Instructional Manual

HD-SERIES REACH-INS

R1SS, R2SS, R3SS, F1SS, F2SS, F3SS

This manual contains important information regarding your Culitek unit. Read this manual thoroughly prior to equipment setup, operation, and maintenance. Failure to comply with regular maintenance guidelines outlined in this manual may void the warranty.

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1. TERMS AND CONDITIONS

Two Year Warranty

All claims for parts or labor must be made directly through Culitek, and must include the model, the serial number, proof of purchase, date of installation, and all pertinent information supporting the alleged defect. In case of compressor replacement under warranty, either the compressor or compressor tag must be returned to Culitek, along with above listed information. **Failure to comply with warranty policies will result in voided claims.**

Two Year Parts & Labor Warranty

Culitek warrants all new refrigerated components, such as the cabinet and all parts, to be free from defects in materials or workmanship. Culitek's obligation under this warranty is limited to a period of two (2) years from the date of shipment from Culitek. All parts covered under this warranty that are defective within two (2) years from the date of shipment from Culitek are limited to repair or replacement (including labor charges) of defective parts or assemblies. The labor warranty shall include standard straight time labor charges only and reasonable travel time, as determined by Culitek.

Additional Three-Year Compressor Warranty

In addition to the two (2) year warranty, Culitek warrants its sealed compressor to be free from defects, in both material and workmanship, under normal and proper use and maintenance service for a period of three (3) additional years from the date of original installation, but not to exceed five (5) years. Compressors that have been determined to be defective from Culitek within this extended period will be either repaired or replaced with a compressor or compressor parts of similar design and capacity, according to Culitek's discretion. The three (3) year extended compressor warranty applies only to sealed parts of the compressor and does not apply to any other parts or components. This includes the cabinet, paint finish, temperature control, refrigerant, metering device, motor starting equipment, fan assembly, and other electrical components, etc.

Compressor Warranty

The (5) five-year compressor warranty will be void if the following procedure is not carefully adhered to:

1. System contains R290 refrigerant and lubricant. The lubricant has rapid moisture absorbing qualities.
2. Drier replacement is very important and must be changed when a system is opened for servicing.
3. Micron level vacuums must be achieved to insure low moisture levels in the system.
4. Compressor must be obtained through Culitek, unless otherwise specified in writing, through Culitek's warranty department.

What is NOT Covered by the Warranty

Culitek's sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

ROUTINE MAINTENANCE REQUIREMENTS MUST BE FOLLOWED, OR WARRANTY IS VOID.

No Consequential Damages

In no event will Culitek be responsible for economic loss, profit loss, or special, exemplary, punitive indirect, or consequential damages, including without limitation losses or damages arising from food or product spoilage, regardless of whether or not they result from equipment failure.

Warranty is Not Transferable

This warranty is not assignable and applies only to the original purchaser/user to whom delivered. ANY SUCH ASSIGNMENT OR TRANSFER SHALL VOID THE WARRANTIES HEREIN AND SHALL VOID ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR LABOR COVERAGE FOR COMPONENT FAILURE OR OTHER THE WARRANTY PACKET PROVIDED WITH THE UNIT.

Alteration, Neglect, Abuse, Misuse, Accident, Damage During Transit or Installation, Fire, Food, or Acts of GOD

Culitek is not responsible for the repair or replacement of any parts that are determined to have been subjected after the date of manufacture to alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire, flood, or act of God.

Improper Electrical Connections

Culitek is not responsible for repair or replacement of failed or damaged components, resulting from electrical power failure, the use of extension cords, low voltage, or voltage drops to the unit.

The two (2) year parts & labor warranty and the additional three (3) year compressor warranty are as described above. These warranties are exclusive and are in lieu of all other warranties and seller disclaims any implied warranty of merchantability or that the goods will be fit for a particular purpose. Seller also disclaims any implied warranties of non-infringement. There are no warranties which extend beyond the description on the face hereof.

Stocking Period

Equipment distributed by stocking dealers are permitted a period of up to six (6) months for time equipment is in-stock before sale to purchaser/user before warranty starts. For this extended warranty stocking period to be honored, customer must provide model number of the unit, the serial number, and dated proof of purchase.

Outside U.S.A. and Canada

This warranty does not apply to areas outside the continental USA. Culitek is not responsible for any warranty claims made on products sold or used in such areas.

Residential

Culitek assumes no liability for parts or labor coverage for component failure, factory defect or any other damages for units installed in non-commercial foodservice or residential applications.

** In some cases, a 25% restocking fee may be charged for returned items.*

** Culitek may at any time modify equipment in order to provide and insure a superior product. Change is sometimes necessary to keep up with today's high standards in our industry. Culitek reserves the final interpretation of all public materials.*

2. PREFACE

Please read instructions before using this unit.

IMPORTANT SAFETY INSTRUCTION

To reduce the risk of fire, electric shock, or injury to persons when using your product, basic safety precautions should be adhered to, including the following:

- ▲ Before unit is used, it must be properly installed and operated in accordance with the installation instruction.
- ▲ Before the unit is plugged in, ensure the rated voltage corresponds to the voltage of the electrical system in your operation. The power plug should have its own independent socket. Using adapters may cause overheating or burning.
- ▲ If the supply cord is damaged, it must be replaced by the manufacturer, or its service agent or a similarly qualified person, in order to avoid a hazard.
- ▲ Connect to properly grounded outlets only. Avoid the use of extension cords. Do not run cord under carpeting, runners or the like. Arrange cord away from traffic areas where it will not create a tripping hazard.
- ▲ Always unplug unit when not in use and before cleaning, adjusting, or maintaining. To disconnect the unit, turn switch off and remove plug from power source.
- ▲ Do not disconnect by pulling on the cord. Always disconnect by grasping and pulling on the plug top.
- ▲ Do not pull out the cord or touch the power plug with wet hands. Clean water or dust from the power plug and insert it with the ends of the pins securely connected.
- ▲ Do not use outdoors.
- ▲ Do not splash water on unit; it may cause a malfunction or electric shock.
- ▲ Do not disassemble, repair or alter the unit; it may cause fire or abnormal operations, which may lead to injury.
- ▲ Do not touch cold surfaces in the freezer compartment, particularly when hands are damp or wet. Skin may adhere to these extremely cold surfaces.
- ▲ Never place glass products in the freezer because glass may explode when inner content freezes.
- ▲ The refrigerant and insulation blowing gas used in the unit require special disposal procedures. When disposing, please consult with a service agent or a similarly qualified person.
- ▲ Do not store explosive substances, such as aerosol cans, with a flammable propellant in this unit.
- ▲ WARNING: Keep clear of obstruction all ventilation openings in the unit enclosure or in the structure for build-in.
- ▲ WARNING: Do not use mechanical devices, or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- ▲ WARNING: Do not damage the refrigerant circuit.
- ▲ WARNING: Do not use electrical appliances inside the food storage compartments of the unit, unless they are of the type recommended by the manufacturer.

2. PREFACE (continued)

WARNING: RISK OF FIRE/FLAMMABLE MATERIALS

CAUTION: RISK OF FIRE AND FLAMMABLE REFRIGERANT R290

If you need the electronic version instruction manual, please ask the manufacturer or its service agent.

▲ Maximum load of shelf is 176 pounds

This instruction manual provides all the necessary information regarding:

▲ Use of the reach-in
▲ Technical specifications
▲ Installation and handling
▲ Operator procedures and instructions
▲ Maintenance operation

The manual is to be considered an integral part of the unit and should be stored in a safe place for further consult to permit a good working life of the unit. Unit is intended for commercial use only.

▲ Component parts shall be replaced with like components and servicing shall be done by factory authorized service personnel.

The manufacturer cannot be held liable in the following cases:

▲ Improper installation (not in accordance with the guidelines indicated herein)
▲ Misuse of the unit
▲ Power supply defects
▲ Improper or inadequate maintenance
▲ Unauthorized modification or tampering
▲ Use of non-original spare parts
▲ Partial or total failure to comply with the instructions

All electrical equipment can be hazardous to health. Current standards and legal requirements must be complied with during the installation and use of any equipment.

3. Use of Equipment

The unit is for preserving fresh perishable food, with a built-in refrigerated unit. Do not utilize the equipment to store medical supplies. The optimum operational temperatures are between 33°F to 40°F in refrigerators and -8°F to 0°F in freezers.

4. Technical Features

The unit is a ventilated system; the evaporator is in a separate insulated box on the top. All the materials used in the manufacture of this unit are guaranteed to be suitable for use with food. Eco-friendly R290 hydrocarbon refrigerant. The refrigerating circuit is in compliance with the current normative

5. Operation

The gas in the refrigerating circuit is compressed, liquefied and evaporated in the ventilated evaporator, which is situated on the top of the container.

This cycle involves the absorption of heat from the air in the refrigerator compartment and the reason is cooled. The heat produced is dissipated to the outside environment by a condenser unit located on the top of the unit.

6. Control Unit

The unit is operated from a digital control unit and a main switch pilot light in the top panel of the unit. The main switch pilot light is for turning on the power supply. The green pilot light turns on to indicate that the unit is connected to the main electricity and to start work. The green pilot light comes off to indicate that the unit is disconnected and will not work. The digital control unit is for the regulation of all parameters to provide the correct working of the unit. Please consult all parameters in the manual of the digital control unit.

This manual is part of the instruction manual and is very important in case of service.

7. Handling

The unit arrives in PET film and is packed in a cardboard box on a wood pallet. The unit must be transported and handled with care to avoid posing a hazard to persons or property. Never place unit on its side or turn it upside down, as this may damage or impair operation of the refrigerated unit. Culitek cannot be held liable for any damage or defects arising directly or indirectly from improper handling of the equipment or non-compliance with the safeguards noted above.

8. Installation Procedure

Place the unit in the coolest and best ventilated part of the room. Do not install near heat sources or in direct sunlight. Remove the straps securing the cardboard packing, the cardboard covering and the PET protection film before installation. Clean the unit with mild detergent and then dry it with a soft cloth.

9. Connecting to Main Power Supply

This operation must be carried out by professionally and only by qualified persons. The unit is supplied with a power supply cable for the connection to the main power supply. A thermomagnetic circuit breaker (not supplied) must be installed between the main power point and the power supply cable of the unit.

Before proceeding make sure:

▲ The main voltage corresponds to the voltage on the unit 115V/60Hz/1Ph; to ensure proper operation it is essential for the power supply voltage to come within a range of +/- 10% of the unit's rated voltage.

▲ The electrical system to which the unit is sized to cater for the rated electric output of the buffet unit being installed.

▲ The electronic system to which the unit is connected is made in compliance with current standard requirements.

▲ The electric connections and the installation of the thermomagnetic circuit breaker have been done by a qualified person.

Connecting steps:

▲ Install a thermomagnetic circuit breaker suited to the rated output of the unit being installed.

▲ Connect the refrigerator unit to the thermomagnetic circuit breaker outlet.

▲ Check that refrigerator unit is in order as demonstrated by the pilot light incorporated in the main switch coming on.

10. Maintenance Instructions

The smooth operation and life of the equipment are mainly determined by correct and regular maintenance. Regular cleaning is strongly recommended each month. Please follow the instructions below:

! Disconnect the unit power supply cable from the main power source prior to carrying out any type of cleaning operation.

▲ **Cleaning the Exterior**
Clean with mild detergent and then dry it with a soft cloth. Do not use abrasive detergents!

▲ **Cleaning the Interior**
Clean the inside a minimum of once each month with a detergent suitable for use with foodstuff.

▲ **Cleaning the Condenser**
For efficient operation, it is advisable to clean the condenser regularly, a minimum of once every 4 months with a dry brush or vacuum cleaner.

11. Troubleshooting

Unit stops working (light off):

▲ Power supply failure
Remedies:
- ➲ Check that the plug is inserted properly in the socket
- ➲ Check that the on/off switch
- ➲ Check that the main voltage powers the plug

Unit temperature goes up:

▲ Unit too near to a heat source
▲ Condenser dirty or closed
Remedies:
- ➲ Move the counter or the heat source further away
- ➲ Clean the condenser

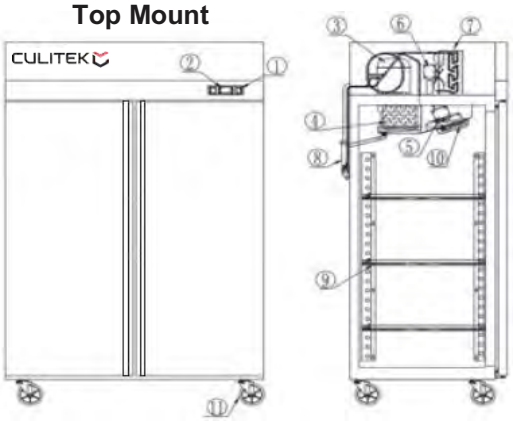
12. Technical Service

For technical service, please contact the dealer technical support department and provide them with the serial number and the purchase date.

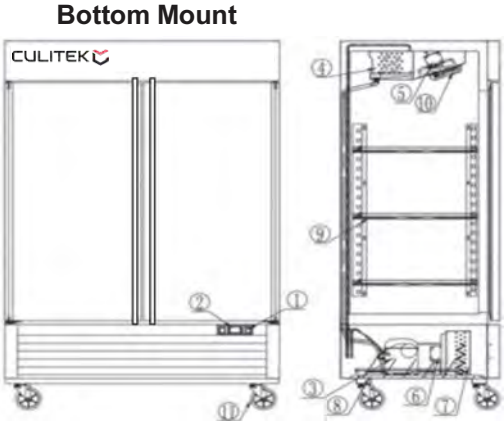
13. Configuration Sketch Map

1. Power switch
2. Micro-computer controller
3. Compressor
4. Evaporator
5. Evaporator fan motor
6. Condenser fan motor
7. Condenser
8. Drain case
9. Shelf
10. Lamp
11. Caster

Top Mount



Bottom Mount



14. Operating Instructions

1. New upright air-cooling unit should be opened and ventilated before it is used. After that, users should use warm water to clean its inside.

2. After connecting the power supply, press the "POWER" switch on the controller keyboard (Green Indicator Light **ON),** the fridge will turn on. The microcomputer controller, installed in the controller keyboard, can automatically adjust the temperature ranges. This intelligent digital controller works by recognizing when the temperature increases and reaches set point, plus differential when the compressor is started and turns off when the temperature reaches the set point value again.\

3. Microcomputer Controller Operation Instruction:

4. Microcomputer panel sketch map, meanings of running indicator light and LED showing.

5. SET Display target set point. In programming mode, it selects a parameter or confirms an operation.

   ❄ Start a manual defrost.

   ∧ In programming mode, it browses the parameter codes, or increases the displayed value.

   ∨ AUX In programming mode, it browses the parameter codes, or decreases the displayed value.

   ∨+∧ Lock or unlock keyboard.

   SET+∨ To enter in programming mode.

   SET+∧ To return to room temperature display.

❄	On	Compressor enabled
	Flashing	Anti-short cycle delay enabled (AC parameter)
❄	On	Defrost in progress
	Flashing	Dripping in progress
	On	Fans output enabled
	Flashing	Fans delay after defrost
°C	On	Measurement unit
	Flashing	Programming mode
°F	On	Measurement unit
	Flashing	Programming mode

6. How to see the point:
   Push and immediately release SET key, the SET point will be displayed;
   Push and immediately release SET key, or wait 5 seconds to return to normal visualization.

7. How to change the SET point:
   To change SET point value, push the SET key for more than 2 seconds;
   the value of the SET point will be displayed and the **°F** or **°C** LED will start blinking.

   To change SET value, push the ∧ or ∨ AUX arrows.

   To memorize the new SET point value, push the SET key again, or wait 10 seconds.

8. How to start a manual defrost:
   Push ❄ key for more than 2 seconds, and a manual defrost will start.

9. How to change a parameter value:
   Enter programming mode by pressing SET and ∨ AUX keys; **°F** or **°C** LED starts blinking.
   Select the required parameter. Press SET to display its value.
   Use ∧ or ∨ AUX to change its value.
   Press SET to store the new value and move to the following parameter.
   To exit press SET or wait 15 seconds without pressing a key.
   NOTE: *The SET value is stored even when exiting the procedure by waiting for the time-out to expire.*

10. To lock the keyboard:

    Press ▽+△ for 3 or more seconds.
    The "OFF" message will be displayed, and the keyboard will be locked.

11. To unlock the keyboard:

    Press ▽+△ for 3 or more seconds until the "ON" message is displayed.

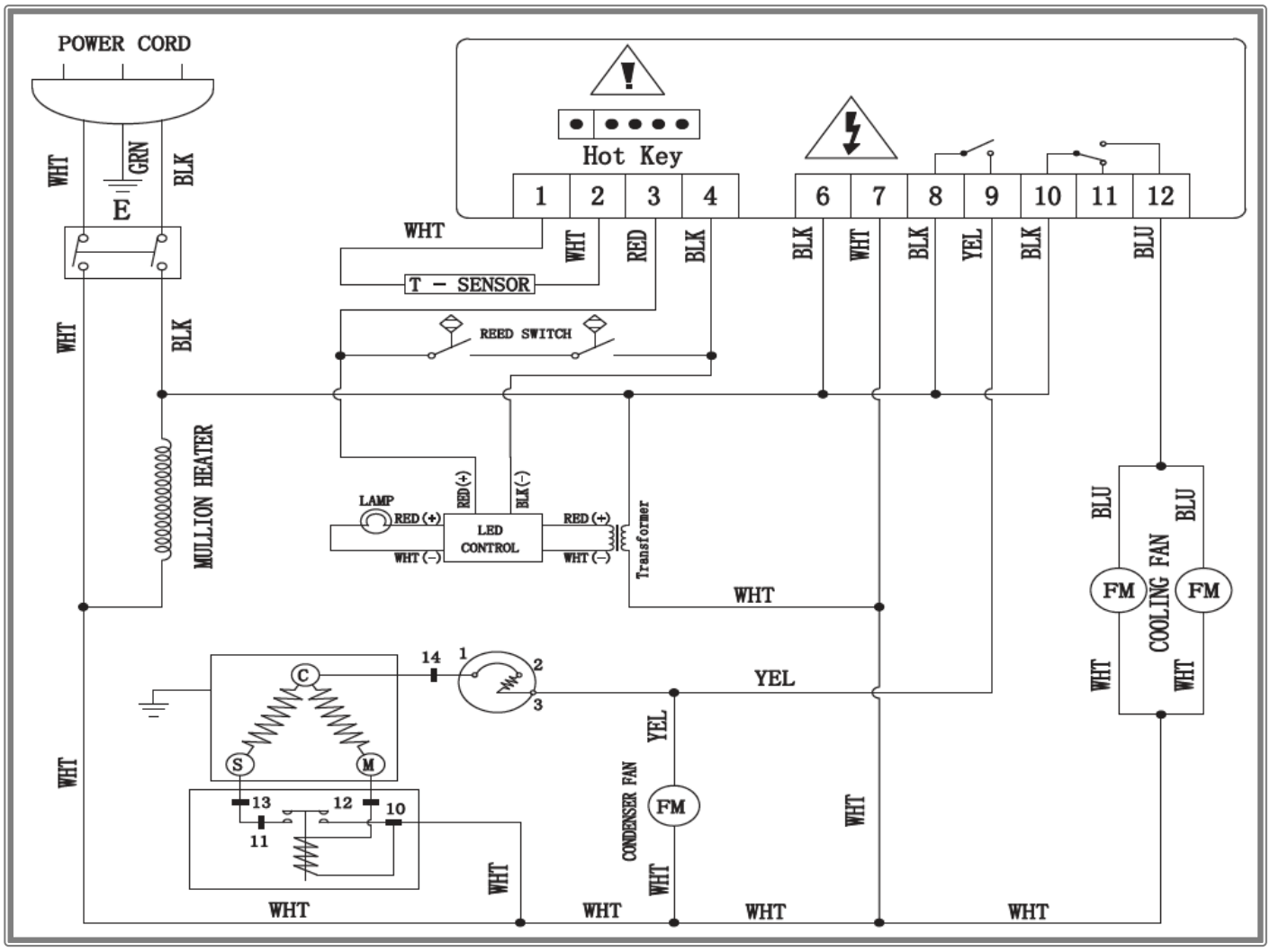
12. Alarm signaling:

P1	Room probe failure	Compressor output according to "'Cy" e "Cn"
P2	Evaporator probe failure	Defrost end is timed
HA	Maximum temperature alarm	Outputs unchanged
LA	Minimum temperature alarm	Outputs unchanged
EA	External alarm	Outputs unchanged
CA	Serious external alarm	All outputs OFF
DA	Door Open	Compressor and fans restarts

Culitek products have been modified precisely before leaving factory. To avoid damaging compressor unit or other malfunctions, users must not modify the microcomputer parameters privately.

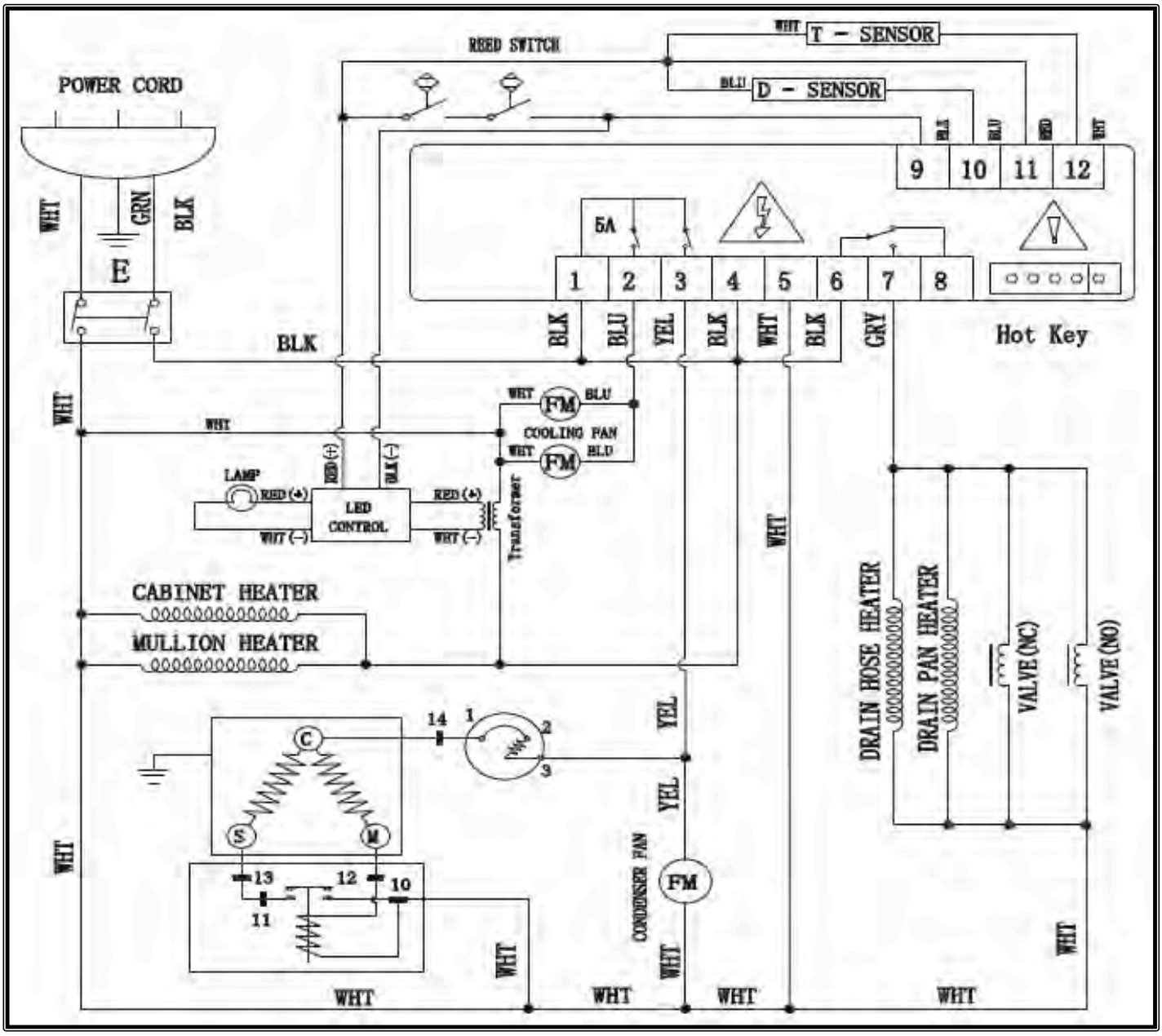
ELECTRICAL CONTROL CIRCUIT DIAGRAMS

Refrigerator



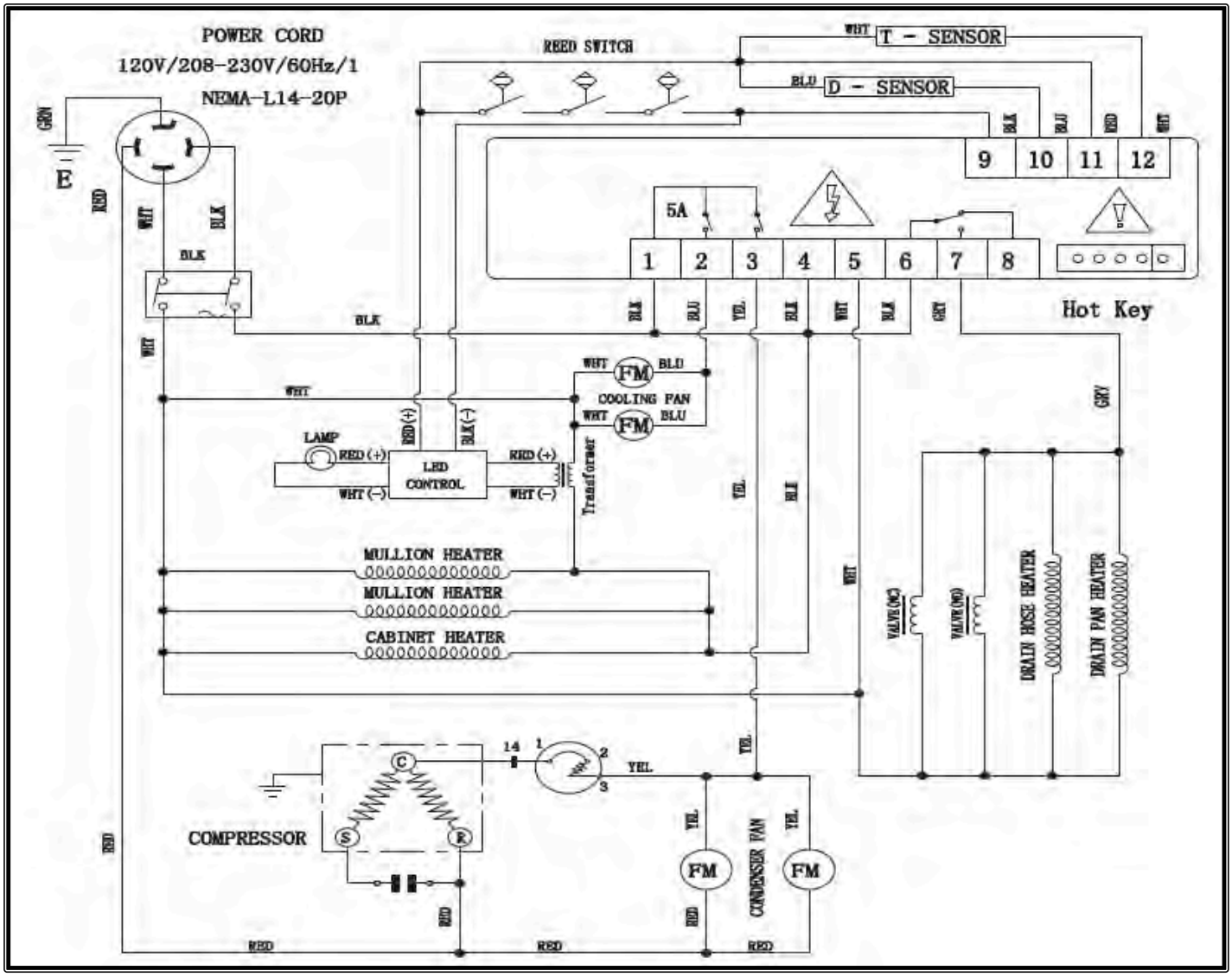
ELECTRICAL CONTROL CIRCUIT DIAGRAMS

Freezer



ELECTRICAL CONTROL CIRCUIT DIAGRAMS

Three-Door Freezer



TECHNICAL PARAMETERS

Bottom Mount Reach-Ins

Product Name	Model Number	Power Source (V)	Rating Frequency (Hz)	Rated Current (A)	Volume (Cu. Ft)	Temperature Range (°F)	Input Power (W)	Refrigerant	Amount (oz.)	Dimensions (in)
FREEZERS										
1 Door	**F1SS**	115	60	6.3	19.1	-8°F to 0°F	610	R290	4.2	27"Wx31 7/10"Dx83 1/10"H
2 Door	**F2SS**	115	60	8.6	43.8	-8°F to 0°F	935	R290	5.3	54 2/5"Wx31 7/10"Dx83 1/10"H
3 Door	**F3SS**	115/208/230	60	5.5	68	-8°F to 0°F	1360	R290	5.3	81 9/10" x 31 7/10"D x 83 1/10"H
REFRIGERATORS										
1 Door	**R1SS**	115	60	2.1	19.1	33°F to 40°F	250	R290	3.9	27"Wx31 7/10"Dx83 1/10"H
2 Door	**R2SS**	115	60	3.2	44.8	33°F to 40°F	370	R290	4.9	54 2/5"Wx31 7/10"Dx83 1/10"H
3 Door	**R3SS**	115	60	4.2	68	33°F to 40°F	470	R290	5.3	81 9/10" x 31 7/10"D x 83 1/10"H

NOTE: Technical data subject to changes

OFFICIAL APPROVAL & RULES

Conforms to UL STD.471
Certified to CSA STD.C22.2 NO. 120
Conforms to NSF/AMSI STD. 7

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