knife to clean or scrape the gasket. Regularly check the gasket for any damage. Damage can be caused by striking the gasket with a sharp object such as the corner of a tray. Damaged gaskets do not seal correctly and can increase the amount of electricity consumed, seriously affecting the efficiency and performance of the cabinet.

Damaged gaskets are easily replaced. To fit a new gasket - simply pull out the old gasket and push the new gasket into the channel (gasket retainer) at the center and work along the gasket pushing it into the channel, continue in the same way on the other three sides, pushing the corners in last (see Fig 2).

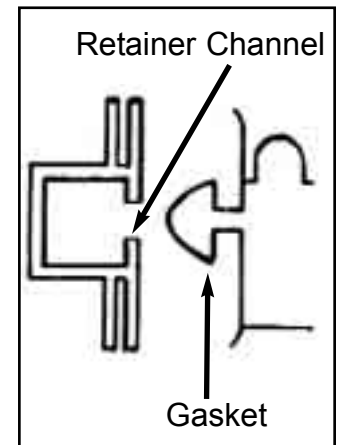


Fig 2

### Condenser Cleaning

The condenser, which is part of the refrigeration unit, is sited in the unit compartment and requires cleaning, approximately 4 times per year or when the LED indicates. To clean the condenser, **disconnect main power supply before starting**, then brush the fins vertically with a stiff brush, taking care not to damage the fins or push dirt or dust further in and vacuum away. **Remember to reconnect main power supply once finished.**

## **TECHNICAL SERVICE & REPLACEMENT PARTS**

Victory Refrigeration strives to provide excellent customer service along with quality equipment. To help us better assist you, a serial number and/or model number must be provided when contacting the technical service or parts department. The data plate is located inside the reach-in cabinet on the right side wall. Roll-in blast chiller data plates are placed on the exterior of the back panel that supports the controller. All serial numbers are recorded and kept indefinitely.

## **RULES OF THUMB**

- ❑ Pre-chill the cabinet for thirty (30) minutes before you do first load (to remove interior residual heat).
- ❑ Doubling the food thickness triples the pull-down time.
- ❑ Don't stack food and/or containers on top or alongside of each other.
- ❑ Covering the food increases pull-down time by 10% - 30%.
- ❑ Pull-down rate initially is about 2°F per minute and approaching final temperature is about 2 minutes per degree Fahrenheit.
- ❑ Factors affecting blast chill pull-down times:
  1. Entering food temperatures (the hotter the initial temperature, the longer the pull-down time).
  2. Final food temperature (the colder the final temperature, the longer the pull-down time).
  3. Food "thickness" (the greater the distance from geometric "core" center of food to it's surface pull-down time).
  4. Food density (the greater the density, the longer the pull-down time).
  5. Food thermal conductivity (the lower the conductivity, the longer the pull-down time).
  6. Food specific heats (the higher the specific heat, the longer the pull-down time).
  7. Container surface area (the smaller the surface area, the longer the pull-down time).
  8. Container material (metals are conductors and render a shorter pull-down than plastics which are insulators).
  9. Covering material (metal preferred instead of plastic for reasons above).
  10. Covering method-cover such as aluminum foil or a "stretch wrap film" placed in direct contact with food eliminates the "dead air space" between the cover and the food. Since "dead air space" is an insulator, elimination of reduction of it shortens pull-down time.
  11. "Delta T" is temperature difference between the food and the blast of air. The greater the "Delta T" the quicker the pull-down time.
  12. Air velocity (the greater the air velocity across the food, the faster the pull-down time).
  13. Amount (weight) of food put in as compared to rated capacity of machine. Exceeding the capacity increases the pull-down time.
  14. Mechanical problems (equipment not operating at full efficiency takes longer to pull down)



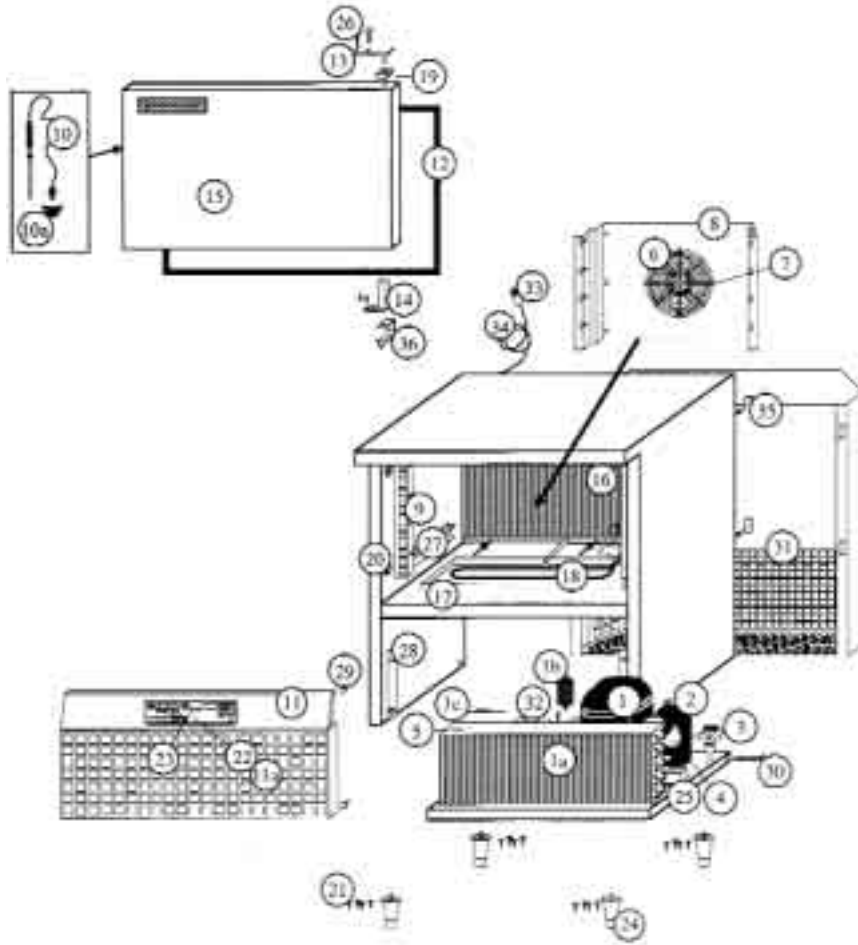
## Before Calling Service Guide for "VBC" Common Problems

**CAUTION: Disconnect Power Supply Prior to Attempting Any Service!**

Problem	Possible Cause	Remedy
Cabinet not running and/or no 1-2-3 Controller display	Circuit Breaker tripped	Reset Circuit Breaker (*make sure circuit breakers show red indicators for "ON" position)
	Power Cord unplugged	Plug in power cord
	Main power supply turned "OFF"	Turn main power supply "ON"
	Improper voltage supplied to cabinet	Supply correct voltage (*do not use extension cords or put other equipment on circuit, etc.)
	Cabinet in defrost cycle	Allow defrost cycle to finish
	Cabinet not pre-chilled prior to placing hot product load	Remove product load and pre chill cabinet for approximately 30 minutes. (*only applies to cabinets that do not stay on all the time)
Condensing Unit on cabinet runs for prolonged period or continuously.	Excessive amount of warm product loaded in cabinet	Allow adequate time for product to cool down
	Whole product loads placed in cabinet	Portion product load(s)
	Improper use of "Soft Chill" mode	Use "Soft Chill" for delicate and less dense product loads only. Refer to pages 3,4,9 and "The Guide to Cook-Chill".
	Prolonged door opening or door ajar	Make sure door is closed when not in use. Avoid prolonged door openings.
	Door gasket not sealing properly	Check gasket condition. Adjust door or replace gasket.
	Dirty Condenser coil	Clean the condenser coil
	Improper air flow around Condensing Unit	Ensure adequate air space, relocate away from heat generating equipment, direct sunlight, or direct path of air conditioning or heating ducts.
	Evaporator coil blocked with ice	Turn unit off and allow coil to defrost or manually force defrost. (* while cabinet is "ON", hold the "cancel" button for 5 seconds for manual defrost)
Cabinet temperature too high	Poor air circulation in cabinet	Move product load away from fan(s)
	Excessive amount of warm product loaded in cabinet	Allow adequate time for product to cool down
	Prolonged door openings or door(s) ajar	Make sure door(s) are closed when not in use. Avoid prolonged door openings.
	Dirty condenser coil	Clean the condenser coil
	Insufficient clearance around cabinet or excessively high ambient temperature	Ensure adequate air space, relocate away from heat generating equipment (ovens, fryers, etc.), and out of direct sunlight.
	Evaporator coil blocked with ice	Turn unit off and allow coil to defrost or manually force defrost. (*hold the red button with "X" for 5 seconds for manual defrost)
	Cabinet is noisy	Part(s) loose Locate and tighten loose part(s)
Product taking too long to pull-down	Product load covered	Uncover product or try to use metal pans. Refer to page 3 or "The Guide to Cook-Chill".
	Improper use of "Soft Chill" mode	Use "Hard Chill" for product loads that are of great density. Refer to pages 3,4,9 and "The Guide to Cook-Chill".
Compressor will not start, hums and trips circuit breaker	Dirty Condenser coil	Clean the condenser coil
	Excessive heat generated from equipment nearby	Relocate cabinet, or adjacent heat generating equipment
	Voltage to cabinet too high or too low	Check and correct supply voltage
Door won't close tight	Cabinet is not level	Level cabinet by adjusting casters or legs. Shim casters or legs if necessary.
Water or ice at bottom of cabinet	Product load too hot	Cool down product load before placing into cabinet
Error Code displayed (See page 6)	Loose or defective food probe/thermocouple. Main power failure	Press "X" (cancel) button to stop alarm sound off.
Printer paper not feeding or printing tickets	Printer paper jamming, not straight or properly seated on spool. Printer paper spool is finished.	Reload paper. Refer to page 7 for instruction.
No printout on printer paper	Cartridge dry or needs to be replaced.	Change print cartridge. Refer to page 7 for instruction.

# VBC PARTS LISTS

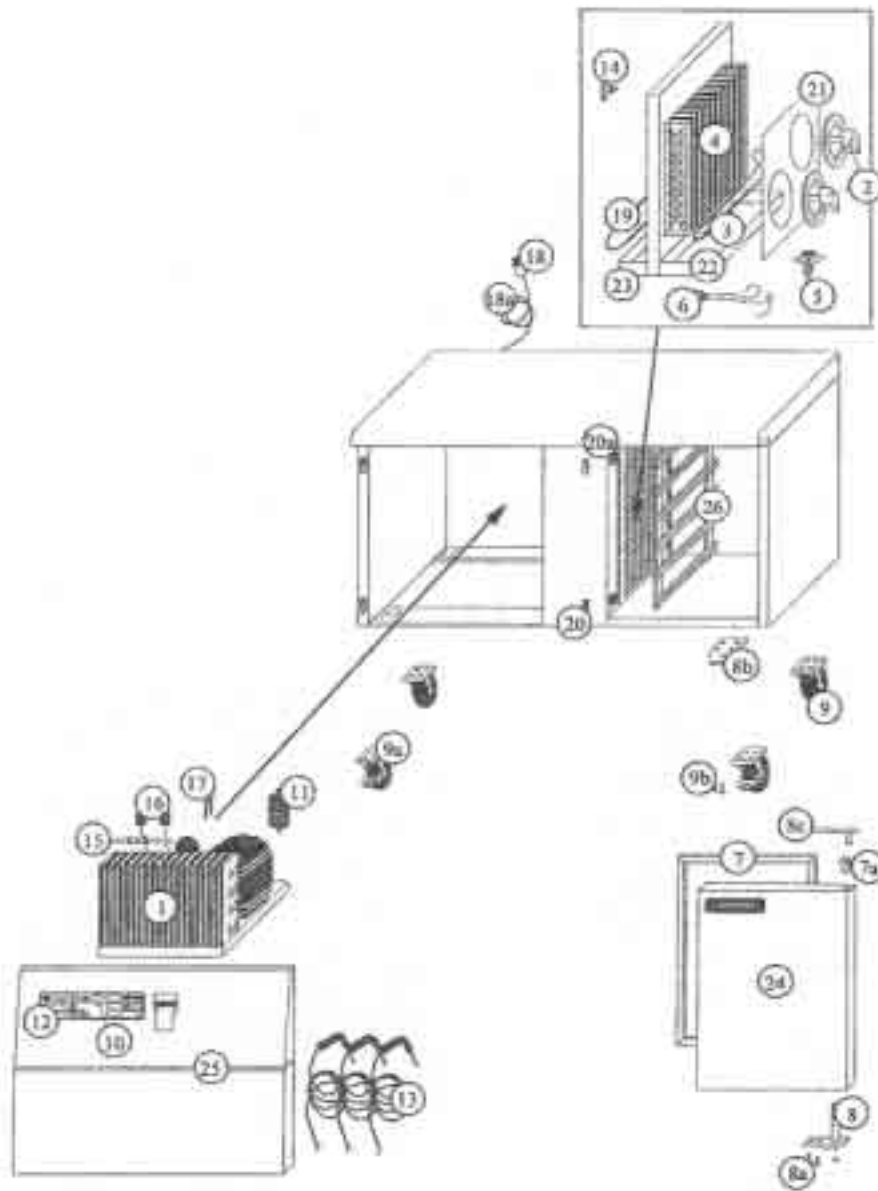




### PARTS LIST FOR VICTORY BLAST CHILLER 35 (VBC-35)

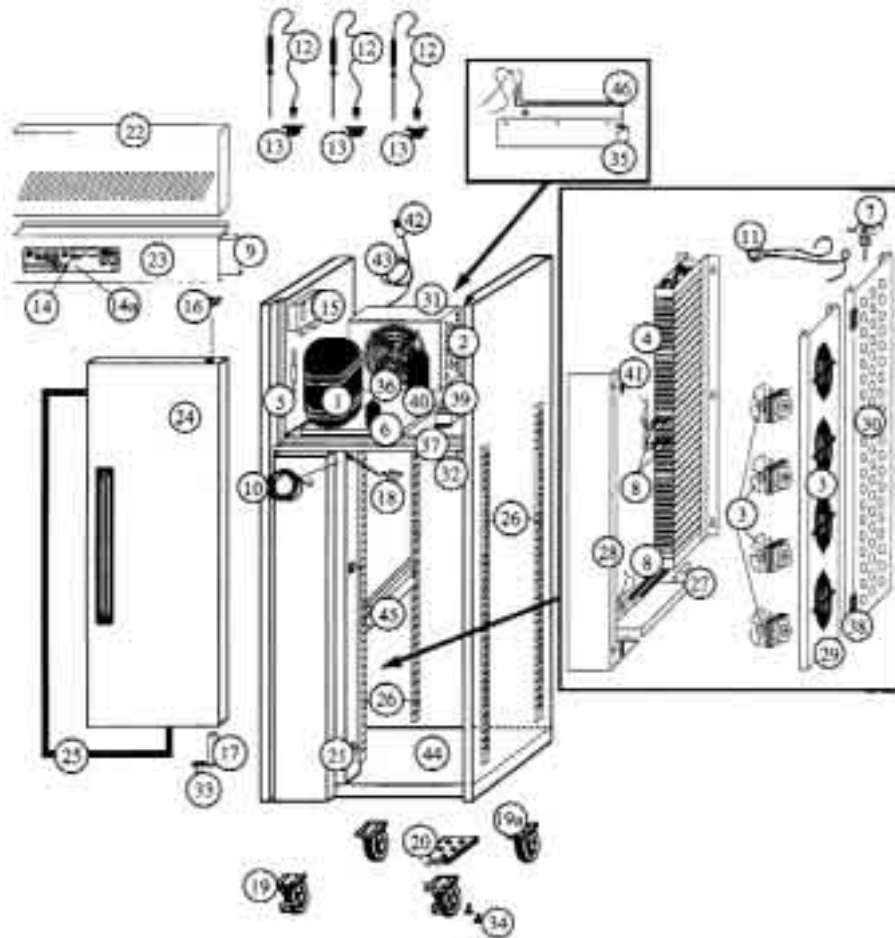
Item No	Description	Part No.
1	Comp CAJ 4492Y R134A	52000101
1a	Coil Condenser 3 x 11 x 21	52000201
1b	Drier 1/4 x 3/16 Sweat R134A	52000301
1c	Sight Glass 1/4 Sweat	52000401
2	Receiver 2.2L	52000501
3	Valve Expansion Body Ten 2 R134A	52000601
3	Valve Adapter Solder 1/4	52000701
3	Orifice No. 00 068-2090	52000801
4	Motor Condenser Fan 16 Watt	52000901
4	Blade Cond Fan 10In 27Dg Pitch	52001001
5	Plate Condenser Fan	52001101
6	Motor Evap Fan 315mm Axial	52001201
7	Guard Evap Fan Wire 50mm Deep	52001301
8	Plate Evaporator Fan	52001401
9	Upright Pilaster Racking	52001501
10	Probe Food 90 Degree Heavy Duty	52001603
10a	Probe Socket Type T Flanged	52001701
11	Cover Unit Front Top Section	52001801
11a	Cover Unit Front Bottom Section	52001901
12	Gasket Door 26-3/4 x 16-15/16	52002001
13	Plate Hinge R7 Opal Top	52002101
14	Hinge Door Spring Loaded	52002201
15	Door Standard VBC35	52002301
16	Coil Evaporator 4 x 13 x 17	52002401
17	Tray Drip	52002501
18	Heater Defrost 300W 3 Bend	52002601
19	Plug Nylon Door Hinge Top	52002701
20	Insert Nylon Pilaster Ladderack	52002801
21	Screw 6mm x 12 Pozi Pan Zinc	52002901
22	Label Polypanel W/O Printer	52003001
23	Panel Front No Printer 1Probe (123)	52003101
23	Board Back WBC II (123)	52003201
23	Logger Chip Full WBC II	52003301
23	Cable Ribbon Front To Back 1M	52003401
24	Leg, S/S 4IN Short Stud C/C Plate	52003501
25	Contacter 190V 50Hz/220V 60Hz	52003601
26	Screw 6mm x 25mm Zinc Pozi Pan	52003701
27	Slide Pan (Tray) S/S 276mm	52003801
28	Clip Latch Unit Cover Front	52003901
29	Clip Strike Unit Cover Front	52004001
30	Screw Set 8mm x 20mm Zinc	52004101
31	Cover Rear	52004201
32	Vaporizer Hot Gas	52004301
33	Plug 15 Amp 3 Pin	52004401
34	Cord Power Cable 3 Wire 14AWG	52004501
35	Insert Nylon Plstr Mtg Ladderack	52004601
36	Hinge Cabinet Piece	52004701
*	Klixon 14T31 30210 L13C 9651	52004801
*	Switch Thermal Heated 331-528	52004901
*	Heater Wire 3M 240V 30 Watts	52005001
*	Bracket Fan Motor	52005101
*	Caster W/O Brake	52005201
*	Caster W/ Brake	52005301





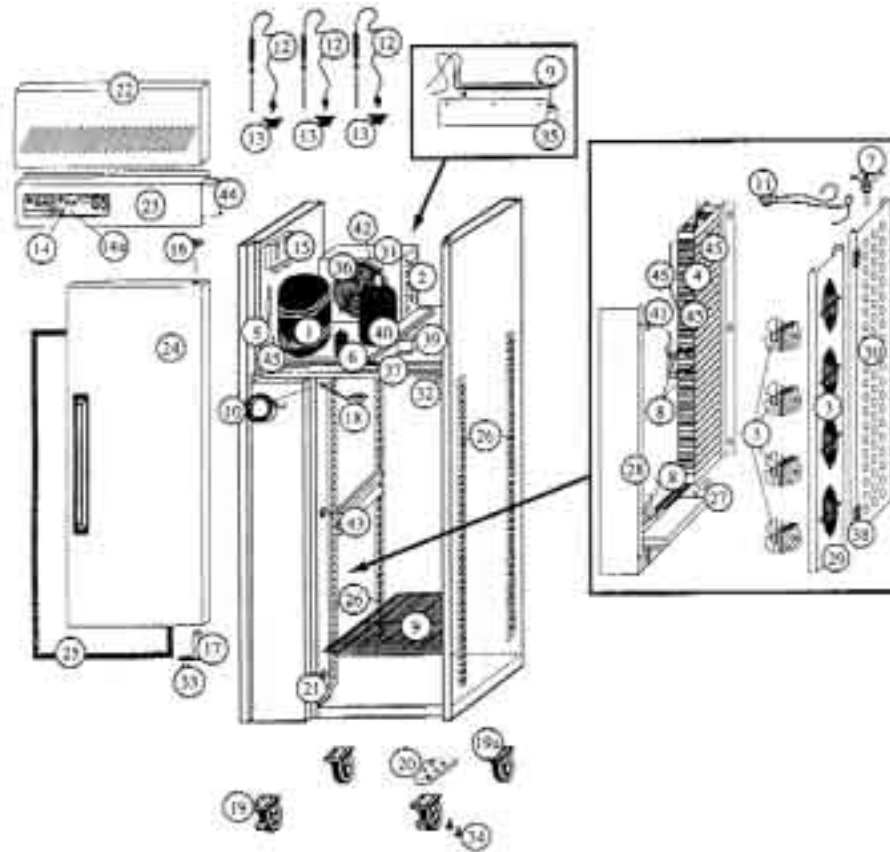
## PARTS LIST FOR VICTORY BLAST CHILLER 70 (VBC-70)

Item No	Description	Part No.
1	CONDENSING UNIT CAJ 4511Y HR	52077901
2	EVAPORATOR FAN 16 WATT 208V 60Hz UL	52078001
3	DEFROST HEATER 300W 1BEND	52078101
4	EVAPORATOR 3" x 20" x 20"	52078201
5	EXPANSION VALVE BODY TEN2 R134A	52000601
5	3/8" SOLDER ADAPTOR 068-2060	52010901
5	ORIFICE NO.2 068-2096	52071701
6	KLIXON 14T31 30210 L13C 9651	52004801
7	GASKET, 22" x 24" [560mm X 622mm]	52078301
7a	PLUG, TOP HINGE	52078401
8	HINGE:SPRING LOADED	52002201
8a	SCREW 8 X 1/2 POZI PAN ZINC S/T	52078501
8b	HINGE PLATE:R4 FLAT	52078601
8c	HINGE PLATE:R7 CHROME	52078701
9	CASTERS:NEW 6" UNBRAKED	52005201
9a	CASTERS:NEW 6" BRAKED	52011701
9b	SCREW M6 X 25 POZI PAN ZINC T/T	52003701
0	AARDWARE FRONT PANEL C/W PRINTER 3 PROBE	52011401
10	AARDWARE BACKBOARD (*ATTACHED BEHIND FRONT PANEL)	52003201
10	MAIN CONTROL BOARD WITH CONTACTORS	52044601
10	LOGGER CHIP FULL (*180 VERSION 11)	52003301
11	DRIER 3/8", R134a	52010801
12	LABEL,BLAST CHILLER 3 PROBE WITH PRINTER	52011501
13	90° ANGLED FOOD PROBE	52001603
14	SWITCH THERMAL HEATED 331-528	52004901
15	SIGHT GLASS, 3/8" SWEAT	52010701
16	LP SWITCH, TYPE G60 T01	52078801
16	HP SWITCH, TYPE G63 T01	52078901
17	1/4" SCHRAEDER VALVE	52079001
18	PLUG 3 PIN USA 15 AMP	52004401
18a	CABLE FOR USA LEAD 3 CORE 14AWG/2MM	52004501
19	VAPORIZER HEATER, 115W 3 BEND	52014301
19	VAPORIZER HEATER, 150W 3 BEND	52014302
20	LADDERACK BLOCKS TYPE 1	52079101
20a	LADDERACK BLOCKS TYPE 2	52002801
21	EVAPORATOR FAN PLATE	52079201
22	DRIP TRAY	52079301
23	VAPORIZER TRAY	52079401
24	DOOR ASSEMBLY, COMPLETE	52079501
25	UNIT COVER	52079601
26	RACKING, LEFT OR RIGHT SIDE	52079701



## PARTS LIST FOR VICTORY BLAST CHILLER 75 (VBC-75)

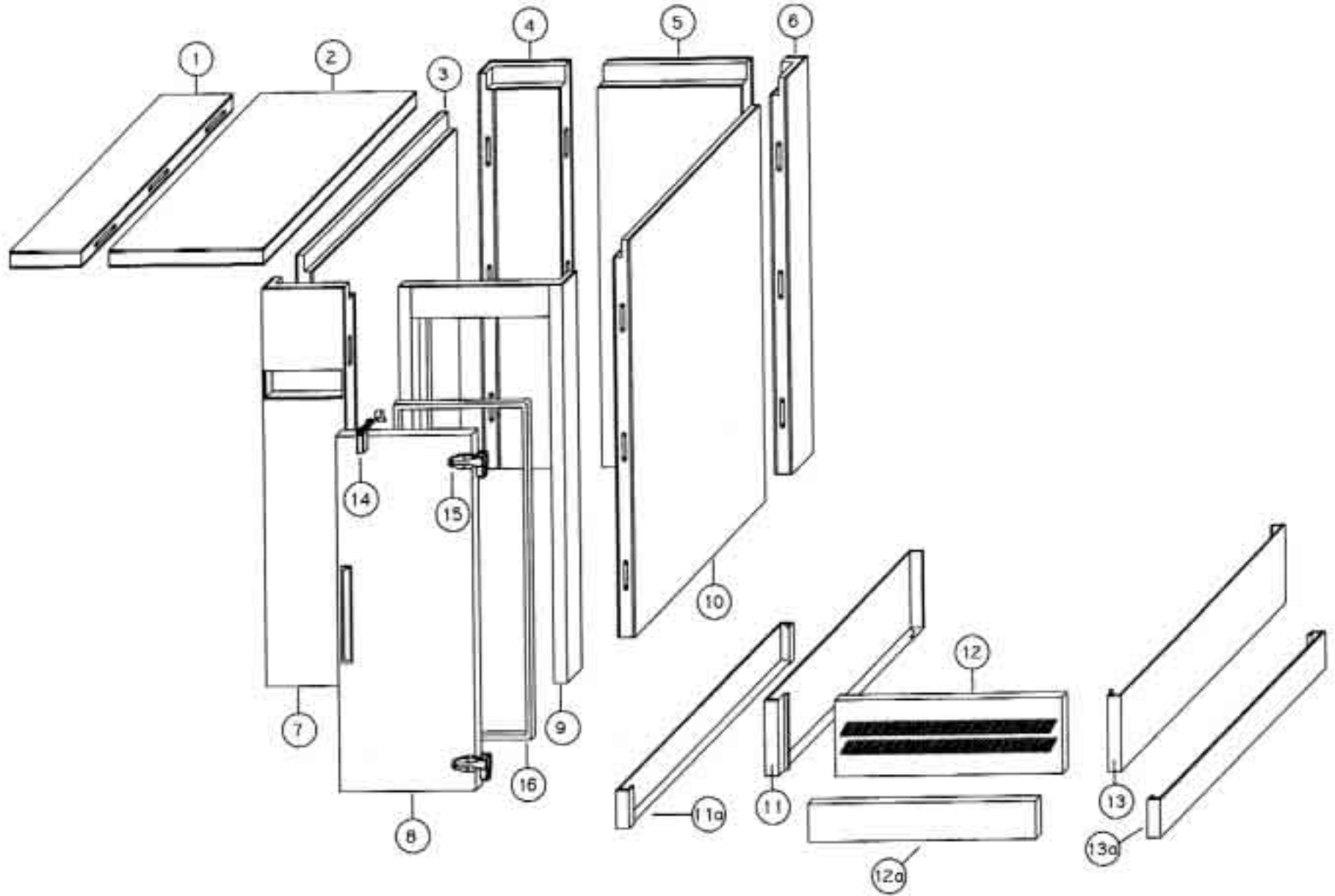
Item No	Description	Part No.
1	Comp 1-1/2 FH4518Y 208/60	52020101
2	Coil Condenser 4 x 17 x 17.5	52010201
3	Motor Evap Fan (4) 200mm Axial	52010301
3	Guard Evap Fan Flat	52010401
3	Capacitor 230V 60Hz 1.5UF	52020201
4	Coil Evaporator 5 x 45 x 16	52020301
5	Sight Glass 3/8 Sweat	52010701
6	Drier 3/8 Suitable For R134A	52010801
7	Valve Expansion Body Tes 2 R134A	52020401
7	Adapter Solder 3/8 068-2060	52010901
7	Valve Orifice No. 3	52011001
8	Heater Defrost 500W 1 Bend	52020501
9	Panel Control Cover Rear	52020601
10	Heater Wire 4.35 M 240V (57W)	52011301
11	Thermostat, Klixon	52004801
12	Probe Food 90 Degree Heavy Duty	52001603
13	Probe Socket Type T Flanged	52001701
14	Panel Front C/W Printer (123)	52011401
14	Board Back WBC II	52003201
14	Logger Chip Full	52003301
14	Cable Ribbon Front To Back IM	52003401
14a	Polypanel W/ Printer	52011501
15	Control Pressure High/Low	52011601
16	Nylon Plug Door Hinge (Top)	52002701
17	Hinge, Spring Loaded Door	52002201
18	Switch, Thermal Heated 331-528	52004901
19	Caster 6" W/ Brake	52011701
19a	Caster 6" W/O Brake	52011801
20	Plate Hinge L3 Opal/T2U Bottom	52011901
21	Insert Nylon Pilaster Ladderack	52002801
22	Cover Unit	52020701
23	Panel Control	52020801
24	Door Standard VBC75	52020901
25	Gasket 53-5/16 x 24-11/16	52021001
26	Upright Pilaster Ladderack	52021101
27	Tray Drip	52021201
28	Plate Baffle	52021301
29	Plate Evaporator Fan	52021401
30	Plate Evaporator Baffle	52021501
31	Plate Condenser Fan	52012901
32	Insert Door M4/T38 6x26	52013001
33	Screw M6x25 Pozi Countersunk	52013101
34	Screw 6mm x 25mm Zinc Pozi Pan	52003701
35	Vaporizer, Electric	52013201
36	Motor Condenser Fan 120 Watt	52013301
36	Capacitor 230V 60Hz 3.0UF	52013401
37	Panel Control Bottom	52013501
38	Cover Hinge Black Plastic	52013601
39	Contactator 190V 50Hz/220V 60Hz	52013701
40	Receiver 2.2L	52000501
41	Insert Nylon 316-F2/St38 M5X5	52013801
42	Cowl Condenser Fan	52021701
43	Slide Pan (Tray)	52021801
44	Control Panel Rear Cover	52021901
45	Thermocouple Type 'T' PTFE 2M	52022001
46	Vaporizer Heater 115W 3 Bend	52014301
46	Box Elec For Comp 833 TFH4524Z	52022101



## PARTS LIST FOR VICTORY BLAST CHILLER 100 (VBC-100)

Item No	Description	Part No.
1	Comp 2HP TFH 4524 Z 208/60/3	52020101
2	Coil Condenser 4 x 17 x 17.5	52010201
3	Motor Evap Fan (4) 200mm Axial	52010301
3	Guard Evap Fan Flat	52010401
3	Capacitor 230V 60Hz 1.5UF	52020201
4	Coil Evaporator 5 x 45 x 16	52020301
5	Sight Glass 3/8 Sweat	52010701
6	Drier 3/8 Suitable For R134A	52010801
7	Valve Expansion Body Tes 2 R404A	52020401
7	Solder Adapter 3/8 068-2060	52010901
7	Orifice No. 3	52011001
8	Heater Defrost 500W 1 Bend	52020501
9	Shelf Garnet White Coated	52020601
10	Heater Wire 4.35 M 240V (57W)	52011301
11	Thermostat, Klixon	52004801
12	Probe Food 90 Degree Heavy Duty	52001603
13	Probe Socket Type T Flanged	52001701
14	Front Panel C/W Printer (123)	52011401
14	Board Back WBC II	52003201
14	Logger Chip Full	52003301
14	Cable Ribbon Front To Back IM	52003401
14a	Polypanel W/ Printer	52011501
15	Control Pressure High/Low	52011601
16	Nylon Plug Door Hinge (Top)	52002701
17	Hinge, Spring Loaded Door	52002201
18	Switch, Thermal Heated 331-528	52004901
19	Caster 6" W/ Brake	52011701
19a	Caster 6" W/O Brake	52011801
20	Plate Hinge L3 Opal/T2U Bottom	52011901
21	Insert Nylon Pilaster Ladderack	52002801
22	Cover Unit	52020701
23	Panel Control	52020801
24	Door Standard VBC75	52020901
25	Gasket 53-5/16 x 24-11/16	52021001
26	Upright Pilaster Ladderack	52021101
27	Tray Drip	52021201
28	Plate Baffle	52021301
29	Plate Evaporator Fan	52021401
30	Baffle Plate Evaporator	52021501
31	Plate Condenser Fan	52012901
32	Insert Door M4/T38 6x26	52013001
33	Screw M6x25 Pozi Countersunk	52013101
34	Screw 6mm x 25mm Zinc Pozi Pan	52003701
35	Vaporizer Electric	52013201
36	Motor Condenser Fan 120 Watt	52013301
36	Capacitor 230V 60Hz 3.0UF	52013401
37	Panel Control Bottom	52021601
38	Cover Hinge Black Plastic	52013601
39	Contactore 190V 50Hz/220V 60Hz	52013701
40	Receiver 3.3L	52021701
41	Nylon Insert 316-F2/St38 M5X5	52013801
42	Cowl Condenser Fan	52021801
43	Slide Pan (Tray)	52021901
44	Panel Control Cover Rear	52022001
45	Thermocouple Type 'T' PTFE 2M	52022101
46	Box Elec For Comp 833 TFH4524Z52001241	52022201
46	Vaporizer Heater 115W 3 Bend	52014301

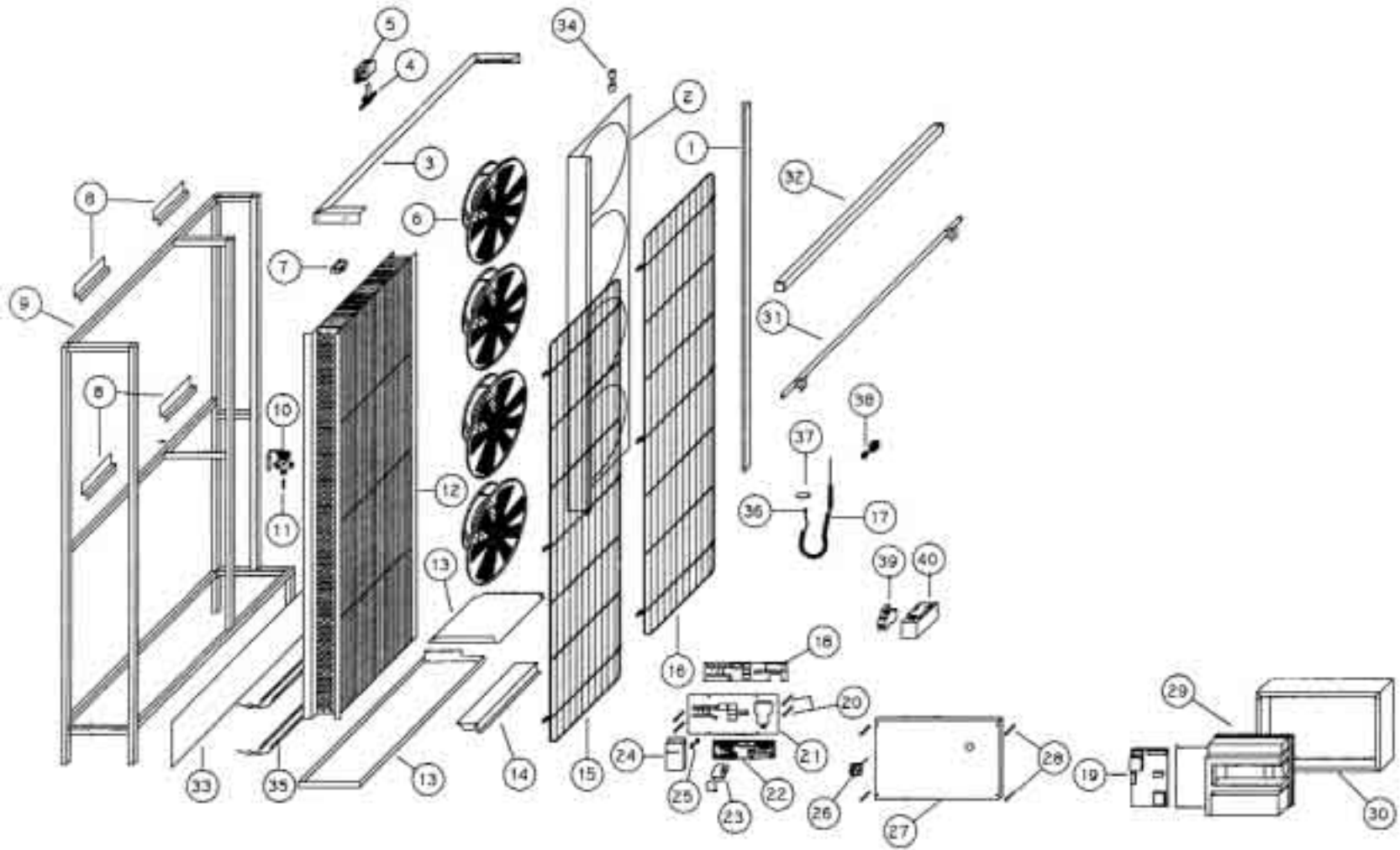
# Victory Blast Chillers 175, 220 & 350 (VBC-175, VBC-220 & VBC-350) Panels Parts



**VBC-175, VBC-220 & VBC-350 Panels Parts List**

<b>Item #</b>	<b>Part Description</b>	<b>VBC-175</b>	<b>VBC-220</b>	<b>VBC-350</b>
1	Panel Roof, Left	52040101	52040101	52040101
2	Panel Roof, Right	52040201	52040201	52040201
3	Panel Wall, Left Side	52040301	52040301	52040301
4	Panel Corner, Left Rear	52040401	52040401	52040401
5	Panel Wall, Rear	52040501	52040501	52040501
6	Panel, Coved Corner Right Rear	52040601	52040601	52040601
7	Panel Corner, Front Left	52040701	52040701	52040701
8	Door	52040801	52040801	52040801
9	Jam Corner, Coved	52040901	52040901	52040901
10	Panel Wall, Right Side	52041001	52041001	52041001
11	Upper End Panel (for Cabinet with "POD" Refrigeration System)	52041101	52041101	52041101
11a	Upper End Panel (for Cabinet without "POD" Refrigeration System)	52041102	52041102	52041102
12	Grille, Front (for Cabinet with "POD" Refrigeration System)	52041201	52041201	52041201
12a	Grille, Front (for Cabinet without "POD" Refrigeration System)	52041202	52041202	52041202
13	Upper End Panel (for Cabinet with "POD" Refrigeration System)	52041101	52041101	52041101
13a	Upper End Panel (for Cabinet without "POD" Refrigeration System)	52041102	52041102	52041102
14	Latch, Door	52041301	52041301	52041301
15	Hinge, Door	52041401	52041401	52041401
16	Gasket, Door	52041501	52041501	52041501

# Victory Blast Chillers 175, 220 & 350 (VBC-175, VBC-220 & VBC-350) Equipment Parts

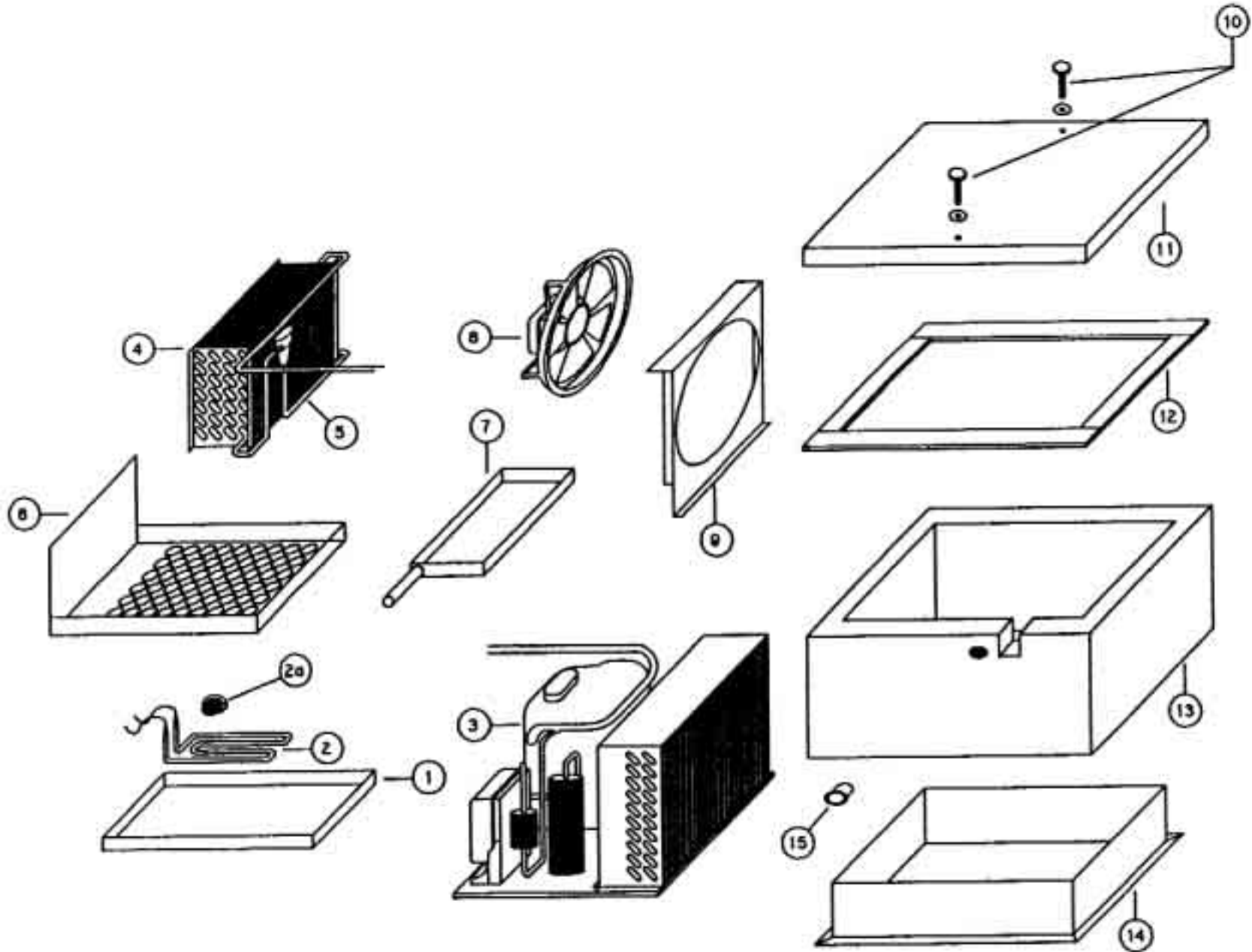


## VBC-175, VBC-220 & VBC-350 Equipment Parts List

Item #	Part Description	VBC-175	VBC-220	VBC-350
1	Bracket, Fan Guard	52041601	52041601	52041601
2	Plate, Fan	52041701	52050101	52060101
3	Angle, Roof	52041801	52041801	52041801
4	Valve, Solenoid EVR10	52041901	52041901	52041901
5	Valve, Coil Solenoid 60Hz	52042001	52042001	52042001
6	Blast Fans, HCGT-355J-MXNC	52042101	52042101	52042101
7	Switch, Fan Cut-Off ZC-055	52042201	52042201	52042201
8	Bracket, Frame Support	52042301	52042301	52042301
9	Frame, WBC R/H	52042401	52042401	52042401
10	Valve, Expansion (Power)	52042501	52042501	52042501
	Valve, Expansion (Body)	52042601	52042601	52042601
11	Valve, Expansion Orifice	52042701	52050201	52060201
12	Coil, Evaporator (Dimensions: 6" x 66" x 19.5")	52042801	52042801	52042801
13	Assembly, Drip Tray	52042901	52042901	52042901
14	Baffle, Drip Tray	52043001	52043001	52043001
15	Guard, Evaporator	52043101	52043101	52043101
16	Guard, Fan	52043201	52043201	52043201
17	Probe, 90 Degree Heavy Duty Food	52001603	52001603	52001603
18	Panel, Front C/W Print (123)	52011401	52011401	52011401
19	Board, WBC II Back	52003201	52003201	52003201
20	Screw, Control Panel	52043301	52043301	52043301
21	Fascia, Control Panel	52043401	52043401	52043401
22	Polypanel with Printer	52011501	52011501	52011501
23	Logger Paper	52043501	52043501	52043501
24	Cover, Printer	52043601	52043601	52043601
25	Latch	52043701	52043701	52043701
	Striker	52043801	52043801	52043801
26	Switch, Isolator	52043901	52043901	52043901
	Bar, Isolator	52044001	52044001	52044001
	Handle, Isolator	52044101	52044101	52044101
27	Lid, Control Panel	52044201	52044201	52044201
28	Screw, Control Panel Lid	52044301	52044301	52044301
29	Contact, Main Control Panel	52044401	52044401	52044401
30	Box, Control	52044501	52044501	52044501
31	Bumper, Cart Side	52044601	52044601	52044601
32	Bumper, Equipment Side	52044701	52044701	52044701
33	Plate, Bottom Blanking	52044801	52044801	52044801
34	Hinge, Fan Plate	52044901	52044901	52044901
35	Heater, Defrost (300 Watt, 1 Bend)	52045001	52045001	52045001
36	Grommet, Support	52045101	52045101	52045101
37	Grommet, Blind	52045201	52045201	52045201
38	Contact, Cap and Bushing	52045301	52045301	52045301
39	Breaker, 30 Amp 2-Pole Circuit	52045401	52045401	52045401
40	Enclosure, 30 Amp 2-Pole Breaker	52045501	52045501	52045501

# Victory Blast Chillers 175, 220 & 350 (VBC-175, VBC-220 & VBC-350) Storage "POD" Parts

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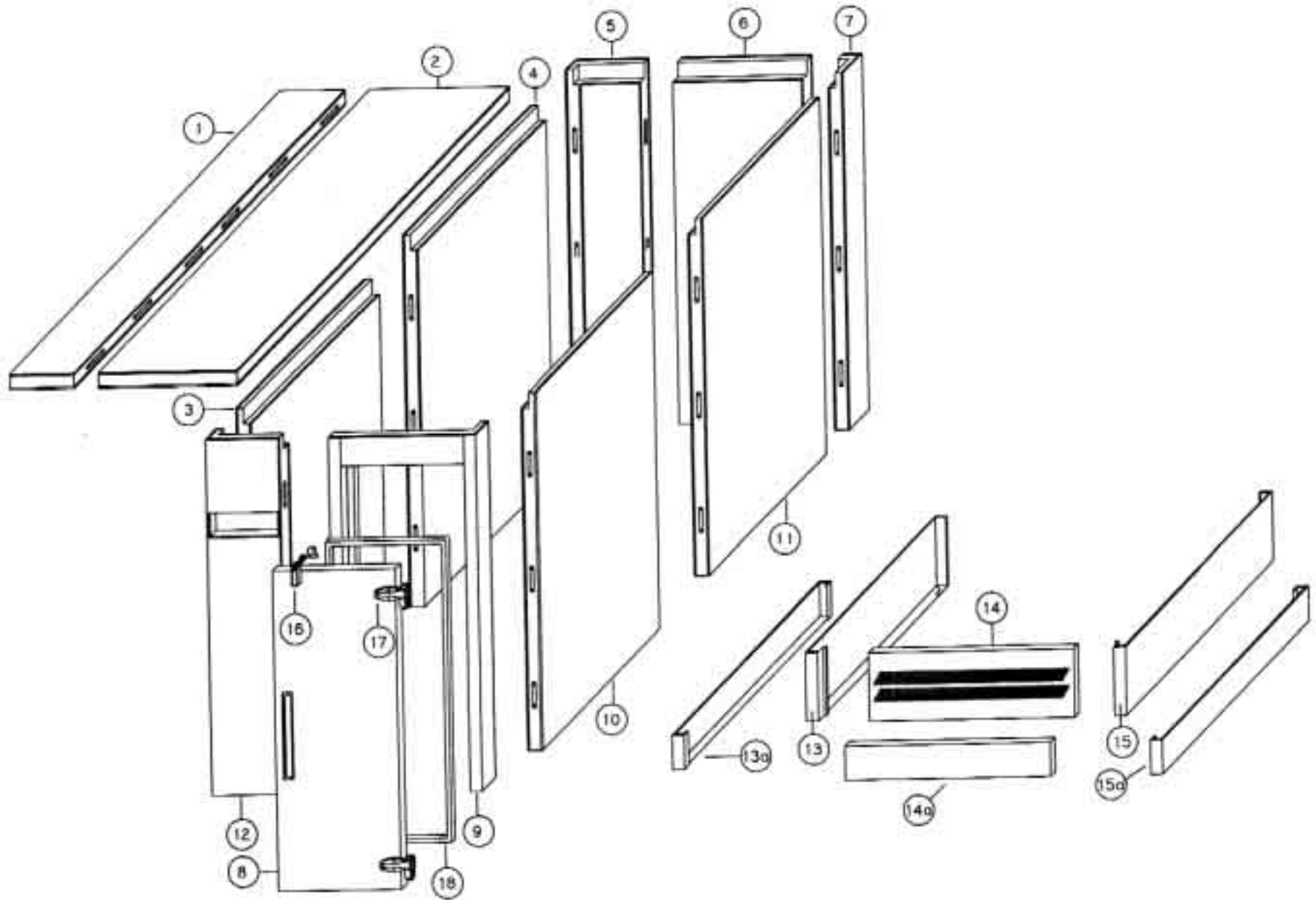




**VBC-175, VBC-220 & VBC-350 Storage "POD" Parts List**

<b>Item #</b>	<b>Part Description</b>	<b>VBC-175</b>	<b>VBC-220</b>	<b>VBC-350</b>
1	Tray, Vaporizer	52045601	52045601	52045601
2	Heater, Vaporizer Tray	52045701	52045701	52045701
2a	Klixon, Vaporizer Heater Tray	52045801	52045801	52045801
3	Unit, Condensing (Model: CAJ4461Y, 60Hz, R-134a)	52045901	52045901	52045901
4	Coil, Evaporator (Dimensions: 4" x 9" x 10")	52046001	52046001	52046001
5	Valve, Expansion (Body) Ten 2 R-134a	52000601	52000601	52000601
	Orifice, No. 1 68.2091	52046101	52046101	52046101
6	Chute, Air	52046201	52046201	52046201
7	Tray, "POD" Evaporator Drip	52046301	52046301	52046301
8	Motor, "POD" Fan	52046401	52046401	52046401
9	Plate, Fan	52046501	52046501	52046501
10	Bolt, M8 x 65	52046601	52046601	52046601
11	Lid, "POD"	52046701	52046701	52046701
12	Gasket, Tape Foam	52046801	52046801	52046801
13	"POD"	52046901	52046901	52046901
14	Liner, "POD"	52047001	52047001	52047001
15	Bushing, Bellmouth	52047101	52047101	52047101

# Victory Blast Chillers 480 & 660 (VBC-480 & VBC-660) Panels Parts

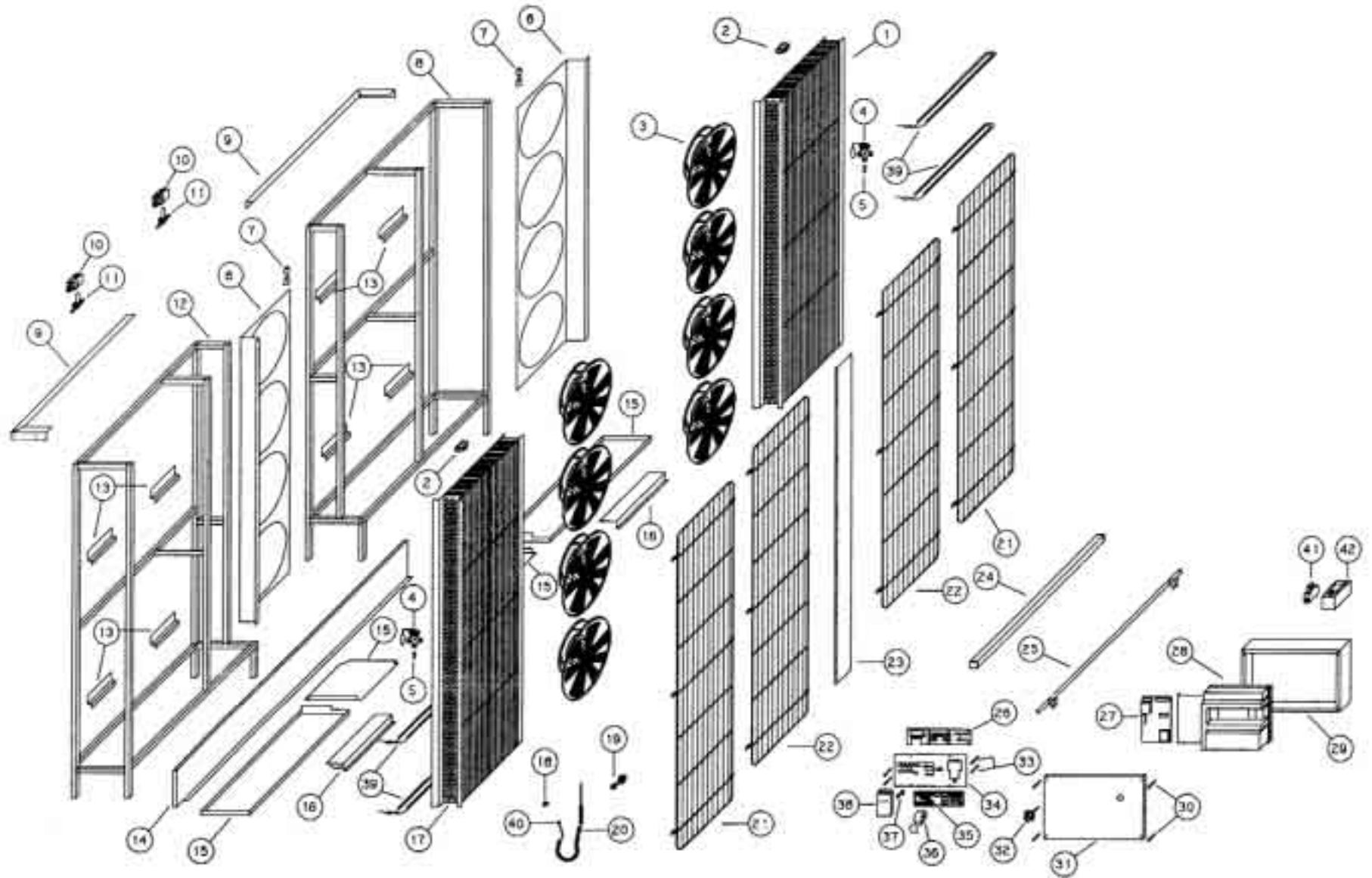


### VBC-480 & VBC-660 Panels Parts List

Item #	Part Description	VBC-480	VBC-660
1	Panel Roof, Left	52070101	52070101
2	Panel Roof, Right	52070201	52070201
3	Panel Wall, Left Side	52040301	52040301
4	Panel Wall, Left Side	52070301	52070301
5	Panel Corner, Left Rear	52040401	52040401
6	Panel Wall, Rear	52040501	52040501
7	Panel, Coved Corner Right Rear	52040601	52040601
8	Door	52040801	52040801
9	Jam Corner, Coved	52040901	52040901
10	Panel Wall, Right Side	52041001	52041001
11	Panel Wall, Right Side	52070401	52070401
12	Panel Corner, Front Left	52040701	52040701
13	Upper End Panel (for Cabinet with "POD" Refrigeration System)	52070501	52070501
13a	Upper End Panel (for Cabinet without "POD" Refrigeration System)	52070502	52070502
14	Grille, Front (for Cabinet with "POD" Refrigeration System)	52041201	52041201
14a	Grille, Front (for Cabinet without "POD" Refrigeration System)	52041202	52041202
15	Upper End Panel (for Cabinet with "POD" Refrigeration System)	52070501	52070501
15a	Upper End Panel (for Cabinet without "POD" Refrigeration System)	52070502	52070502
16	Latch, Door	52041301	52041301
17	Hinge, Door	52041401	52041401
18	Gasket, Door	52041501	52041501

# Victory Blast Chillers 480 & 660 (VBC-480 & VBC-660) Equipment Parts

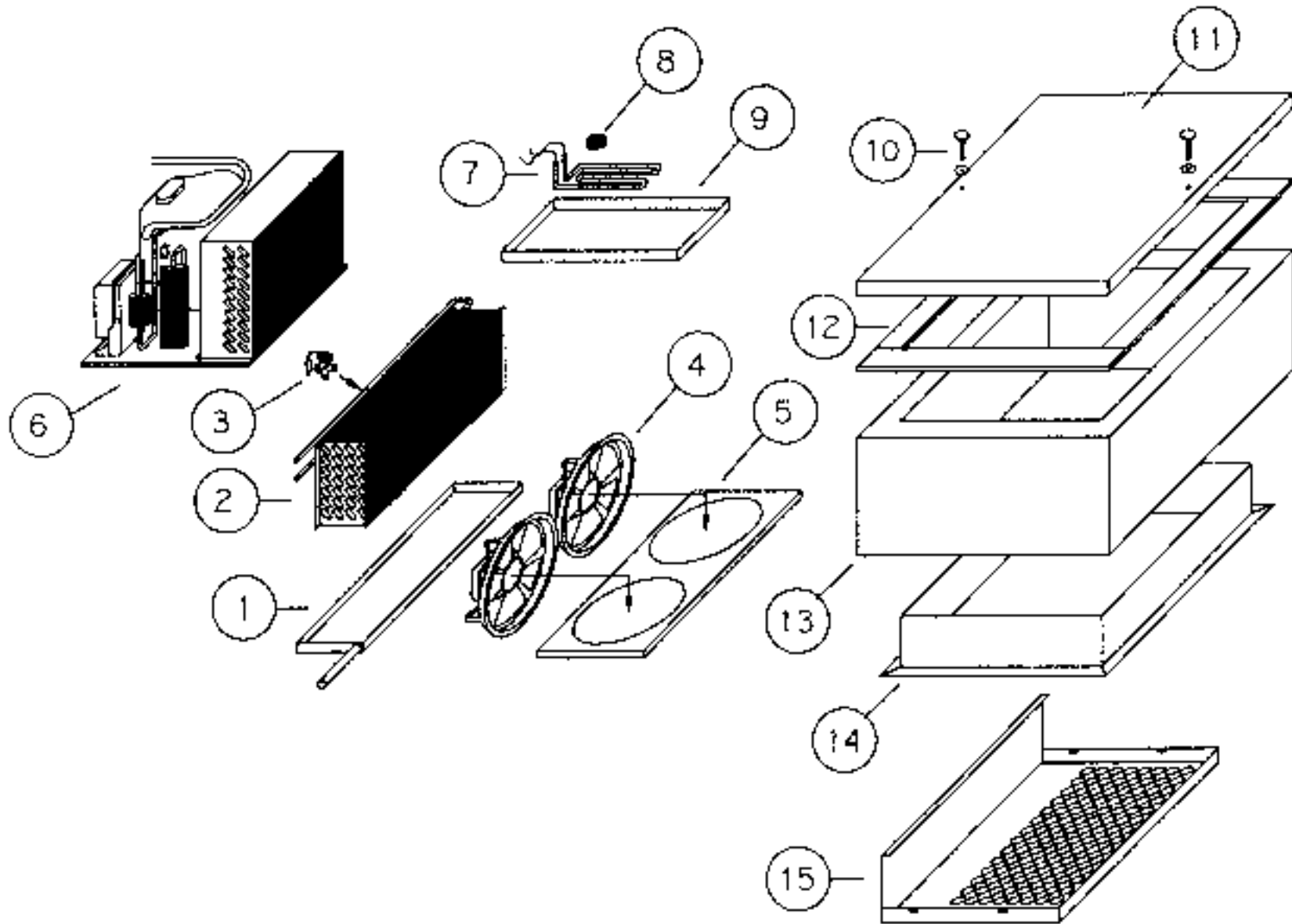
24



## VBC-480 & VBC-660 Equipment Parts List

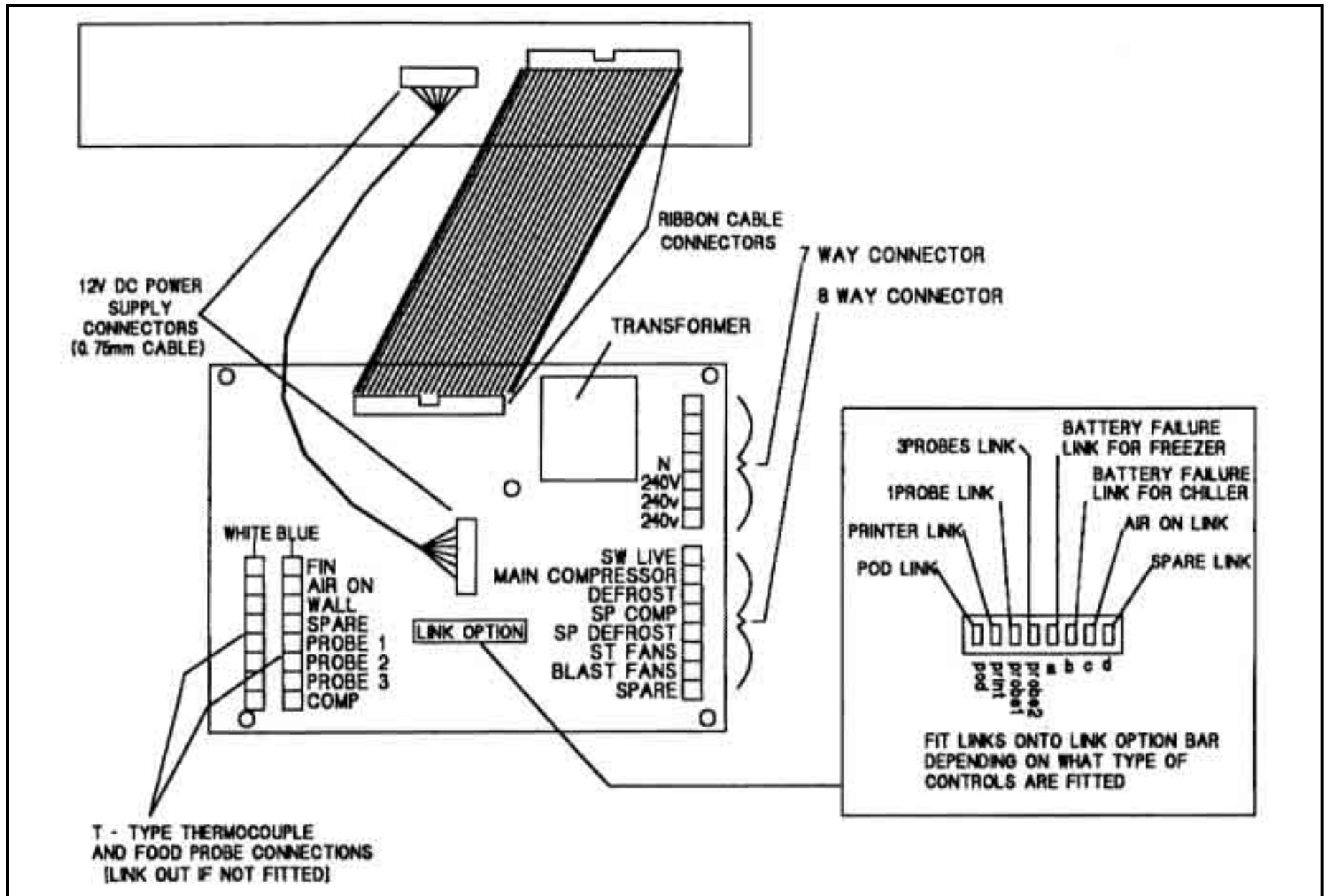
Item #	Part Description	VBC-480	VBC-660
1	Coil, Evaporator (Dimensions: 6" x 66" x 19.5")	52042802	52042802
2	Switch, Fan Cut-Off ZC-055	52042201	52042201
3	Fan, Blast HCGT-355J-MXNC	52042101	52042101
4	Valve, Expansion (Power)	52042501	52042501
	Valve, Expansion (Body)	52042601	52042601
5	Valve, Expansion Orifice	52042701	52050201
6	Plate, Fan	52050101	52060101
7	Hinge, Fan Plate	52044901	52044901
8	Frame, WBC L/H	52042402	52042402
9	Angle, Roof	52070601	52070601
10	Valve, Coil Solenoid 60Hz	52042001	52042001
11	Valve, Solenoid EVR10	52041901	52041901
12	Frame, WBC L/H	52042401	52042401
13	Bracket, Frame Support	52042301	52042301
14	Plate, Bottom Blanking	52070701	52070701
15	Assembly, Drip Tray	52042901	52042901
16	Baffle, Drip Tray	52043001	52043001
17	Coil, Evaporator (Dimensions: 6" x 66" x 19.5")	52042801	50242801
18	Grommet, Blind	52045201	52045201
19	Contact, Cap and Bushing	52045301	52045301
20	Probe, 90 Degree Heavy Duty Food	52001603	52001603
21	Guard, Evaporator	52043101	52043101
22	Guard, Fan	52043201	52043201
23	Bracket, Fan Guard	52070801	52070801
24	Bumper, Equipment Side	52070901	52070901
25	Bumper, Cart Side	52071001	52071001
26	Panel, Front C/W Print (123)	52011402	52011402
27	Board, WBC II Back	52003202	52003202
28	Contact, Main Control Panel	52071101	52071101
29	Box, Control	52071201	52071201
30	Screw, Control Panel Lid	52044301	52044301
31	Lid, Control Panel	52071301	52071301
32	Switch, Isolator	52043901	52043901
	Bar, Isolator	52044001	52044001
	Handle, Isolator	52044101	52044101
33	Screw, Control Panel	52043301	52043301
34	Fascia, Control Panel	52071401	52071401
35	Polypanel with Printer	52011502	52011502
36	Logger Paper	52043501	52043501
37	Latch	52043701	52043701
	Striker	52043801	52043801
38	Cover, Printer	52071501	52071501
39	Heater, Defrost (300 Watt, 1 Bend)	52045001	52045001
40	Grommet, Support	52045101	52045101
41	Breaker, 30 Amp 2-Pole	52045401	52045401
42	Enclosure, 30 Amp 2-Pole Breaker	52045501	52045501

# Victory Blast Chillers 480 & 660 (VBC-480 & VBC-660) Storage "POD" Parts



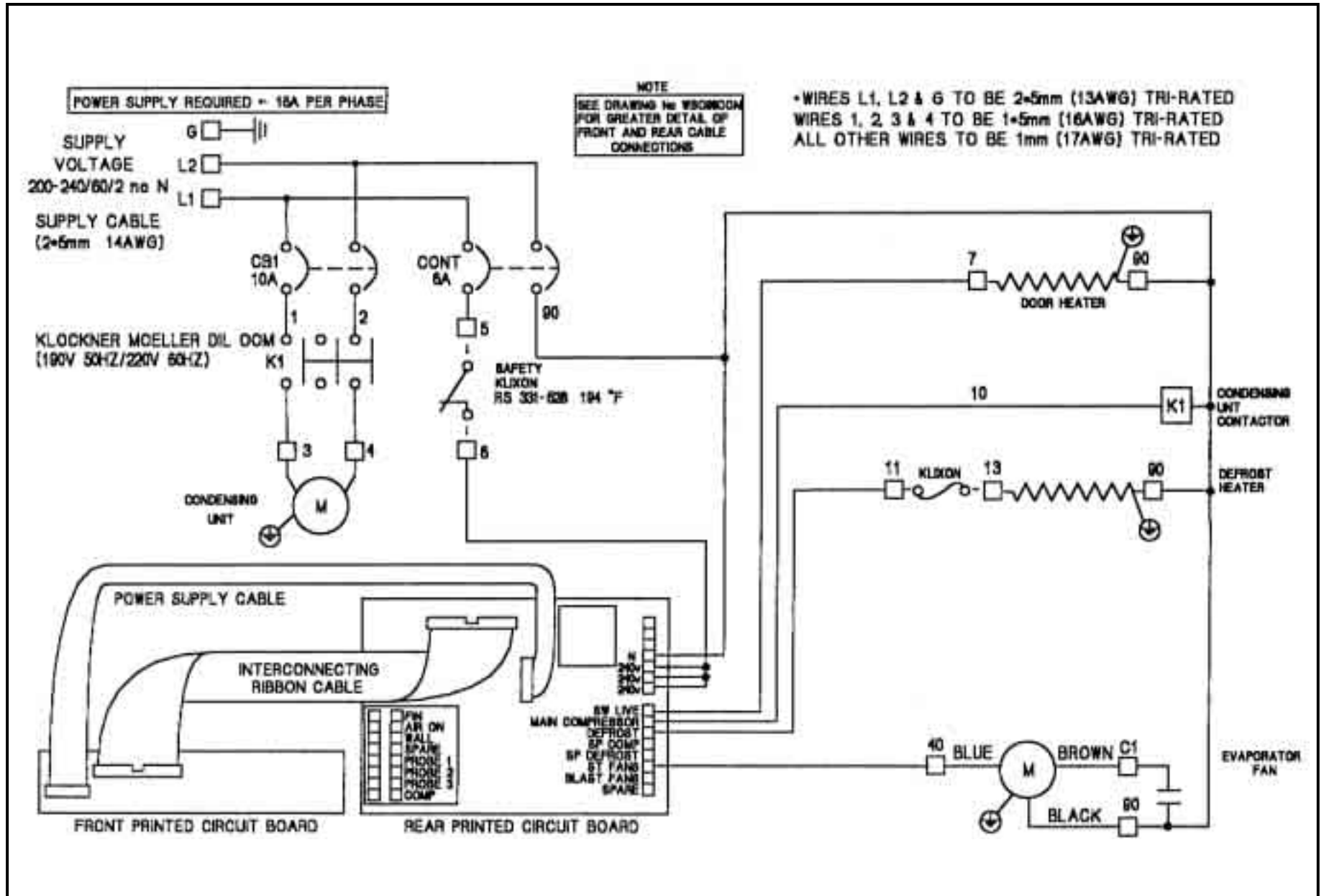
<b>VBC-480 &amp; VBC-660 Storage "POD" Parts List</b>			
<b>Item #</b>	<b>Part Description</b>	<b>VBC-480</b>	<b>VBC-660</b>
1	Tray, "POD" Evaporator Drip	52071501	52071501
2	Coil, Evaporator (Dimensions: 4" x 10" x 22")	52071601	52071601
3	Valve, Expansion 068Z3385	52000601	52000601
	Orifice No. 1 68.2092	52071701	52071701
4	Motor, "POD" Fan	52046401	52046401
5	Plate, Fan	52071801	52071801
6	Unit, Condensing (Model: CAJ4492YHR, 60Hz, R-134a)	52071901	52071901
	Drier, 3/8" Sweat	52072001	52072001
7	Heater, Vaporizer Tray (300 Watt, 3 Bend)	52072101	52072101
8	Klixon, Tray Heater	52045801	52045801
9	Tray, Vaporizer	52072201	52072201
10	Bolt, M8 x 65	52046601	52046601
11	Lid, "POD"	52072301	52072301
12	Gasket, Tape Foam	52046801	52046801
13	"POD"	52072401	52072401
14	Liner, "POD"	52072501	52072501
15	Chute, Flush 2 Fan Air	52072601	52072601

# CABLE CONNECTIONS & THERMOCOUPLES





# VBC-35 (208-230V/60Hz/1Ph)

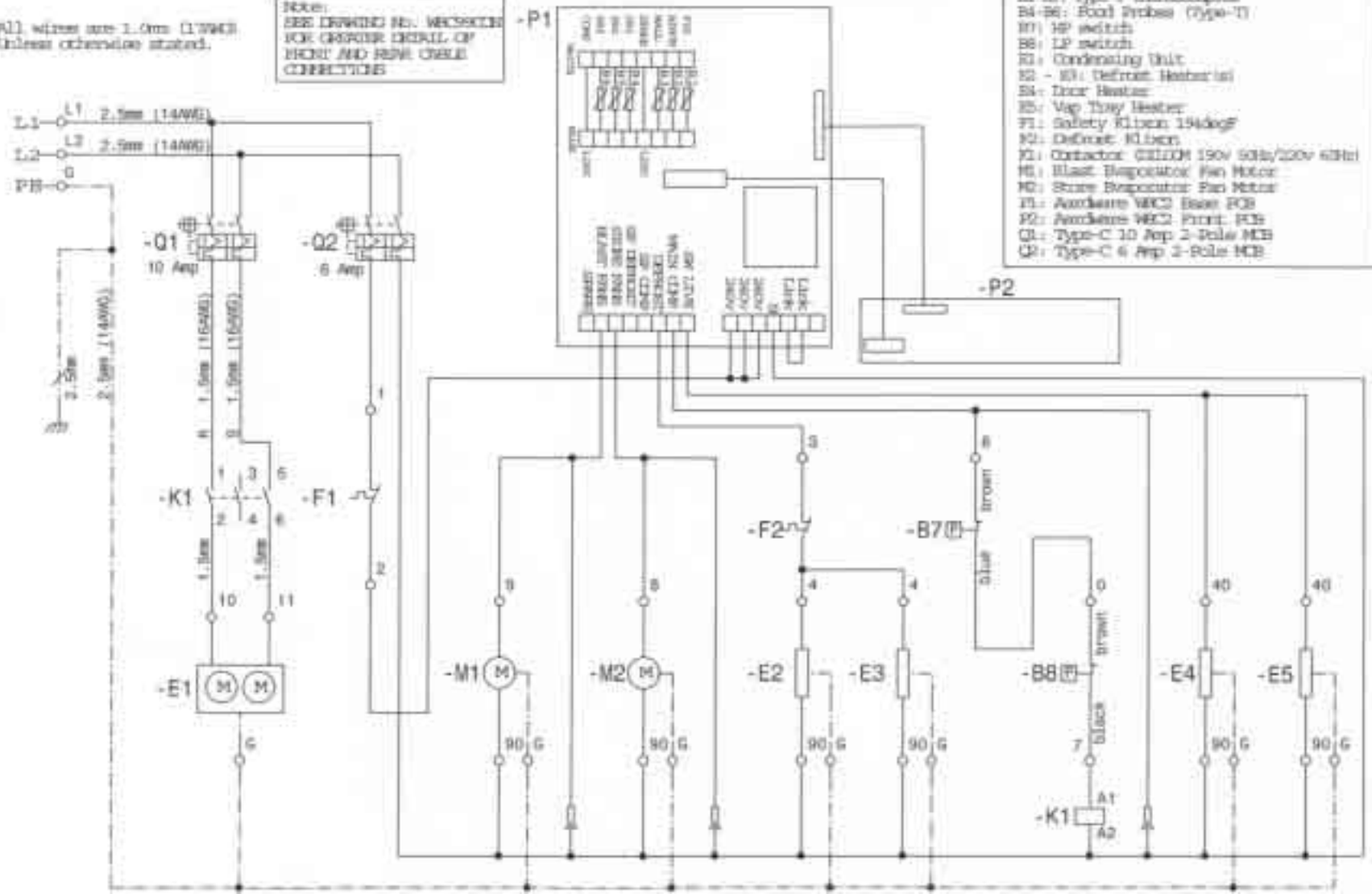


# VBC-70 (208-230V/60Hz/1Ph)

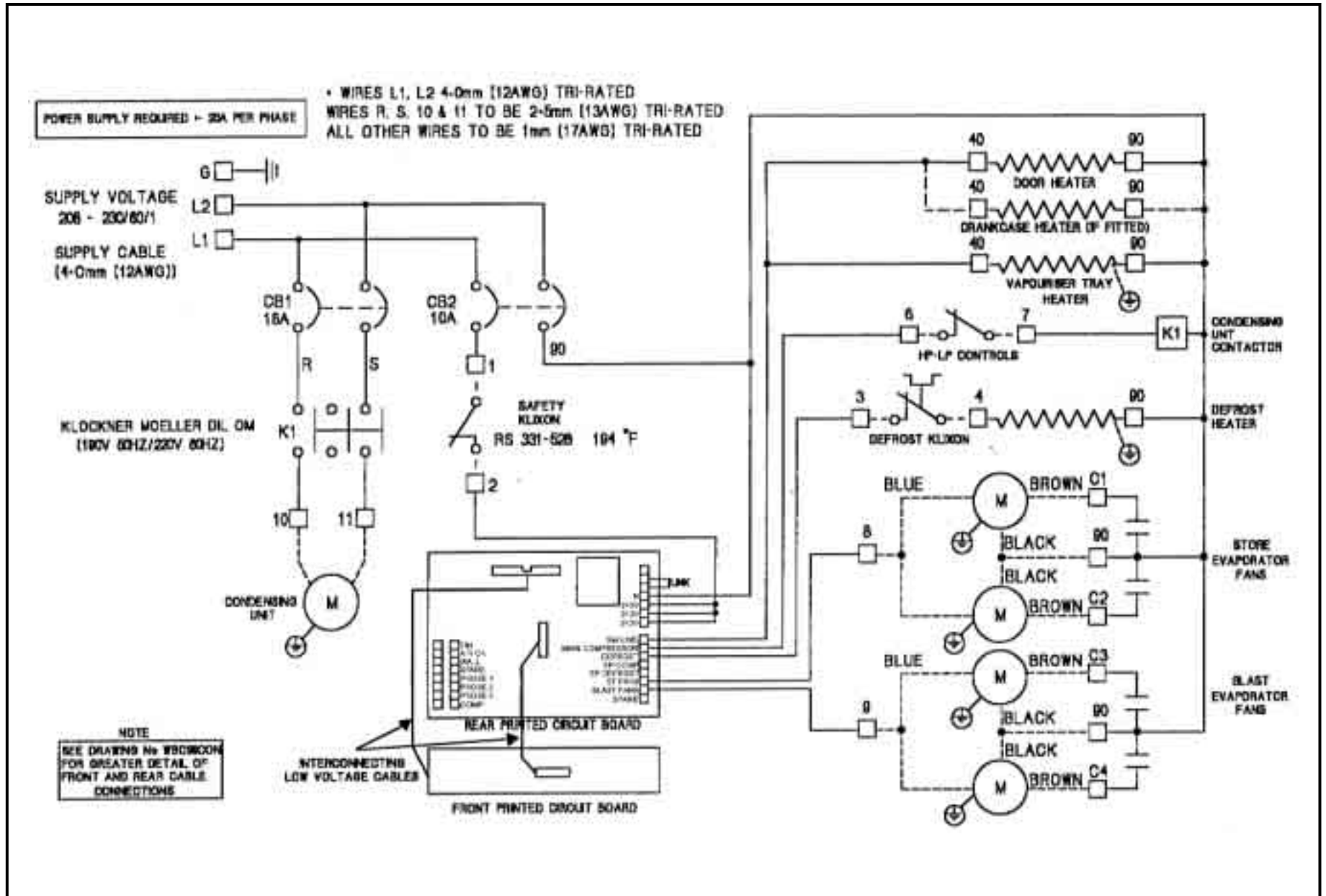
All wires are 1.0mm (17AWG)  
Unless otherwise stated.

NOTE:  
SEE DRAWING NO. VBC0001  
FOR COMPLETE DETAIL OF  
FIELD AND FROM CABLE  
CONNECTIONS

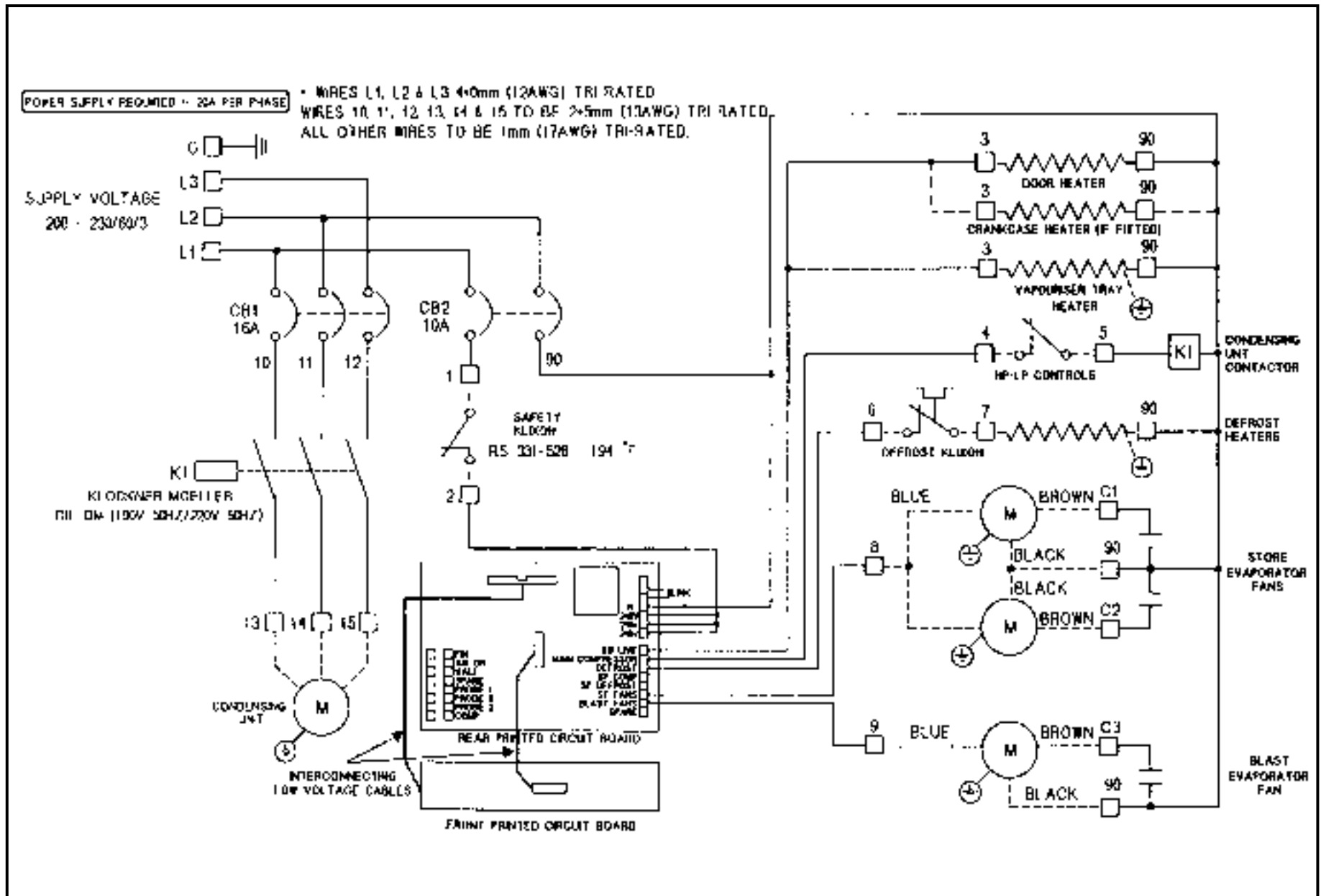
- H1-H3: Type-T Thermocouples
- B4-B6: Food Switch (Type-T)
- B7: 1P switch
- B8: LP switch
- R1: Condensing Unit
- R2 - R3: Defrost Heater(s)
- R4: Door Heater
- R5: Vap Tray Heater
- F1: Safety Killswitch 194degF
- F2: Defrost Killswitch
- K1: Contactor GILCO 150v 50Hz/200v 60Hz
- M1: Blast Degreaser Fan Motor
- M2: Store Degreaser Fan Motor
- H: Auxiliary VBC2 Issue PCB
- F3: Auxiliary VBC2 Front PCB
- Q1: Type-C 10 Amp 2-Pole MCB
- Q2: Type-C 6 Amp 2-Pole MCB



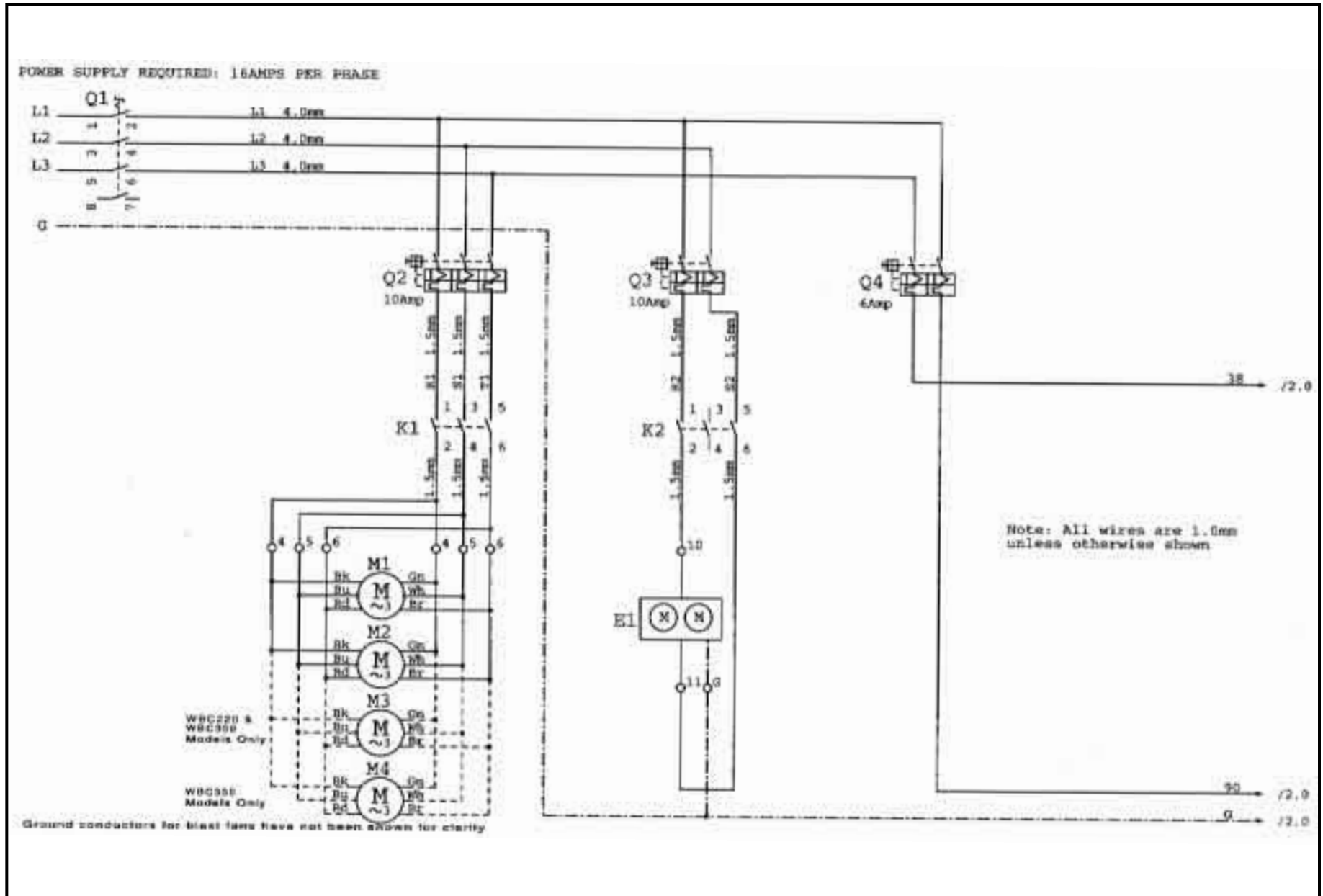
# VBC-75 (208-230V/60Hz/1Ph)



# VBC-100 (208-230V/60Hz/3Ph)



# VBC-175, 220 & 350 with "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 1 of 2

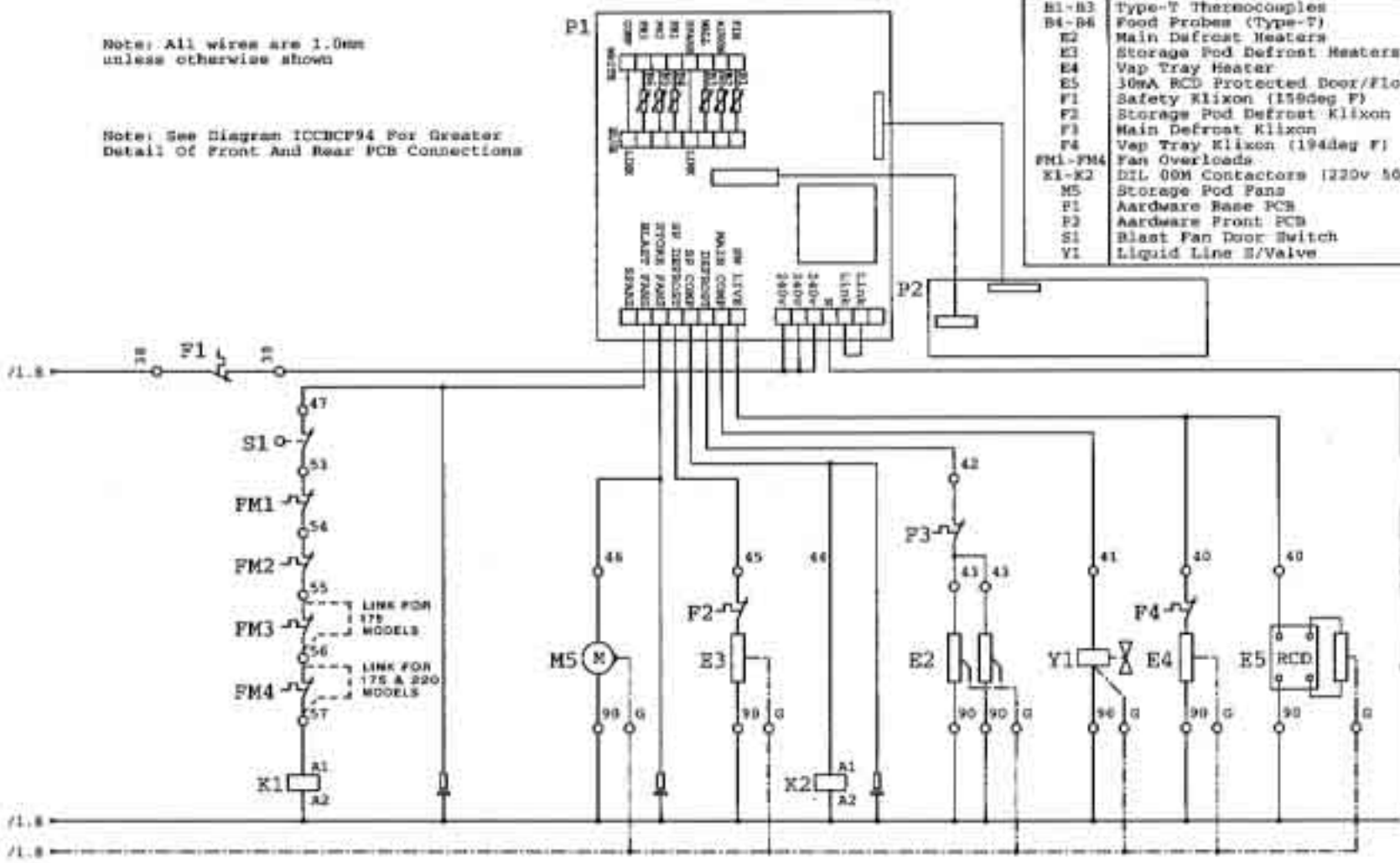


# VBC-175, 220 & 350 with "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 2 of 2

Note: All wires are 1.0mm unless otherwise shown

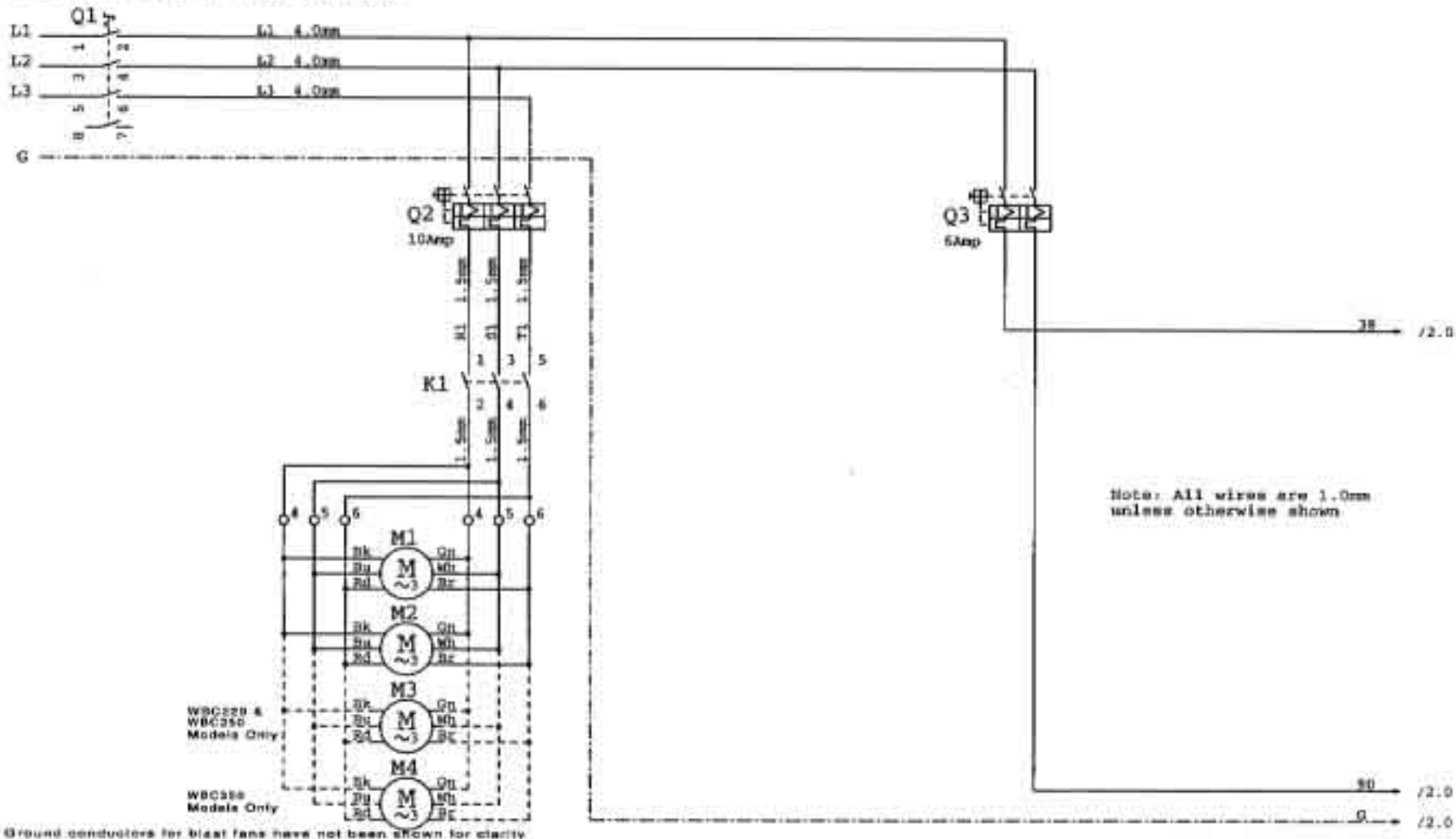
Note: See Diagram ICCBCP94 For Greater Detail Of Front And Rear PCB Connections

E1-E3	Type-T Thermocouples
B4-B6	Food Probes (Type-T)
E2	Main Defrost Heaters
E3	Storage Pod Defrost Heaters
E4	Vap Tray Heater
E5	30mA RCD Protected Door/Floor Heaters
F1	Safety Klixon (159deg F)
F2	Storage Pod Defrost Klixon
F3	Main Defrost Klixon
F4	Vap Tray Klixon (194deg F)
FM1-FM4	Fan Overloads
K1-K2	DIL 00M Contactors (220v 50/60Hz)
M5	Storage Pod Fans
P1	Hardware Base PCB
P2	Hardware Front PCB
S1	Blast Fan Door Switch
V1	Liquid Line S/Valve



# VBC-175, 220 & 350 without "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 1 of 2

POWER SUPPLY REQUIRED: 16AMPS PER PHASE

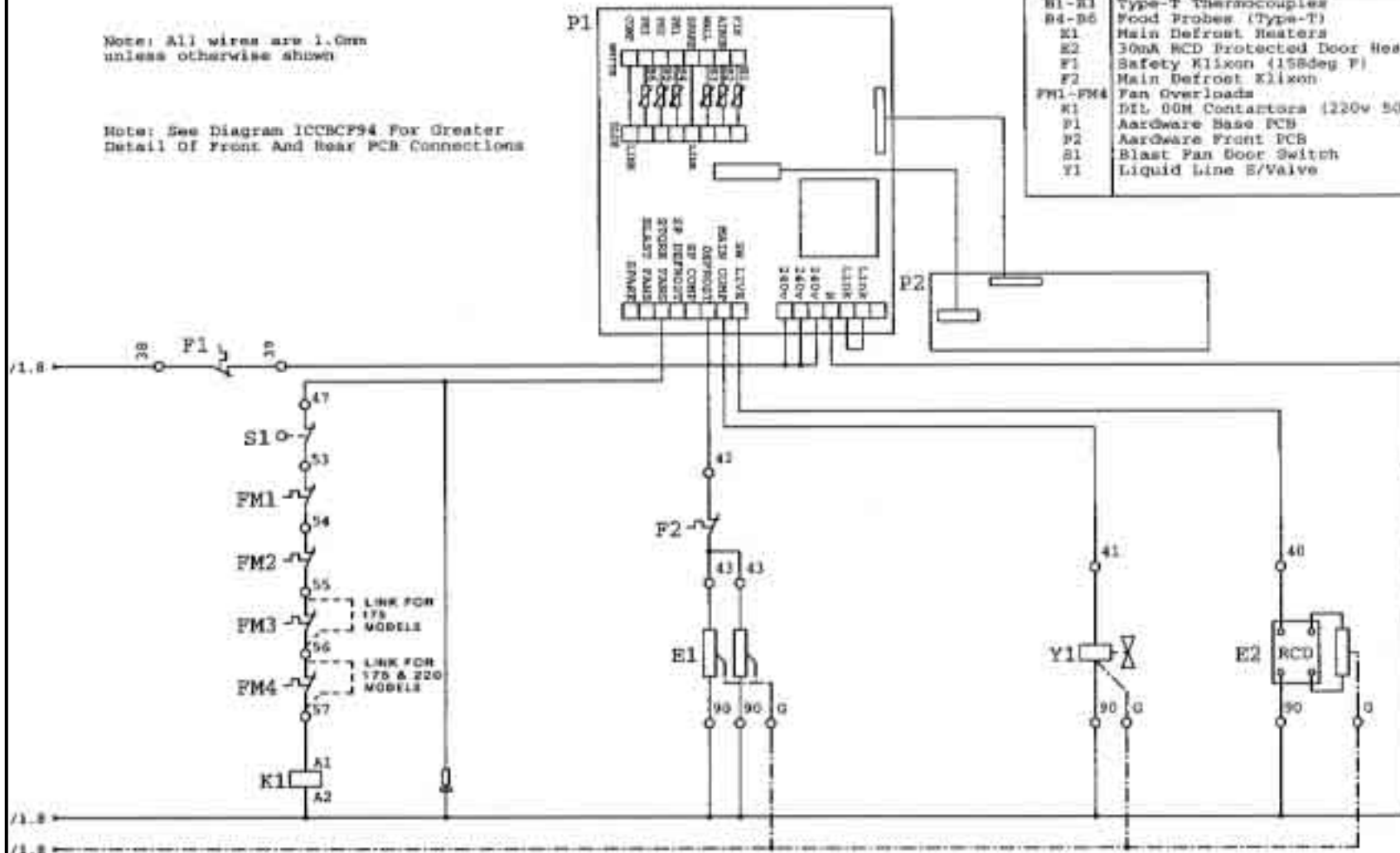


# VBC-175, 220 & 350 without "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 2 of 2

Note: All wires are 1.0mm unless otherwise shown

Note: See Diagram 1CCBCF94 For Greater Detail Of Front And Rear PCB Connections

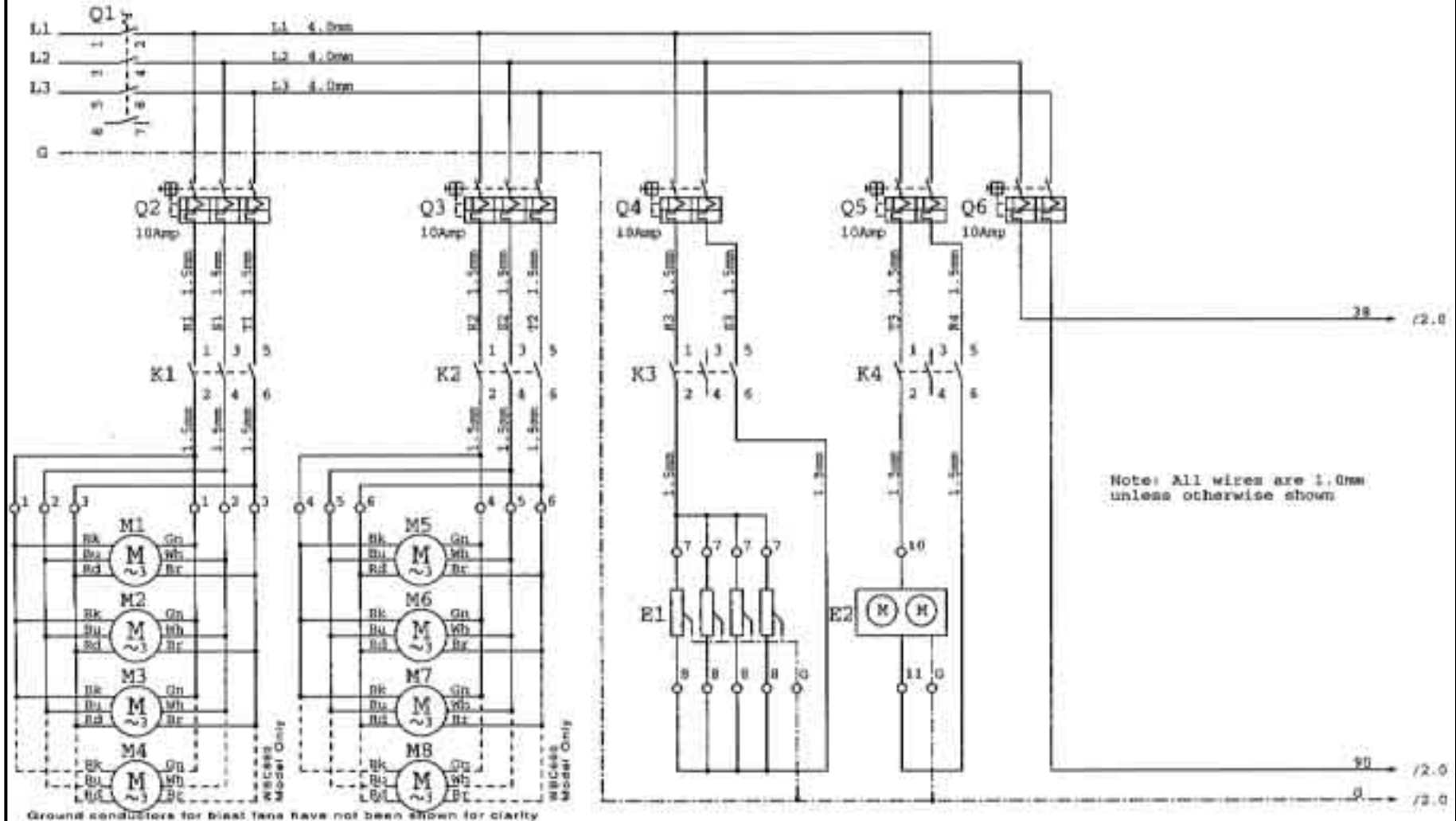
B1-B1	Type-T Thermocouples
B4-B6	Food Probes (Type-T)
E1	Main Defrost Heaters
E2	30mA RCD Protected Door Heaters
F1	Safety Klixon (158deg F)
F2	Main Defrost Klixon
FM1-FM4	Fan Overloads
K1	DIL. GGM Contactors (220v 50/60Hz)
P1	Hardware Base PCB
P2	Hardware Front PCB
S1	Blast Fan Door Switch
Y1	Liquid Line S/Valve





# VBC-480 & 660 with "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 1 of 2

POWER SUPPLY REQUIRED: 20AMPS PER PHASE

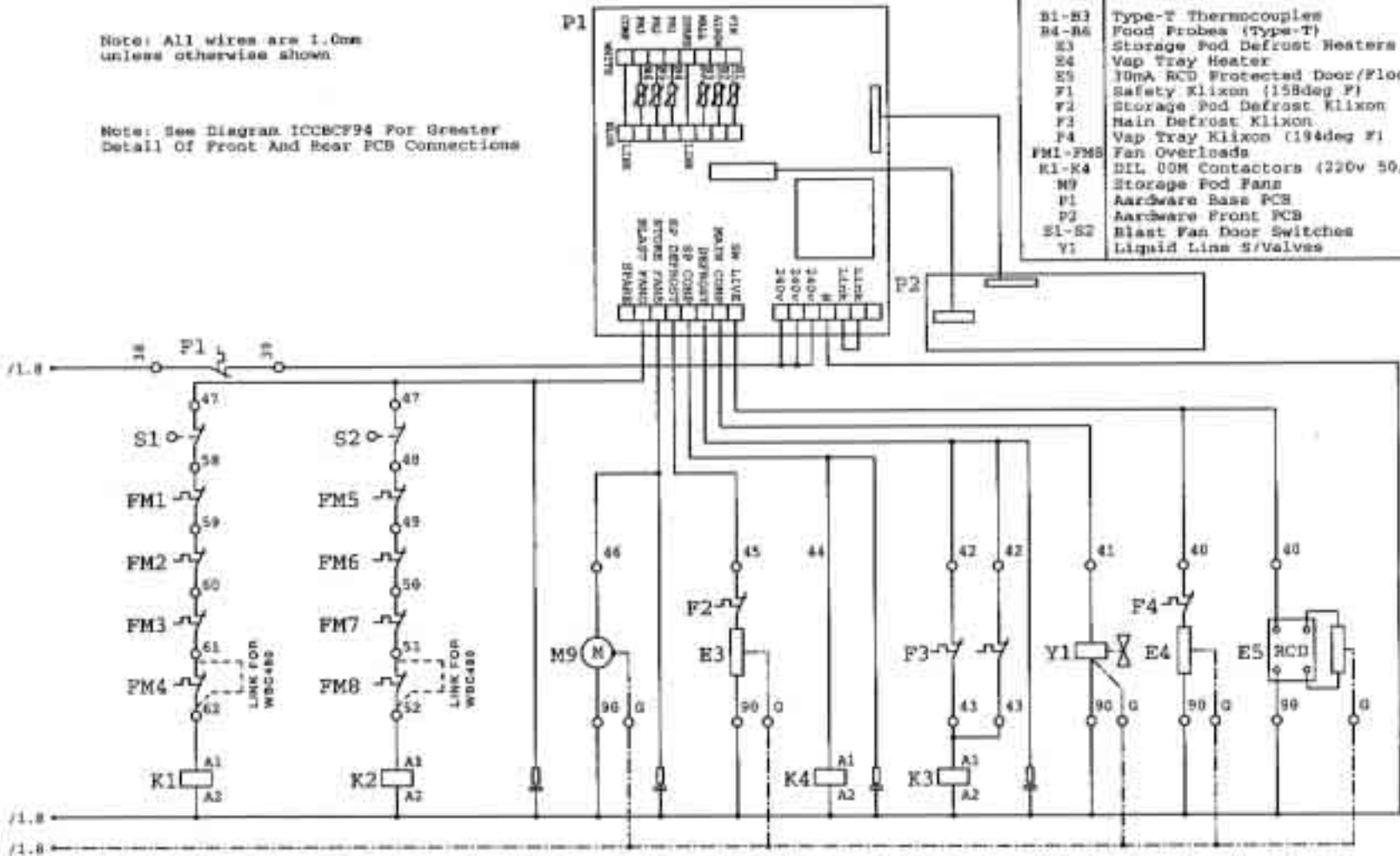


# VBC-480 & 660 with "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 2 of 2

Note: All wires are 1.0mm unless otherwise shown.

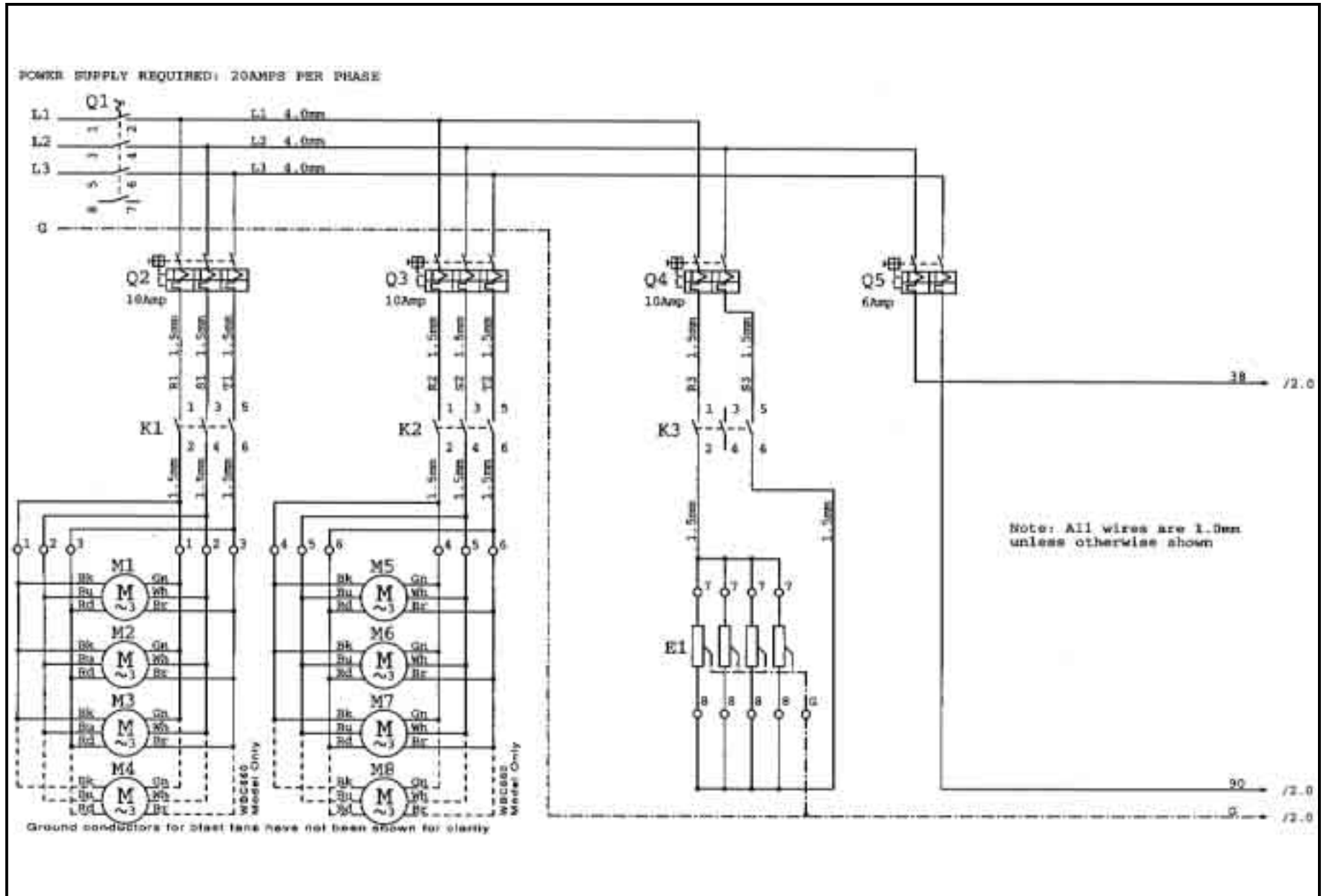
Note: See Diagram ICCBCF94 For Greater Detail Of Front And Rear PCB Connections

B1-B3	Type-T Thermocouples
B4-B6	Food Probes (Type-T)
E3	Storage Pod Defrost Heaters
E4	Vap Tray Heater
E5	10mA RCD Protected Door/Floor Heaters
F1	Safety Klixon (158deg F)
F2	Storage Pod Defrost Klixon
F3	Main Defrost Klixon
F4	Vap Tray Klixon (194deg F)
FM1-FM8	Fan Overloads
K1-K4	2IL 00M Contactors (220v 50/60Hz)
M9	Storage Pod Fans
P1	Hardware Base PCB
P2	Hardware Front PCB
S1-S2	Blast Fan Door Switches
Y1	Liquid Line S/Valves



# VBC-480 & 660 without "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 1 of 2

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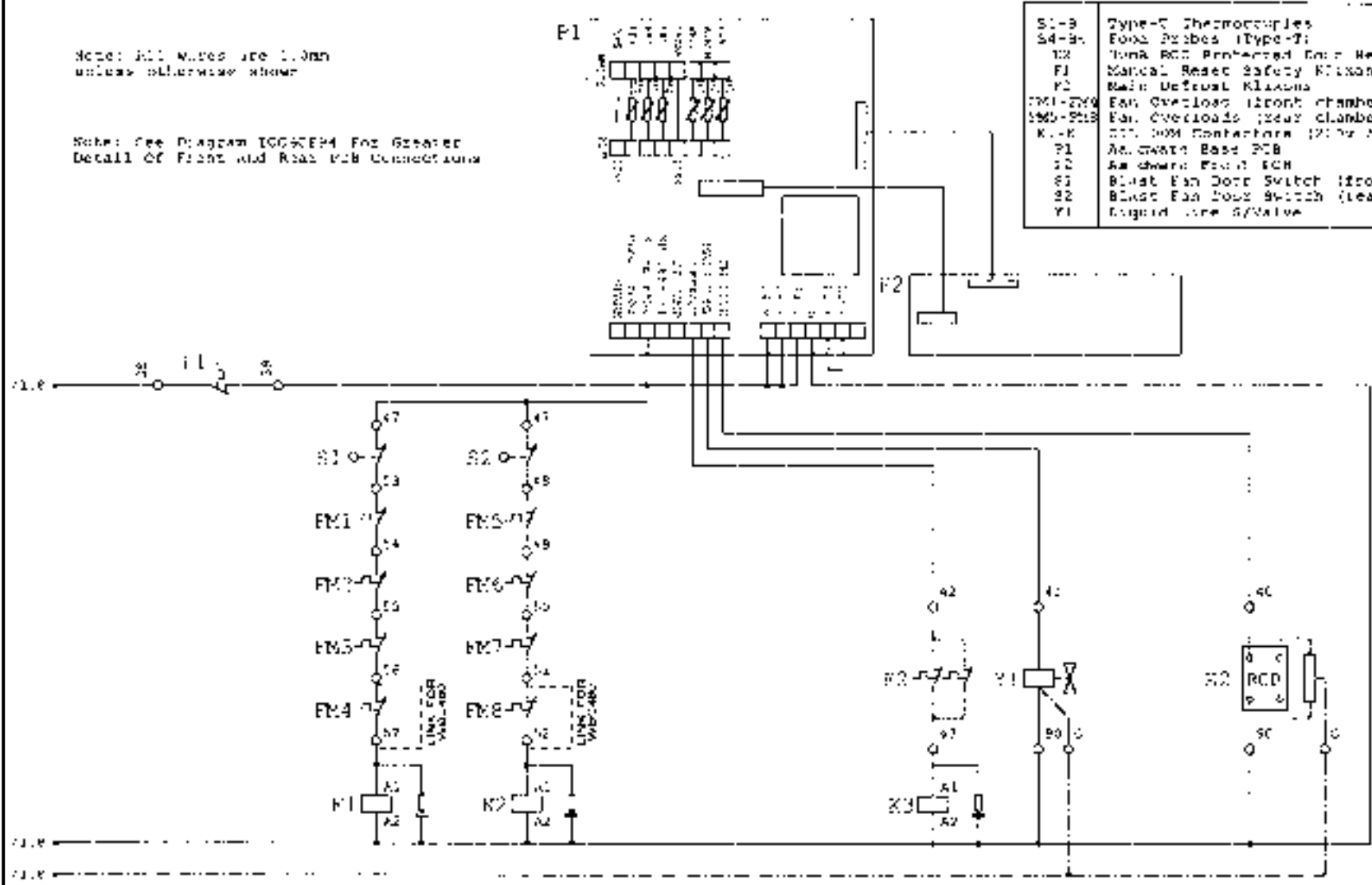


# VBC-480 & 660 without "POD" Refrigeration System (208-230V/60Hz/3Ph), Page 2 of 2

Note: All wires are 1.0mm  
unless otherwise shown

Note: See Diagram ICG9CEP4 For Greater  
Detail Of Front And Rear PCB Connections

S1-S3	Type-C Thermocouples
S4-S6	Food Probes (Type-T)
IK	10mA RCD Protected Earth Neutral
F1	Manual Reset Safety Klixon
K2	Main Defrost Klixon
FM1-FM8	Fan Overload (front chamber)
FM9-FM18	Fan Overloads (rear chamber)
K1-K	110.00M Contactors (208V/230V/60Hz)
P1	Refrigerant Base PCB
S2	Refrigerant Fault ECM
S3	Blind Fan Door Switch (front)
S2	Blind Fan Door Switch (rear)
Y1	Liquid Line Solenoid







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**E-mail:** [service@victory-refrig.com](mailto:service@victory-refrig.com)  
or  
[parts@victory-refrig.com](mailto:parts@victory-refrig.com)