

## C5 3 SERIES - 1 SERIES HOLDING & PROOFING CABINETS

#### TABLE OF CONTENTS

SECTIC	DN PAGE
1.	Basic Operating Guidelines Inside Front Cover
II.	Safety Information
III.	Identifying Your Cabinet 4
IV.	Installation & Set-up
V.	Product Features
VI.	Operating Instructions10
VII.	Care & Maintenance12
VIII.	Basic Troubleshooting 13
IX.	Service & Replacement Parts15
Χ.	Warranty28

Metro Heated Cabinets are for Hot Food Holding applications only.

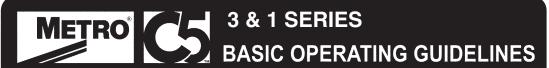






#### **DESCRIPTION**

This manual covers cabinets with electrical ratings of: 120V-60 Hz-2000W, 120V-60 Hz-1440W, 220-240V, 50/60 Hz, 1681 – 2000W and 220-240V, 50/60 Hz, 1210 – 1440W



#### **BASIC CABINET SETUP**

- A. Refer to DATA PLATE for electrical requirements. Cabinets rated at 120V 1440W must be plugged into either a 15 amp or 20 amp 125VAC receptacle. Cabinets rated at 120V 2000W must be plugged into a 20 amp 125VAC receptacle and used on an individual branch circuit. Cabinets rated at 220-240V must be plugged into a 15 amp 250VAC receptacle.
- B. With POWER switch OFF, plug into VAC grounded receptacle.
- C. Fill stainless water pan to top with clean HOT tap water for Proofing, Combination, and Moisture holding modules. Check water level every 3 hours (2 hours when Proofing) and refill with clean HOT tap water as necessary.

#### **HOLDING INSTRUCTIONS (Holding, Combo, Moisture Holding)**

- 1) Set Combination Module switch to **HOLD.**
- 2) Set POWER switch to the **ON** position.
- 3) Set TEMPERATURE control to 10.
- 4) **Moisture Module Only:** Set MOISTURE control to **10** (or desired level).
- 5) Pre-heat cabinet until desired temperature is reached (typical heat-up time from 72°(22°C) ambient to 160°(71°C) is approximately 45 minutes).
- 6) Re-set TEMPERATURE control and adjust as necessary to reach desired temperature setting 6-8 is typical for 150°(66°C) to 160° (71°C). Indicator light will turn on and off as the heat thermostat cycles.

#### PROOFING INSTRUCTIONS (Combo and Proofing)

- 1) Set Combination Module switch to **PROOF**.
- 2) Set POWER switch to the **ON** position.
- 3) Set TEMPERATURE control to 2.
- 4) Set MOISTURE control to 10.
- 5) Pre-heat cabinet until desired temperature and humidity is reached (typical heat-up time from 72°(22°C)ambient to 95°(35°C)and 95% relative humidity is approximately 30 minutes).
- 6) Adjust settings as necessary to reach desired temperature and humidity levels. Power indicator lights will turn on and off as the heat and moisture thermostats cycle.

## A

## CAUTION



- UNPLUG CABINET FROM POWER SOURCE, ALLOW CABINET AND WATER TO COOL, BEFORE CLEANING OR SERVICING.
- SOME SURFACES, WATER, AND ESCAPING VAPOR CAN BE HOT ENOUGH TO BURN. USE CAUTION WHEN OPENING DOORS AND WORKING IN AND AROUND THIS CABINET.
- DO NOT SPRAY OR POUR WATER INTO THE CONTROLLER ENCLOSURE. TO CLEAN CABINET, WIPE WITH A DAMP CLOTH AND DRY WITH A TOWEL. FLOOR OF CABINET AND WATER RESERVOIR MAY BE HOSED OUT AT LOW PRESSURE.
- KEEP THE CABINET CLEAN. ACCUMULATION OF GREASE AND DIRT MAY IGNITE.



### SAFETY INFORMATION

**WARNING:** Follow all food safety guidelines. Pre-heat the cabinet to the desired temperature before placing

cooked, hot food into the cabinet. This is not a re-thermalizing cabinet. Food must be at the appropriate

temperature before being placed into this cabinet. Use a food probe to check internal food temperature — the cabinet temperature is not necessarily the internal food temperature.

WARNING: Only factory-approved service agents should attempt to service, repair or replace electrical components,

wiring or power cord.

WARNING: Unplug the cabinet before cleaning or servicing. Do not wash the cabinet with a water jet or high pressure

water.

WARNING: This cabinet is for hot food holding applications only.

**CAUTION:** Stainless steel water pan and Plastic drip pan should not go together when operating the cabinet.

Stainless steel water pan is located/installed inside cabinet and plastic drip pan is located/installed

underneath the cabinet. Stainless pan not included with holding module.

CAUTION: Do not spray or pour water into the module. To clean the cabinet, wipe with a damp cloth and dry with a

towel. Use only cleaning agents approved for aluminum.

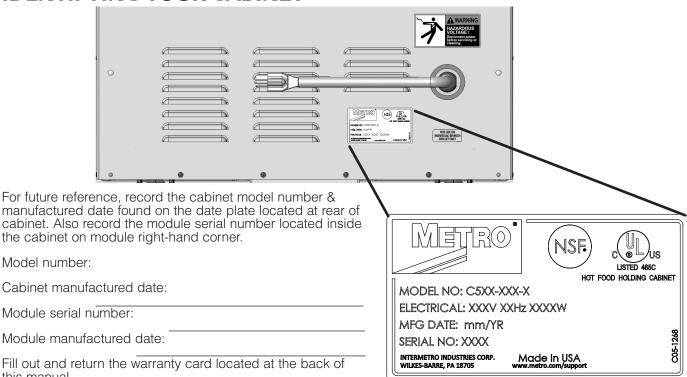
**CAUTION:** Water dripping onto the floor from open doors can be a slip hazard.







### **IDENTIFYING YOUR CABINET**



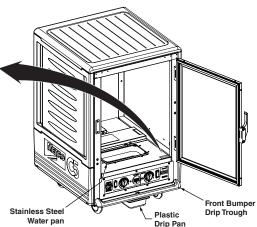
#### PART NUMBERING <u>C5</u> 1 9 - H FC - 4 **CABINET NAME -**A = ACCESSORIES (IF APPLICABLE) CABINET TYPE 1 = UN-INSULATED SLIDES L = FIXED, LIP LOAD **CABINET SIZE (HEIGHT)** U = ADJUSTABLE, UNIVERSAL 9 = FULL 4 = FIXED WIRE $7 = \frac{3}{1}$ $5 = \frac{1}{2}$ DOOR FC = FULL CLEAR MODEL = C5-CM2000, COMBO, 120V, 2000 W. H = C5-HM2000, HOLDING, 120V, 2000 W. P = C5-PM1500, PROOFER, 120V, 1440 W. CX = C5-CM2000X, COMBO, 220-240V, 1681-2000 W. HX = C5-HM2000X, HOLDING, 220-240V, 1681-2000 W. C5 3 9 — HL DS — U — BU A PX = C5-PM1500X, PROOFING, 220-240V, 1210-1440 W CABINET NAME A = ACCESSORIES (IF APPLICABLE) **CABINET TYPE** PANEL COLOR 3 = INSULATED BG = BEIGE BLANK = RED **CABINET SIZE (HEIGHT)** BU = BLUE SG = SAGE9 = FULLGY = GRAY**GREEN** $7 = \frac{3}{4}$ $5 = \frac{1}{2}$ OR = ORANGE YL = YELLOW 3 = Under Counter L = FIXED, LIP LOAD MODEL -U = ADJUSTABLE, UNIVERSAL C = C5-CM2000, COMBO, 120V, 2000 W. 4 = FIXED WIRE H = C5-HM2000, HOLDING, 120V, 2000 W. P = C5-PM1500, PROOFER, 120V, 1440 W. DOOR(S) HL = C5-HM1500, HOLDING, 120V, 1440 W. CL = C5-CM1500, COMBO, 120V, 1440 W. FS = FÙLL SOLID DS = DUTCH SOLID M = C5-MM2000, MOISTURE HOLDING, 120V, 2000 W. FC = FULL CLEAR CX = C5-CM2000X, COMBO, 220-240V, 1681-2000 W. HX = C5-HM2000X, HOLDING, 220-240V, 1681-2000 W. PX = C5-PM1500X, PROOFING, 220-240V, 1210-1440 W. DC = DUTCH CLEAR



MX = C5-MM2000X, MOISTURÉ HOLDING, 220-240V, 1681-2000 W.

### **MODULE SERIAL NUMBER LABEL**





### **INSTALLATION AND SET-UP**

- 1. Check for Shipping Damage: Check the packaging and cabinet for shipping damage after unloading the unit, and after removing all the packaging.
- 2. The receiver of this product is responsible for filing freight damage claims. This equipment must be opened immediately for inspection. All visible damage must be reported to the freight company within 48 hours and must be noted on freight bill at the time of delivery.
- 3. Concealed damage is your responsibility you must advise the carrier of any loss or damage within 5 days after receipt of the cabinet. If there is damage, retain the original packaging for inspectors.
- 4. After unpacking the cabinet, remove all tape and packing material from the inside as well as outside of the unit.

Note: Plastic drip pan is wrapped and placed inside the cabinet with packaging. Plastic drip pan must be installed underneath the cabinet.

5. Any protective covers (plastic or paper sheet) on the sheet metal or clear door, if applicable, must also be removed before turning the cabinet on.

**Warning:** Only factory-approved service agents should attempt to service, repair or replace electrical components, wiring or the power cord.

- 6. Refer to the data plate located near the power cord for the electrical specifications of cabinet as shown below.
  - With the POWER switch OFF, plug the cord into the appropriate rated, grounded receptacle.
  - Cabinets rated at 120V 1440W must be plugged into either a 15 amp or 20 amp 125VAC receptacle <u>and used</u> on an individual branch circuit.
  - Cabinets rated at 120V 2000W must be plugged into a 20 amp 125VAC receptacle.
  - Cabinets rated at 220-240V must be plugged into a 15 amp 250VAC receptacle.

15 Amp Outlet For 120V 1440 Watt Cabinets 20 Amp Outlet For 120V 2000 Watt Cabinets 250 VAC 15 Amp Outlet (For All 220-240V Cabinets)







(1440 watt cabinets can be plugged into 20 Amp outlet)

Warning: A 3 Series cabinet (polymer Insulation Armour panels on the sides, top and rear) must not be placed next to

char broilers. Allow 18" (46 cm) between the Insulation Armour and any cooking equipment. Do not allow hot kitchen equipment whose surfaces exceed 200°F (90°C) to touch the panels.

Warning: Do not allow combustible materials to be stored or accumulate on, under or next to the cabinet.

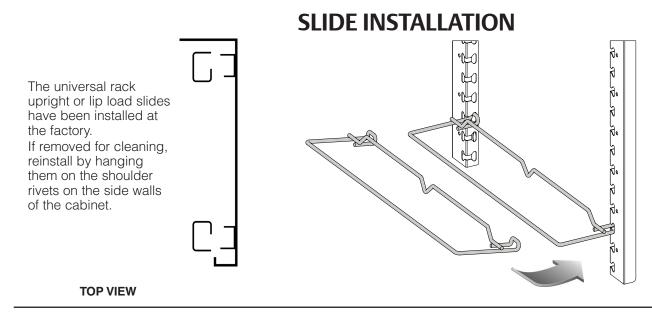
Do not block any ventilation louvers or slots.

**Note:** For 120V units temperature is displayed °F.

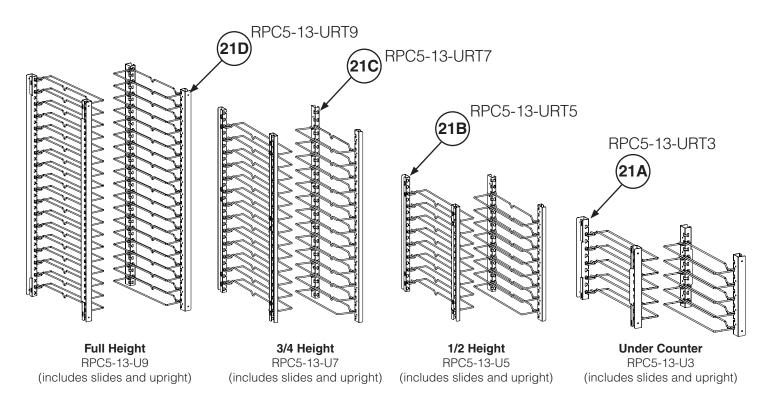
For 220-240V units temperature is displayed in °C.



## **INSTALLATION AND SET-UP (continued)**



# SLIDE POSITION TO MAXIMIZE 3" PAN CAPACITY OF UNIVERSAL SLIDES

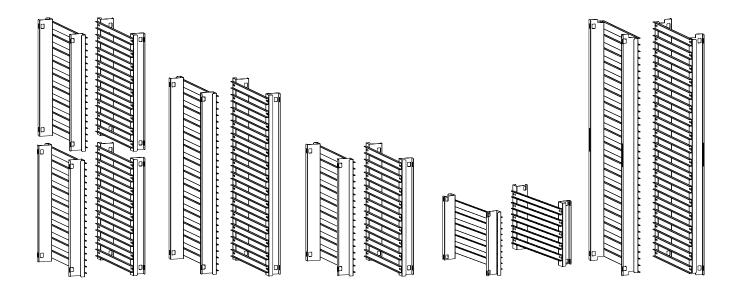


Slides sold in pairs. For additional pair of wire slides, order C5-USLIDEPR-C for Chrome or C5-USLIDEPR-S for Stainless Steel. To order individual universal upright only, see item #'s 21A, 21B, 21C & 21D.



## **INSTALLATION AND SET-UP (continued)**

## CORRECT ORIENTATION OF LIP LOADED SLIDE RACKS



Full Height 2-piece Construction Part No: C5-13-L-9D (For Dutch Door Units)

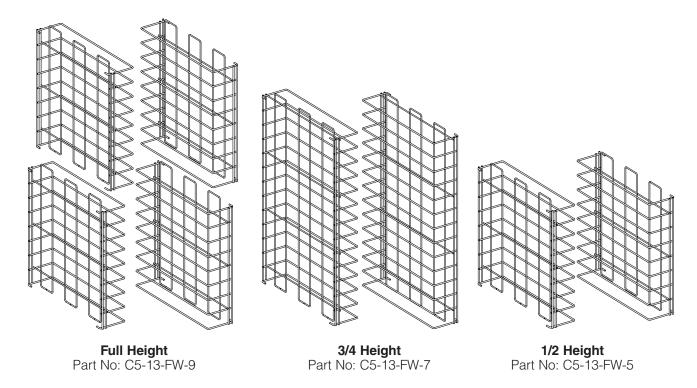
3/4 Height 1-piece Construction 1-piece Construction 1-piece Construction Part No: C5-13-L-7

1/2 Height Part No: C5-13-L-5

**Under Counter** Part No: C5-13-L3

Full Height
1-piece Construction Part No: C5-13-L-9F (For Full Height Door Units)

## **CORRECT ORIENTATION OF FIXED WIRE SLIDES**

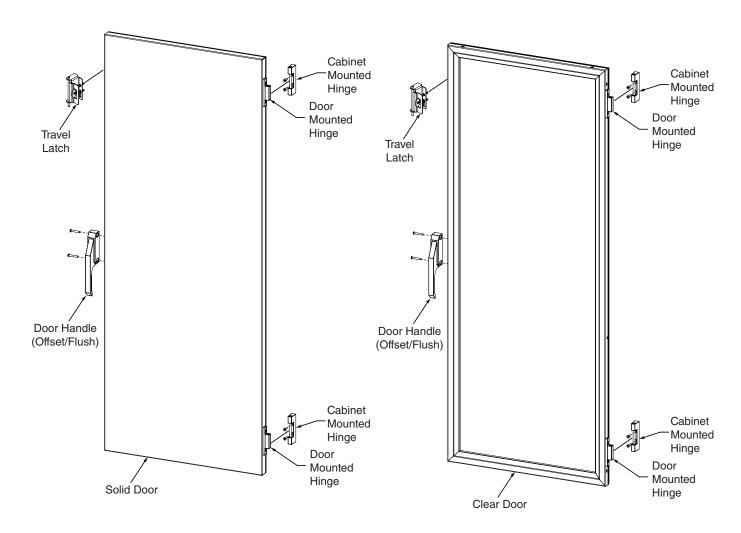




### REVERSING THE DOORS

The doors on your cabinet can be reversed to accommodate a right- or left-hand opening. The cabinet has been shipped with the hinges mounted on the right-hand side. To reverse, follow the instructions listed below:

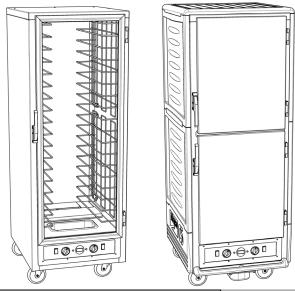
- 1. If the cabinet has Dutch Doors, note which is the top door and which is the bottom door. With the door in the closed position, remove the hinge pin by driving it out using a hammer and a drive pin or small diameter screwdriver.
- 2. Once the pins are removed grasp the door firmly and pull the latch lever, this will release the door. Set the door aside being careful not to damage the gasket.
- 3. Remove the screws from the left side of the cabinet and set aside. Then remove the cabinet mounted part of the hinge and remount to the left side of the cabinet. Put the screws removed from the left side of the cabinet into the remaining holes on the right side of the cabinet. Tighten all screws before proceeding.
- 4. Relocate the latch plate(s) from the left side to the right by removing the two mounting screws. Tighten all screws before proceeding.
- 5. Rotate the door 180 degrees and align the door mounted hinge part with the cabinet mounted hinge part and tap the hinge pin into place so the top of the pin is flush with top of the cabinet mounted hinge part. On Dutch Doors, do not remove the handles; the top door becomes the bottom and the bottom door the top. On single door units, invert the door latch by removing the black plastic screw covers and remove the screws holding the latch in place.

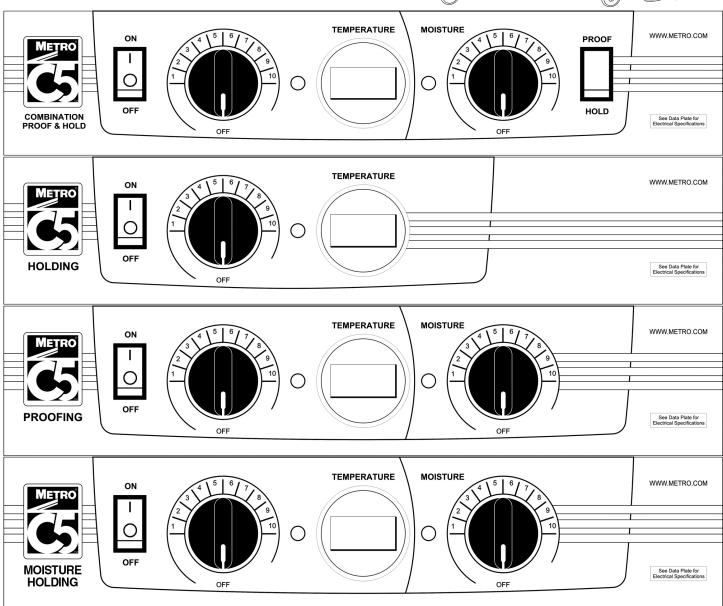




## **PRODUCT FEATURES**

- The module has been placed at the base of the cabinet for easy accessibility and efficient operation.
- Clearly-marked control panel for easy viewing allows climate adjustments without opening the door.
- Combination, proofing, moisture modules include a removable stainless steel water pan (located inside cabinet).
- Cabinet designed with plastic drip pan (located underneath cabinet) to contain condensation drippage.
- Field reversible, gasketed door.
- Easy pull adjustable magnetic door latch.
- · Cord keeper at rear of cabinet.
- All components door, module, slide racks are removable to permit thorough, obstruction-free cleaning.







### **OPERATING INSTRUCTIONS**

#### Power-Up & Pre-Heat

#### YOUR C5 1 SERIES OR 3 SERIES CABINET MAY BE EQUIPPED WITH SEVERAL DIFFERENT MODULES:

C5 1 SERIES

COMBINATION PROOF & HOLD MODULE

HOLDING MODULE

PROOFING MODULE

C5 3 SERIES

COMBINATION PROOF & HOLD MODULE

HOLDING MODULE

MOISTURE HOLDING MODULE

A. Refer to the data plate located near the power cord for the electrical specifications of cabinet as shown on page 5.

With the POWER switch OFF, plug the cord into the appropriate rated, grounded receptacle.

Cabinets rated at 120V 1440W must be plugged into either a 15 amp or 20 amp 125VAC receptacle. Cabinets rated at 120V 2000W must be plugged into a 20 amp 125VAC receptacle.

Cabinets rated at 220-240V must be plugged into a 15 amp 250VAC receptacle.

B. With POWER switch OFF, plug into a grounded receptacle.

C. Fill stainless water pan to 1/ " from the top with clean HOT tap water for Proofing, Combination, and Moisture holding modules. Check water level every 3 hours (2 hours when Proofing) and refill with clean HOT tap water as necessary. Proofing and Moisture Holding Module require water pan to be filled if moisture control is turned on.

**HOLDING INSTRUCTIONS (Combo, Holding & Moisture Holding)** 

- 1. Set Combination Module switch to HOLD.
- 2. Set POWER switch to the **ON** position.
- 3. Set TEMPERATURE control to 10.
- 4. On Moisture Holding only: Set MOISTURE control to 10.
- 5. Pre-heat cabinet until desired temperature is reached (typical heat-up time from 72°F (22°C) ambient to 160°F (71°C) is approximately 45 minutes).
- 6. Re-set TEMPERATURE control and adjust as necessary to reach the desired temperature (setting 6-8 typical for 150°F (66°C) to 160°F (71°C)). Power indicator light will turn on and off as the heat thermostat cycles.
- 7. On Moisture Holding only: Adjust MOISTURE control to desired level (10 being highest level, 1 lowest level, **OFF** being no heat to the water). The indicator lights will turn on and off as the heat and moisture thermostats cycle.

#### PROOFING INSTRUCTIONS (Combo & Proofing)

- 1. Set Combination Module switch to **PROOF.**
- 2. Set POWER switch to the **ON** position.
- 3. Set TEMPERATURE control to 2.
- 4. Set MOISTURE control to 10.
- 5. Pre-heat cabinet until desired temperature and humidity is reached (typical heat-up time from 72°F (22°C) ambient to 95°F (35°C) and 95% relative humidity is approximately 30 minutes).
- 6. Adjust settings as necessary to reach the desired temperature and humidity levels. Power indicator lights will turn on and off as the heat and moisture thermostats cycle.
- 7. Adjust MOISTURE control to desired level (10 being highest level, 1 lowest level, OFF being no heat to the water). The indicator lights will turn on and off as the heat and moisture thermostats cycle.

Figures Shown in °F

When the power switch is on, the blower is always energized, circulating air, and the digital thermometer is always displaying the cabinet temperature. When the thermostat senses heat is required, the appropriate indicator will light and the heater element will begin to produce heat.

At the end of the operating day, it is not necessary to disrupt the temperature setting to turn the cabinet off. By switching the power switch off, the cabinet is no longer operating. When resuming operations, switch the power on and the cabinet will attain the previous temperature and moisture levels.



## **OPERATING INSTRUCTIONS (continued)**

**Caution:** For Combination, proofing, and moisture modules the stainless steel water pan must be in place during module operation.

**Caution:** Water inside this cabinet's pan is hot during use! Turn off and allow the water to cool before emptying the pan.

**Note:** The POWER switch is not a foot switch. Using it as a foot switch can damage the switch and make the cabinet inoperable.

**Warning**: Follow all food safety guidelines. Preheat the cabinet to the desired temperature before putting cooked, hot food into the cabinet. This is not a rethermalization cabinet. Food must be at the appropriate temperature before being placed into this cabinet.

Your C5 1 Series or 3 Series cabinet is capable of creating some humid air. As you operate the cabinet and open and
close the door(s), condensation may form on the inside surfaces of the cabinet. Some dripping of water may occur to the
outside of the cabinet particularly at the door seals. Water may also drip off opened doors onto the floor.

Caution: Water dripping onto the floor from open doors can be a slip hazard.

**Note**: When turning the cabinet off at the end of the workday, it is recommended to leave the door(s) open to prevent heat and condensation build up within the cabinet.

#### **FOOD HOLDING GUIDELINES**

Combo and Holding Modules

Recommended Food Holding Guidelines

Food Product	Covered/Uncovered	Temperature Setting
Baked Fish	Uncovered	175°F (79°C)
Baked Potatoes	Uncovered	180°F (82°C)
Biscuit	Uncovered	180°F (82°C)
Broccoli	Covered	170-175°F (77-79°C)
Chicken Nuggets	Uncovered	175°F (79°C)
Corn on the Cob	Covered	170-175°F (77-79°C)
Croissants	Uncovered	175°F (79°C)
Egg Patties	Covered	180°F (82°C)
French Fries**	Uncovered	185°F (85°C)
Fried Chicken	Uncovered	180-185°F (82-85°C)
Fried Fish	Uncovered	180°F (82°C)
Hamburgers	Covered	180°F (82°C)
Lasagna	Covered	185° F (85°C)
Mashed Potatoes	Covered	175°F (79°C)
Mixed Veggies	Covered	170-175°F (77-79°C)
Pancakes	Covered	175°F (79°C)
Pasta	Covered	180°F (82°C)
Peas	Covered	170-175°F (77-79°C)
Pizza	Uncovered	175-180°F (79-82°C)
Roast Beef	Uncovered	170-180°F (77-82°C)
Roast Pork	Uncovered	170-180°F (77-82°C)
Scalloped Potatoes	Covered	175°F (79°C)
Strip Steak	Uncovered	160-170°F (71-77°C)
Turkey	Uncovered	170-180°F (77-82°C)
Waffles	Covered	175°F (79°C)
Whole Chicken	Uncovered	170-180°F (77-82°C)

<sup>\*</sup>Temperatures are guidelines only, based on opening cabinet doors every 15 minutes.

Developed by Penn State University School of Hotel, Restaurant, and Recreation Management



<sup>\*\*</sup>Lightly salted for best quality.

### **CARE & MAINTENANCE**

#### **Cleaning The Cabinet**

**Warning:** Unplug the cabinet before cleaning or servicing. Do not wash the cabinet with a water jet or high-pressure water.

**Warning:** Allow the unit to cool before cleaning, as the interior of the cabinet may be hot enough to burn. Also, allow the water in the pan to cool before removal.

**Caution:** Do not spray or pour water into the control module. To clean the cabinet and module, wipe with a damp cloth and dry with a towel. Use only cleaning agents approved for aluminum.

Caution: Do not use strong alkalis as it may discolor aluminum.

- Use cleaners in the proper concentrations. Follow the manufacturer's directions for the cleaning product used. After using any cleaning products, thoroughly rinse all surfaces to remove all residue.
- Use a damp cloth or sponge. Mild soap suitable for aluminum is acceptable. Dry with a clean towel. Wipe up spills as soon as possible and regularly clean the cabinet to avoid staining and difficult to clean conditions.
- If a control knob needs to be removed for cleaning, remove the knob, clean the knob recess and knob, and replace the knob.
- 1. When removing the module, make sure the power cord is **NOT plugged into the wall receptacle** or hooked onto the cord keeper. Open the door(s). If there is water in the stainless steel pan, remove and empty. Remove the module from the cabinet by lifting up the front enough to clear its detent, and then pull the module away from the cabinet. The power cord slips through the clearance hole at the rear of the cabinet.
- 2. Remove the slide racks.
- 3. After cleaning, replace all components. Make sure the slide racks are seated in the hangers correctly.
- 4. Push the power cord through the plastic snap bushing in the rear of the cabinet and install the module.

#### Cleaning Instructions for Clear, Polycarbonate Doors (if applicable):

The protective masking on the polycarbonate door may be removed by simply peeling it from the door, starting at a top corner and working downward. For regular cleaning, a soft cotton flannel cloth and a cleaner recommended by its manufacturer for use on polycarbonate plastics is suggested. Do not use synthetic cloths or cleaners not intended for polycarbonate plastics as these will scratch and dull the polycarbonate door panel. Additional hints for keeping the door panel clean and clear:

- 1. Isopropyl (rubbing) alcohol, used as a cleaner, will aid in removing grease smudges and fingerprints.
- 2. A small amount of liquid dish detergent in a bucket of water will help remove heavier dirt and will help make the clear panel antistatic and therefore less likely to attract dust.
- 3. A paste-wax recommended for polycarbonate plastics and approved for food service equipment will hide small scratches and return the luster and clarity to the clear door panel as well as reduce the electrostatic attraction of dust.

#### Cleaning Instructions for 3 Series Insulation Armour Panels on Sides, Top and Back:

Use soft cloth, mild soap water solution to clean lightly-soiled surfaces. Then wipe dry with a clean, soft cloth. For heavily-soiled areas, use a soft brush and solvent or emulsion-based cleaner. Always insure the cleaner is recommended for use on plastics and follow any special instructions from the manufacturer.

#### **Cabinet Maintenance:**

Regularly inspect this product. Tighten loose fasteners and replace worn or damaged parts with new InterMetro approved parts. For mobile units, replace worn or damaged casters immediately; if equipped with grease fittings, lubricate casters regularly.



### **BASIC TROUBLESHOOTING**

#### Module operation basics:

When the power switch is on, the blower is always energized, circulating air, and the digital thermometer is always displaying the cabinet temperature. A thermostat controls whether an element will be energized depending on the thermostat setting and the air temperature it is sensing. The control knob is used to change the thermostat setting. When a thermostat senses the temperature has gone below its set point, the thermostat contacts close, the appropriate indicator will light and the heater element will begin to produce heat. When the thermostat senses the temperature has reached its set point, the contacts open, the indicator light will go out and the heater element will stop producing heat.

**Holding Module:** The holding module has one heating element. It is in the air duct and heats up the air as it is circulated in the cabinet. The thermostat senses the return air temperature and will energize the air duct element as required to heat up the cabinet air. Some passive moisture can be introduced by filling a stainless steel pan with warm water and placing it on large flat area of the heating module, in front of the air discharge cover.

**Moisture Holding and Proofing Module**: There are two heating elements in these modules. One is in the air duct to heat the air, and one is under the stainless steel water pan to heat the water and introduce moisture into the cabinet. One thermostat senses the return air temperature and will energize the air duct element as required to heat up the cabinet air. The other thermostat senses the air temperature around the water pan. It will energize the water pan element to heat the water and release moisture into the cabinet.

Combination Proof and Hold Module: A combination proof and hold module has a mode switch, which allows the module to act as either a holding module or a proofing module. Therefore, it has all the elements of both a holding module and a proofing module. When the mode selector switch is set to HOLD, only the larger wattage air element is used. The stainless steel water pan element is not used. When the mode selector switch is set to PROOF, the lower wattage air element and the water pan element are used but independently controlled by individual thermostats. See the appropriate paragraph above for more detail on how the Combination Proof and Hold Module operates in either holding or proofing mode.

Element wattages are shown in the chart below:

	20 amp, 2000 watt cabinet		15 amp, 1440 watt cabinet		
	Air Duct element Water Pan element		Air Duct element	Water Pan element	
Combination module	1950 watt and 675 watt	675 watt	1360 watt and 675 wat	tt 675 watt	12
Holding module	1950 watt	none	1360 watt	none	0
Proofing module			675 watt	675 watt	<u> </u>
Moisture Holding module	1360 watt	590 watt			

Element wattages are shown in the chart below:

	220-240V, 1681-2000W cabinet		220-240V, 1210	)-1440W cabinet	N
	Air Duct element Water Pan element		Air Duct element	Water Pan element	
Combination module	1950 watt and 675 watt	675 watt			Ų
Holding module	1950 watt	none			1
Proofing module			675 watt	675 watt	Ċ
Moisture Holding module	1360 watt	590 watt			<b> </b>

Note: When heating element(s) are not energized, the amp draw for the blower and digital thermometer is approximately 0.8 to 0.9 amps.

Warning: Only factory-approved service agents should attempt to service, repair or replace electrical components, wiring or power cord.

#### Controls do not work (digital thermometer and indicator light(s) not lit):

- a. Check that the cabinet is plugged in.
- b. Check that the outlet has power. Is electrical service fuse blown or circuit breaker tripped?
- c. Check that the power switch is in the "On" position.
- d. Check the cabinet wiring from the power cord to the power switch and to the terminal block.
- e. Power switch could be bad.

#### 2. Temperature too hot:

- a. Temperature set point is too high. Turn control knob down to a lower setting. Wait several minutes and see if the displayed temperature decreases.
- b. Thermostat may have failed with contacts closed. Check thermostat.
- c. If displayed temperature exceeds 220°F (104°C):



## **BASIC TROUBLESHOOTING (continued)**

- i. Blower wiring is faulty or disconnected.
- ii. Blower needs replacing. Check blower.
- iii. The thermostat or blower may have failed and the thermal overload device is controlling the temperature. Stop using the cabinet immediately and contact a factory-approved service agent.

#### 3. Temperature too low:

- a. The cabinet may still be in pre-heat or recovering from a door being opened.
- b. Temperature set point is too low. Turn temperature control knob to a higher setting. Wait several minutes and see if the displayed temperature increases.
- c. A door is not closed or sealing properly.
- d. Blower is not circulating air:
  - i. Blower wiring is faulty or disconnected.
  - ii. Blower needs replacing.

#### 4. Indicator light is not working:

It is rare that an indicator light will be defective but it is possible. The thermostat contacts may not be closing and therefore the heater element is not being energized. Check the thermostat and pilot light and their respective wiring.

#### 5. No heat generated:

- a. If the heat indicator light is on, but the cabinet does not draw the appropriate amperage per the chart on page 13.
  - i. Air heater element may be faulty.
  - ii. The wiring to the air heater element may be faulty or disconnected.
  - iii. The thermostat may be faulty.
- b. If the heat indicator light is not on, the thermostat contacts may not be closing and therefore the heater element is not being energized. It is rare that the indicator light will be defective but it is possible. Check the thermostat and pilot light and their respective wiring.

#### 6. Moisture level is too low:

- a. If the heat indicator light is on, and the cabinet draws the appropriate amperage per the chart on page 13:
  - i. Check that the stainless steel water pan has water.
  - ii. A door is not closed or sealing properly.
  - iii. Moisture set point is too low. Turn moisture control knob to a higher setting.
- b. If the heat indicator light is on, but the cabinet does not draw the appropriate amperage per the chart on page 13:
  - i. Air heater element may be faulty.
  - ii. The wiring to the air heater element may be faulty or disconnected.
  - iii. The thermostat may be faulty.
- c. If the heat indicator light is not on, the thermostat contacts may not be closing and therefore the heater element is not being energized. It is rare that the indicator light will be defective but it is possible. Check the thermostat and pilot light and their respective wiring.

#### 7. Cabinet trips GFCI (ground fault circuit interrupter):

A GFCI receptacle protects against "ground faults" whenever an electrical product is plugged into the GFCI outlet by constantly monitoring the electricity for any loss of current. If the current flowing out of the receptacle differs by a small amount from that returning, the GFCI quickly switches off power to that circuit. The GFCI interrupts power extremely fast to minimize the possibility of an electric shock.

- a. The heater element may absorb some moisture into its casing and insulation during shipment or during long periods of not being used (such as during the summer in a closed school kitchen). Plug the cabinet (without water in the stainless steel water pan into a non-GFCI outlet, set the temperature to "10" and let it run for 30-60 minutes to dry out any moisture the element may have absorbed. (If it trips the standard circuit breaker call factory-approved service agent.) After drying the element, plug the cabinet into the GFCI outlet; the cabinet should run without tripping the GFCI.
- b. If the cabinet still trips the GFCI, call a factory-approved service agent.



## **SERVICE and REPLACEMENT PARTS**

C5 1 & 3 SERIES CABINETS (BOTH 120V & 220-240V)
CABINET BODY

CABINET BODY				
Item#	RP Part No.	Description		
	RPC5-19-FCDR	Complete Full Height Clear Door		
	RPC5-13-FCDR	Complete UC Clear Door		
1	RPC5-17-FCDR	Complete 3/4 Height Clear Door		
	RPC5-15-FCDR	Complete 1/2 Height Clear Door		
	RPC5-39-TCDR	Complete Top Clear Dutch Door		
	RPC5-39-BCDR	Complete Bottom Clear Dutch Door		
	RPC5-13-FSDR	Complete UC Solid Door		
	RPC5-39-FSDR	Complete Full Height Solid Door		
2	RPC5-37-FSDR	Complete 3/4 Height Solid Door		
	RPC5-35-FSDR	Complete 1/2 Height Solid Door		
	RPC5-39-TSDR	Complete Top Solid Dutch Door		
	RPC5-39-BSDR	Complete Bottom Solid Dutch Door		
3	RPC14-119	Door Hinge ( Qty. 1)		
4	RPC14-118	Door Latch, Offset Handle		
4	RPC14-118A	Door Latch, Flush Handle		
	RPC06-910E	UC Height Clear Door Gasket		
	RPC06-910A	Full Height Clear Door Gasket		
5	RPC06-910B	<sup>3</sup> / <sub>4</sub> Height Clear Door Gasket		
	RPC06-910C	1/2 Height Clear Door Gasket		
	RPC06-910D	Clear Dutch Door Gasket		
	RPC06-916E	UC Height Solid Door Gasket		
	RPC06-916A	Full Height Solid Door Gasket		
6	RPC06-916B	3/4 Height Solid Door Gasket		
	RPC06-916C	1/2 Height Solid Door Gasket		
	RPC06-916D	Solid Dutch Door Gasket		
	ВЗВ	3" Brake Caster		
7	B5DNB	5" Brake Caster		
	RPQC02-248	6" Brake Caster		
	B3	3" Swivel Caster		
C	B5DN	5" Swivel Caster		
8	B5DNR	5" Rigid Caster		
	RPQC02-247	6" Swivel Caster		
9	RPC5-SSLEG-1	Stationary Equipment Leg (Qty. 1)		
10	RPC5-DPTRH	Poly Bumper/Drip Trough & Screws		
11	RPC06-179	Plastic Drip Pan		
12	RPC5-RHANDLE	Rear Handle & Screws (Used Only On 1 Series)		
13	RPC5-TRVL	Travel Latch		
		1		

Item#	RP Part No.	Description
14	RPC5-1-BMPR	1 Series Corner Bumpers (2 Front, 2 Rear & Screws)
15	RPC13-106	Power Cord Bushing
	C5-13-FW-9	Full Height Fixed Wire Slides
16*	C5-13-FW-7	3/ <sub>4</sub> Height Fixed Wire Slides
	C5-13-FW-5	1/2 Height Fixed Wire Slides
	RPC5-13-U9	Full Height Univ Slides & Upright
47*	RPC5-13-U7	3/4 Height Univ Slides & Upright
17*	RPC5-13-U5	1/2 Height Univ Slides & Upright
	RPC5-13-U3	Under Counter
	C5-13-L-9F	Full Height Lip Load Slides — 1 Pair
	C5-13-L-9D	Split Full Height Lip Load Slides— 2 Pair
18*	C5-13-L-7	3/ <sub>4</sub> Height Lip Load Slides
	C5-13-L-5	1/2 Height Lip Load Slides
	RPC5-13-L3	Under Counter Lip Loaded Slide Rack
40*	C5-USLIDEPR-C	Chrome Univ Wire Slides — 1 Pair
19*	C5-USLIDEPR-S	SS Universal Wire Slides — 1 Pair
20	C5-SHELF-S	Accessory Shelf (Used With Universal Upright)
21A	RPC5-13-URT3	Universal Upright For Under Counter Unit (Qty.1)
21B	RPC5-13-URT5	1/2 Height Univ. Upright (Qty. 1)
21C	RPC5-13-URT7	3/ <sub>4</sub> Height Univ. Upright (Qty. 1)
21D	RPC5-13-URT9	Full Height Univ. Upright (Qty. 1)
22	RPC53-HGRKIT	Replacement Rack Hanger Kit— 1 Pair
OU	TSIDE POLY PAN	ELS ON C5 3 SERIES CABINETS
Item#	RP Part No.	Description
	RPC3-TPNL-BU	Blue Top Panel – Includes Screws
23	RPC3-TPNL-GY	Gray Top Panel – Includes Screws
	RPC3-TPNL-RE	Red Top Panel – Includes Screws
	RPC3-SD17-GY	Gray 17" Side Panel – Includes Screws
	RPC3-SD17-RE	Red 17" Side Panel – Includes Screws
24	RPC3-SD27-BU	Blue 27" Side Panel – Includes Screws
	RPC3-SD27-GY	Gray 27" Side Panel – Includes Screws
	RPC3-SD27-RE	Red 27" Side Panel – Includes Screws
	RPC3-SD21-BU	Blue 21" Side Panel – Includes Screws
25	RPC3-SD21-GY	Gray 21" Side Panel – Includes Screws
	RPC3-SD21-RE	Red 21" Side Panel – Includes Screws
26 RPC3-IA-BTPNL Bottom Side Panel – Include		Bottom Side Panel – Includes Screws
27	RPC3-IA-RTNR	Side Panel Retainer – Includes Screws
28	RPC5-3-BASECLP	Bottom Panel Clamp & Screws



### C5 1-3 SERIES HOLDING & PROOFING CABINETS — INSTRUCTIONS FOR USE

ARMOUR SIDE PANEL IDENTIFICATION					
Size Color Top Panel Upper Side Panels Bottom				Bottom Side Panels	Side Retainers
	Red	RPC3-TPNL-RE	RPC3-SD27-RE (Qty 4)	RPC3-IA-BTPNL (Qty 2)	RPC3-IA-RTNR (Qty 2)
Full Height	Blue	RPC3-TPNL-BU	RPC3-SD27-BU (Qty 4)	RPC3-IA-BTPNL (Qty 2)	RPC3-IA-RTNR (Qty 2)
	Gray	RPC3-TPNL-GY	RPC3-SD27-GY (Qty 4)	RPC3-IA-BTPNL (Qty 2)	RPC3-IA-RTNR (Qty 2)
	Red	RPC3-TPNL-RE	RPC3-SD21-RE (Qty 4)	RPC3-IA-BTPNL (Qty 2)	RPC3-IA-RTNR (Qty 2)
3/ <sub>4</sub> Height	Blue	RPC3-TPNL-BU	RPC3-SD21-BU (Qty 4)	RPC3-IA-BTPNL (Qty 2)	RPC3-IA-RTNR (Qty 2)
	Gray	RPC3-TPNL-GY	RPC3-SD21-GY (Qty 4)	RPC3-IA-BTPNL (Qty 2)	RPC3-IA-RTNR (Qty 2)
	Red	RPC3-TPNL-RE	RPC3-SD27-RE (Qty 2)	RPC3-IA-BTPNL (Qty 2)	N/A
1/2 Height	Blue	RPC3-TPNL-BU	RPC3-SD27-BU (Qty 2)	RPC3-IA-BTPNL (Qty 2)	N/A
	Gray	RPC3-TPNL-GY	RPC3-SD27-GY (Qty 2)	RPC3-IA-BTPNL (Qty 2)	N/A
Under Counter	Red	RPC3-TPNL-RE	RPC3-SD17-RE (Qty 2)	RPC3-IA-BTPNL (Qty 2)	N/A
Unider Counter	Gray	RPC3-TPNL-GY	RPC3-SD17-GY (Qty 2)	RPC3-IA-BTPNL (Qty 2)	N/A



FOR C5 1 & 3 120V CABINET MODULES\*

MOISTURI								MOISTURE
ITEM#	PART #	MODULE TYPE: MODULE ELECTRICAL RATING: DESCRIPTION	COMBO 2000W QTY	HOLDING 2000W QTY	PROOFER 1440W QTY	COMBO 1440W QTY	HOLDING 1440W QTY	
30	RPC13-375	POWER SWITCH (RED)	1	1	1	1	1	1
31	RPC13-128	SELECTOR SWITCH (WHITE)	1	1				
32	RPC06-913	THERMOSTAT KNOB	2	1	2	2	1	2
33	RPC13-721	THERMOSTAT	2	1	2	2	1	2
34	RPC09-213	THERMOSTAT MOUNTING CUP	2	1	2	2	1	2
35	RPC13-246	AMBER INDICATOR LIGHT	2	1	2	2	1	2
36	RPC13-237	DIGITAL THERMOMETER	1	1	1	1	1	1
37	RPC13-183	THERMOMETER TRANSFORMER	1	1	1	1	1	1
38	RPC11-191	BLOWER INTAKE COLLAR	1	1	1	1	1	1
39	RPHM20-2103	BLOWER, <b>120V</b>	1	1	1	1	1	1
40	RPC13-365	HEAT ELEMENT, "M" SHAPED, 120V 195	<b>0W</b> 1	1				
40A	RPC13-366	HEAT ELEMENT, "M" SHAPED, 120V 136	0W			1	1	1
41	RPC13-367	HEAT ELEMENT, "U" SHAPED, 120V 675	<b>W</b> 2		2	2		
42	RPC13-198	THERMAL CUT-OUT	1	1	1	1	1	1
43 43A	RPC5-RTANGLE-20 RPC5-STRPLG-20 RPC5-RTANGLE-15 RPC5-STRPLG-15	POWER CORD 20A, RT. ANGLE PLUG POWER CORD, 20A, STR. PLUG POWER CORD 15A, RT. ANGLE PLUG POWER CORD 15A, STR. PLUG	1	1	1	1	1	1
44	RP-STRNRLF	STRAIN RELIEF BUSHING	1	1	1	1	1	1
45	RPC13-096	TERMINAL BLOCK	1	1	1	1	1	1
46	RPC07-055	GROMMET	1	1	1	1	1	1
47	RPC56-SCLP	SENSOR & BULB CLAMP KIT	1	1	1	1	1	1
48	RPC11-185	STAINLESS STEEL WATER PAN	1		1	1		1
50	RPC13-368	HEAT ELEMENT, "U" SHAPED 120V, 590V	W					1

#### **REPLACEMENT MODULES (120V)**

51	RPC5-CM2000	REPLACEMENT COMBO, 120V, 2000W MODULE
52	RPC5-HM2000	REPLACEMENT HOLDING, 120V, 2000W MODULE
53	RPC5-PM1500	REPLACEMENT PROOFING, 120V, 1440W MODULE
54	RPC5-CM1500	REPLACEMENT COMBO, 120V, 1440W MODULE
55	RPC5-HM1500	REPLACEMENT HOLDING, 120V, 1440W MODULE
56	RPC5-MM2000	REPLACEMENT MOISTURE HOLDING, 120V, 2000W MODULE



#### FOR C5 1 & 3 SERIES 220-240V CABINET MODULES\*

ITEM	# PART#	MODULE TYPE: DESCRIPTION	COMBO QTY	HOLDING QTY	PROOFER QTY	MOISTURE HOLDING QTY
30	RPC13-375	POWER SWITCH (RED)	1	1	1	1
31	RPC13-128	SELECTOR SWITCH (WHITE)	1			
32	RPC06-913	THERMOSTAT KNOB	2	1	2	2
33	RPC13-721	THERMOSTAT	2	1	2	2
34	RPC09-213	THERMOSTAT MOUNTING CUP	2	1	2	2
35	RPC13-246	AMBER INDICATOR LIGHT	2	1	2	2
36**	RPC13-248	THERMOMETER °C & <b>220-240V</b> TRANSFORMER	1	1	1	1
38	RPC11-191	BLOWER INTAKE COLLAR	1	1	1	1
39	RPHX20-2103	BLOWER, <b>220-240V, 50/60HZ</b>	1	1	1	1
40	RPC13-370	HEAT ELEMENT, "M" SHAPED, 240V, 1950W	1	1		
40A	RPC13-371	HEAT ELEMENT, "M" SHAPED, 240V, 1360W				1
41	RPC13-369	HEAT ELEMENT, "U" SHAPED, 240V, 675W	2		2	
42	RPC13-198	THERMAL CUT-OUT	1	1	1	1
43	RPC5-STRPLG-240V	POWER CORD, <b>250VAC</b> 15A, NEMA 6-15P	1	1	1	1
44	RPSTRNRLF	STRAIN RELIEF BUSHING	1	1	1	1
45	RPC13-096	TERMINAL BLOCK	1	1	1	1
46	RPC07-055	GROMMET	1	1	1	1
47	RPC56-SCLP	SENSOR & BULB CLAMP KIT	1	1	1	1
48	RPC11-185	STAINLESS STEEL WATER PAN	1		1	1
50	RPC13-372	HEAT ELEMENT, 240V, 590W				1

#### **REPLACEMENT MODULES (220-240V)**

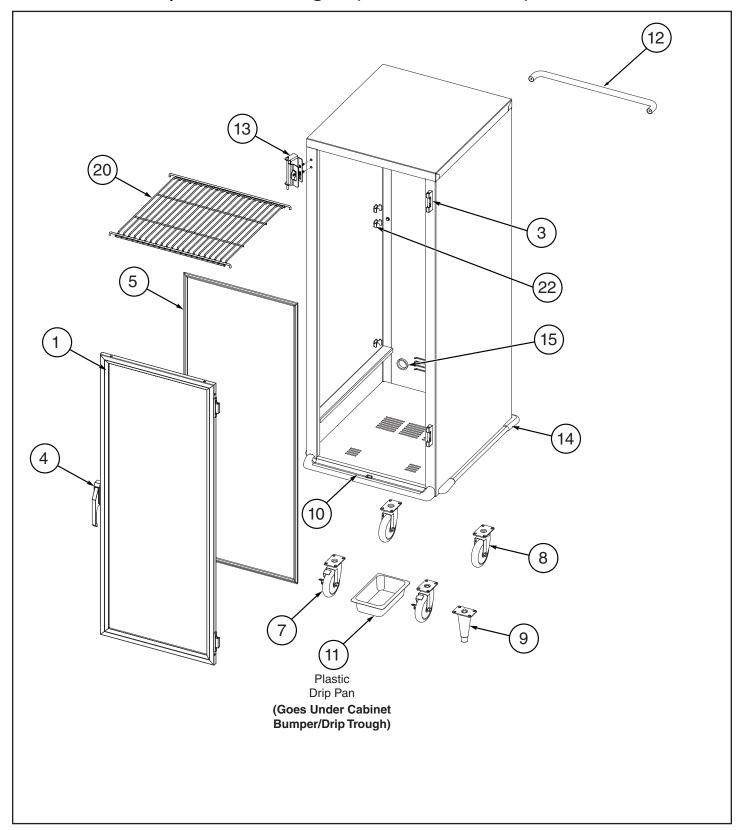
- 51 RPC5-CM2000X REPLACEMENT COMBO, 220-240V, 1681-2000W MODULE
- **52** RPC5-HM2000X REPLACEMENT HOLDING, **220-240V**, **1681-2000W** MODULE
- 53 RPC5-PM1500X REPLACEMENT PROOFING, 220-240V, 1210-1440W MODULE
- 54 RPC5-MM2000X REPLACEMENT MOISTURE HOLDING, 220-240V, 1681-2000W MODULE



<sup>\*</sup>Check data plate at rear of cabinet to confirm cabinet voltage before selecting replacement parts.

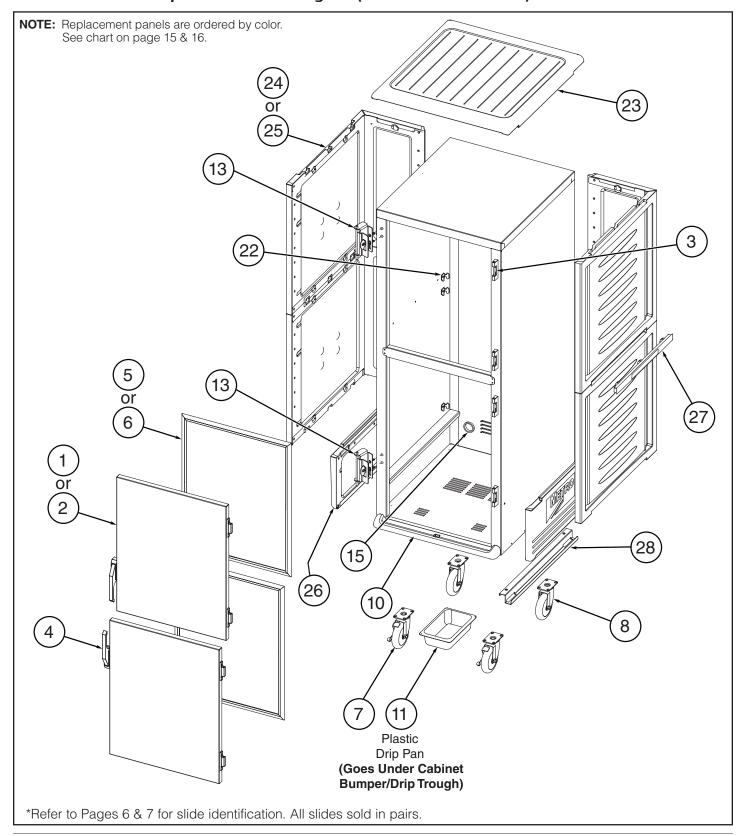
<sup>\*\*</sup>Thermometer and Transformer are serviced as one unit.

## C5 1 Series Cabinet Replacement Parts Diagram (Both 120V & 220-240V)



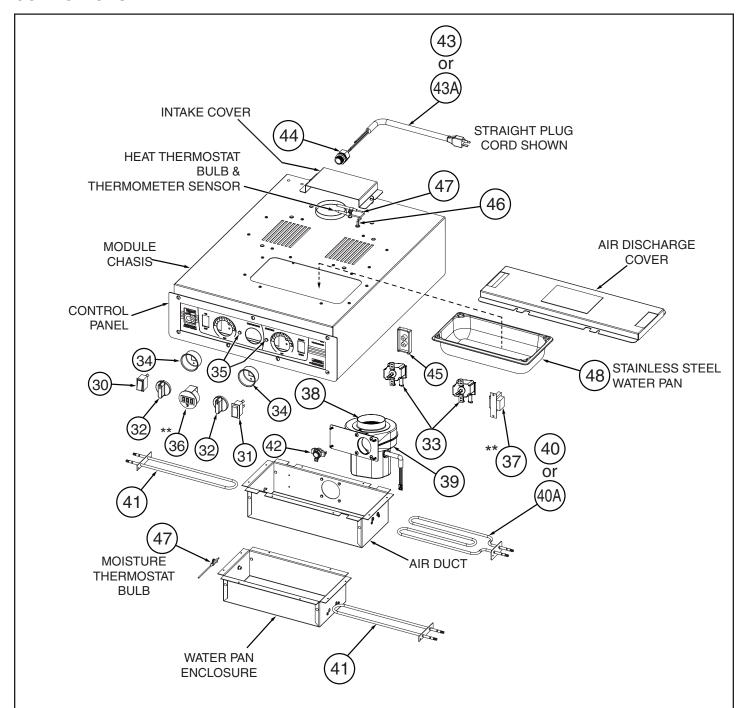


### C5 3 Series Cabinet Replacement Parts Diagram (Both 120V & 220-240V)





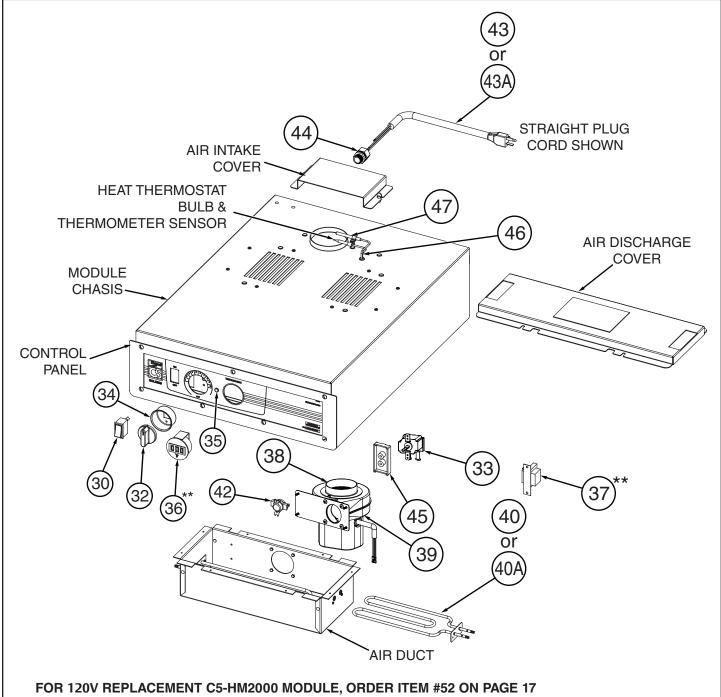
(For 120V parts see Page 17 & for 220-240V parts see Page 18) COMBO MODULE



FOR 120V REPLACEMENT C5-CM2000 MODULE, ORDER ITEM #51 ON PAGE 17 FOR 120V REPLACEMENT C5-CM1500 MODULE, ORDER ITEM #54 ON PAGE 17 FOR 220-240V REPLACEMENT C5-CM2000X MODULE, ORDER ITEM #51 ON PAGE 18



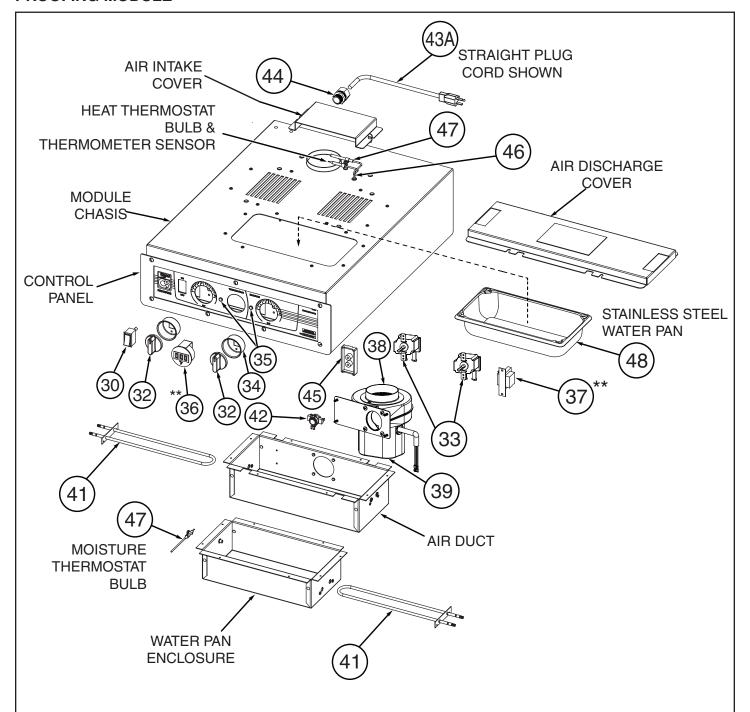
(For 120V parts see Page 17 & for 220-240V parts see Page 18) HOLDING MODULE



FOR 120V REPLACEMENT C5-HM2000 MODULE, ORDER ITEM #52 ON PAGE 17 FOR 120V REPLACEMENT C5-HM1500 MODULE, ORDER ITEM #55 ON PAGE 17 FOR 220-240V REPLACEMENT C5-HM2000X MODULE, ORDER ITEM #52 ON PAGE 18



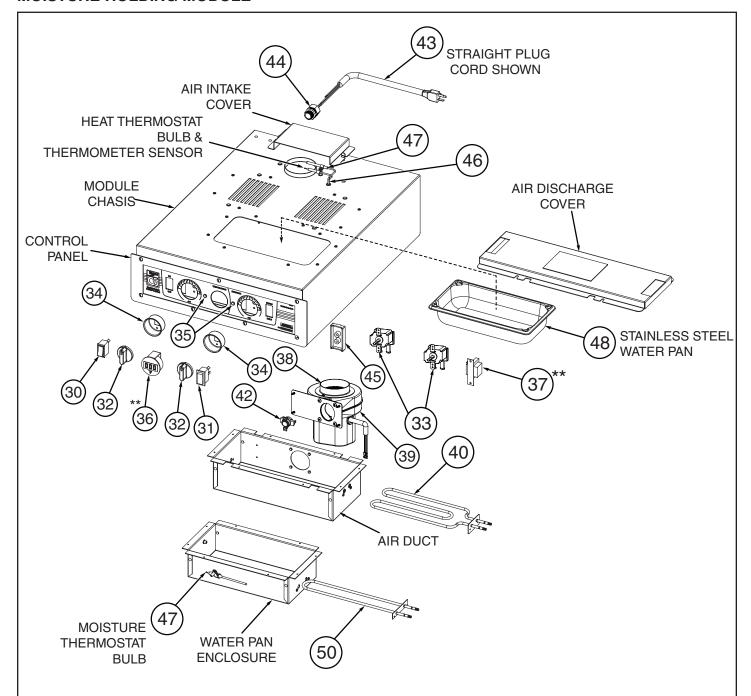
(For 120V parts see Page 17 & for 220-240V parts see Page 18) PROOFING MODULE



FOR 120V REPLACEMENT C5-PM1500 MODULE, ORDER ITEM #53 ON PAGE 17 FOR 220-240V REPLACEMENT C5-PM1500X MODULE, ORDER ITEM #53 ON PAGE 18



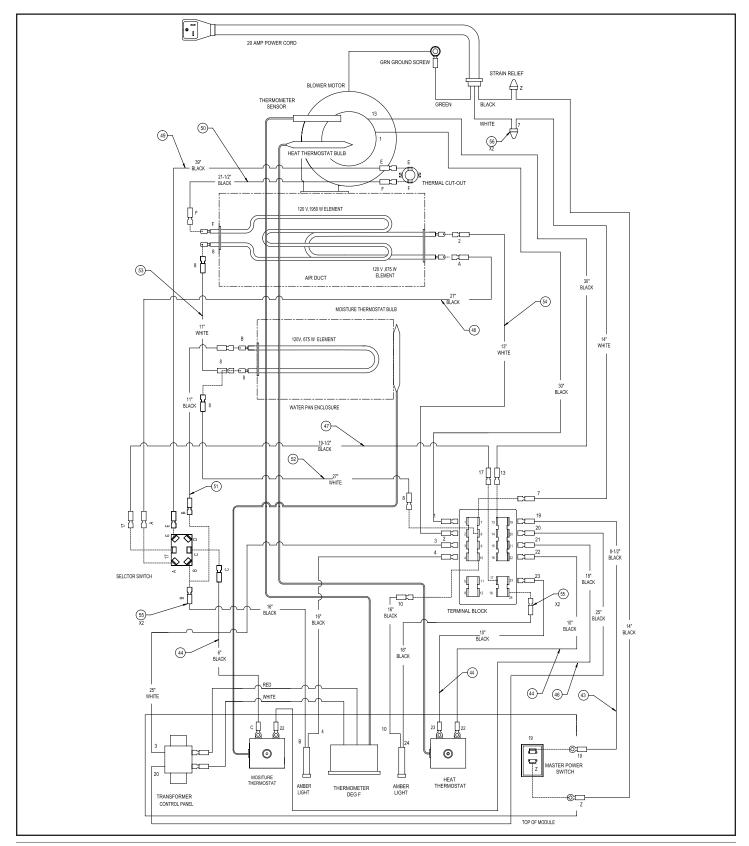
(For 120V parts see Page 17 & for 220-240V parts see Page 18) MOISTURE HOLDING MODULE



FOR 120V REPLACEMENT C5-MM2000 MODULE, ORDER ITEM #56 ON PAGE 17 FOR 220-240V REPLACEMENT C5-MM2000X MODULE, ORDER ITEM #54 ON PAGE 18

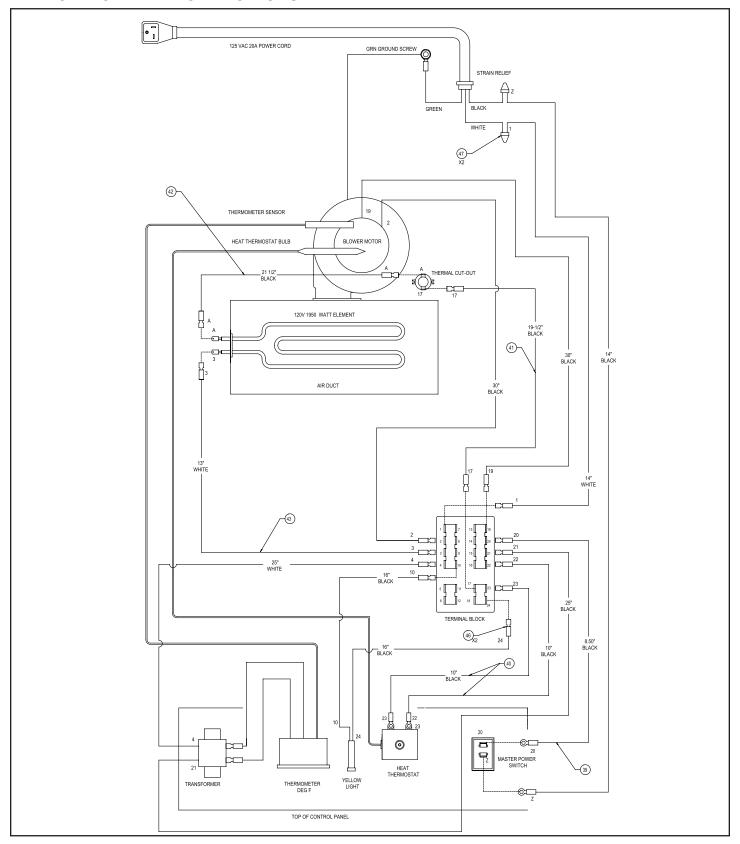


#### WIRING DIAGRAM — COMBO MODULE



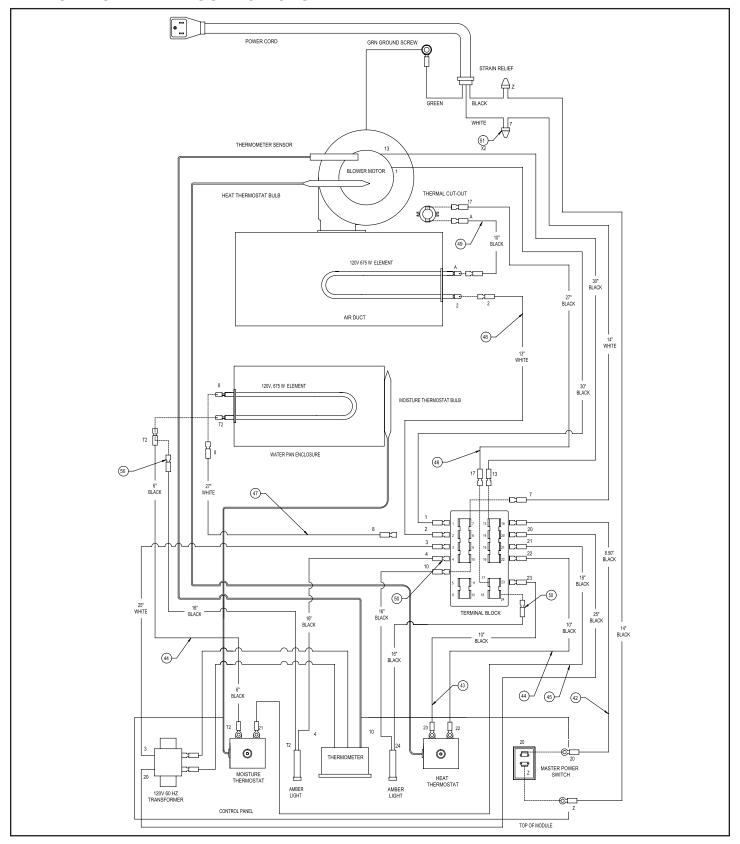


### WIRING DIAGRAM — HOLDING MODULE



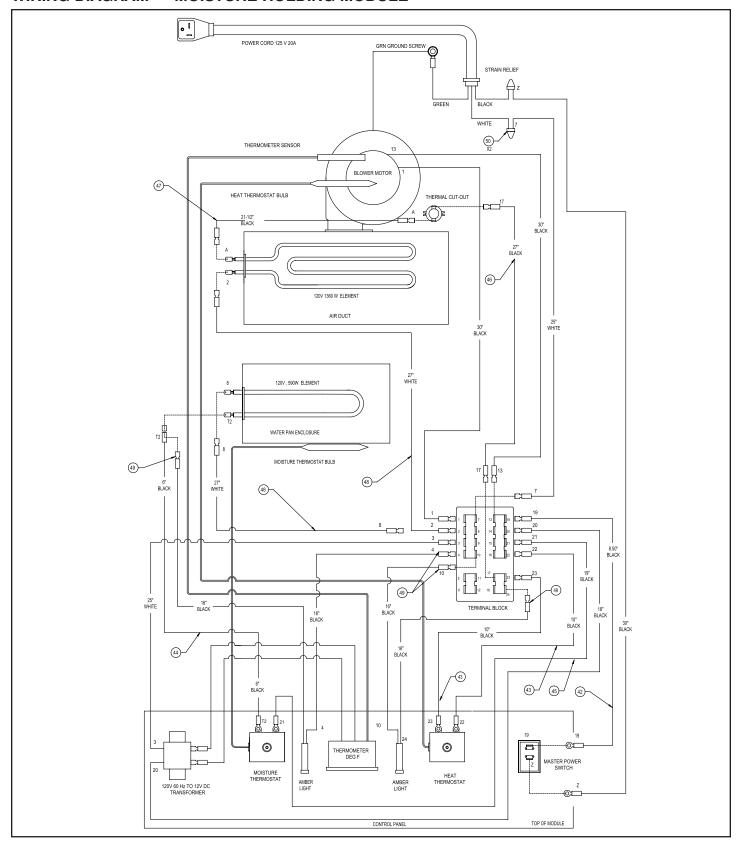


#### WIRING DIAGRAM — PROOFING MODULE





### WIRING DIAGRAM — MOISTURE HOLDING MODULE





# Warranty

WARRANTY, EXCLUSION OF WARRANTIES AND LIMITATION OF LIABILITY. InterMetro Industries Corporation (hereinafter referred to as "Seller") warrants to the original purchaser that all products in its catalog, or custom products, delivered hereunder will be free from defects in workmanship and material. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This Warranty shall be for a period of one (1) year from the date of shipment from Seller's warehouse or factory. If any product delivered hereunder does not meet the Warranty specified above, providing the product has not been altered in any way by anyone other than Seller's factory-authorized representative, and assuming normal and proper use and maintenance, Seller will, at its option, repair or replace any part or material it determines, upon inspection, to be defective; provided however, that a charge for labor will be made except during a period of one (1) year from the date of original shipment from Seller's warehouse or factory. No product, or part thereof, is to be returned to Seller without prior written approval from Seller's factory. All exchanges and replacement shipments will be F.O.B. Seller's factory. Warranties for equipment or articles not manufactured by the Seller are solely the warranties of the manufacturers thereof and they are hereby assigned to the purchaser without recourse to the Seller.

SELLER'S LIABILITY FOR ANY CLAIM OF ANY KIND, WHETHER BASED ON CONTRACT, NEGLIGENCE OR STRICT LIABILITY IN TORT, AND BY WHOMEVER MADE, FOR ANY DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL LOSS, DAMAGE OR INJURY, RESULTING TO THE PURCHASER OR ANY THIRD PARTIES, arising out of, connected with or resulting from this Agreement, or from the performance or breach thereof, or from the manufacture, sale, delivery, resale, installation, inspection, repair or use of any product covered by or furnished under this Agreement, WHETHER OR NOT CAUSED BY SELLER'S NEGLIGENCE, SHALL IN ALL EVENTS BE EXCLUSIVELY LIMITED TO THE COST OF CORRECTING DEFECTIVE, DAMAGED OR NON-CONFORMING PARTS OR MATERIAL AS HEREIN PROVIDED, and upon the expiration of one (1) year, all such liability shall terminate.

SELLER DOES NOT AUTHORIZE any person to assume for it any obligations or liabilities greater than or different than those set forth in this Warranty. The terms under which any of Seller's products may be resold must be limited in accordance with this Warranty.

THIS AGREEMENT, and all the rights and obligations arising hereunder, shall be construed in accordance with, and be governed by, the law of the Commonwealth of Pennsylvania, U.S.A.

TO INSURE WARRANTY implementation, return the completed registration card within 15 days of cabinets' receipt to: InterMetro Industries Corp., Wilkes-Barre, PA 18705



InterMetro Industries Corporation Wilkes-Barre, PA 18705

01/2022

For online warranty registration, please go to www.metro.com/service-support/thermal-cabinets to register electronically



### PAGE INTENTIONALLY LEFT BLANK



### PAGE INTENTIONALLY LEFT BLANK





\* Save this document for future application, load rating and/or safety reference.

© 2022 InterMetro Industries Corporation, Wilkes-Barre, PA 18705 L01-430 REV Y 09/23

