

04/2013

Mod: DDW-3

Production code: HDW3

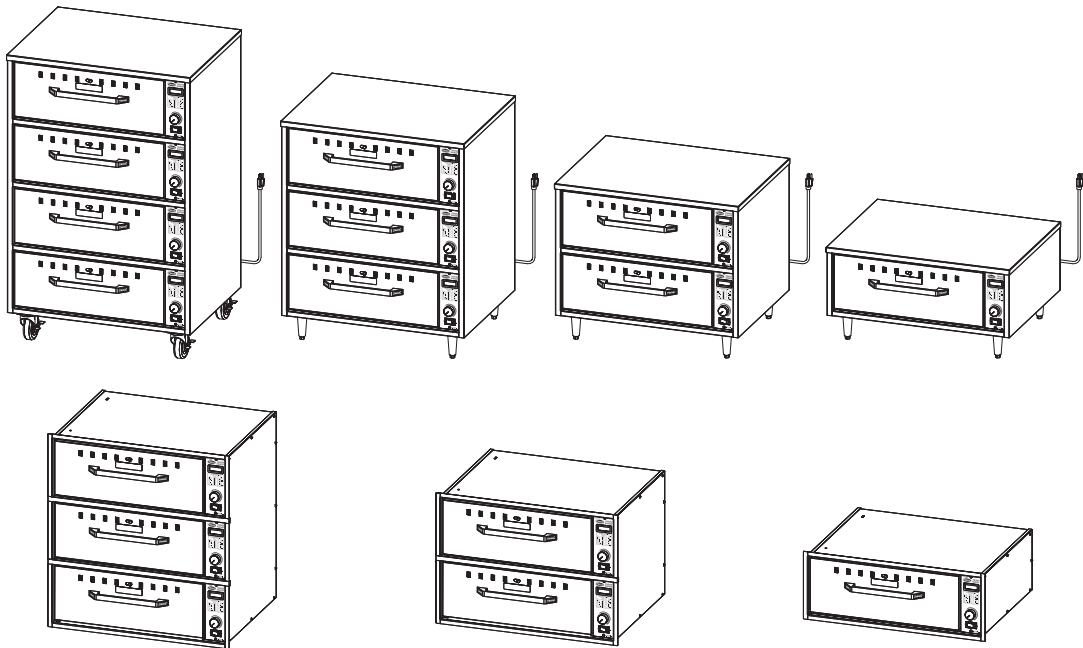


Diamond
catering equipment

Drawer Warmers

Installation and Operating Manual For € and Non- € Models

P/N 07.04.233.00



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IMPORTANT OWNER INFORMATION

Record the model number, serial number (located on the back of the unit for free-standing units and on the inside of the left panel for built-in units), voltage, and purchase date of the unit in the spaces below. Please have this information available when calling Hatco for service assistance.

Model No. _____

Serial No. _____

Voltage _____

Date of Purchase _____

.....

.....

INTRODUCTION

Drawer Warmers are designed to keep foods at optimum serving temperatures without affecting quality. They are built for tough kitchen duty with rugged stainless steel construction, heavy-duty hardware, stainless steel slides, and positive-closing drawers. Drawer Warmers keep everything from meat to vegetables to rolls hot and flavor-fresh until served.

On multiple drawer units, each drawer features individual controls for holding a wider variety of hot foods during peak serving periods.

Drawer Warmers are products of extensive research and field testing. The materials used were selected for maximum durability, attractive appearance, and optimum performance. Every unit is inspected and tested thoroughly prior to shipment.

This manual provides the installation, safety, and operating instructions for Drawer Warmers. Hatco recommends all installation, operating, and safety instructions appearing in this manual be read prior to installation or operation of the unit.

Safety information that appears in this manual is identified by the following signal word panels:



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



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to personal injury.



Read the following important safety information before using this equipment to avoid serious injury or death and to avoid damage to equipment or property.

**WARNING****ELECTRIC SHOCK HAZARD:**

- Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install proper voltage and size electrical receptacle.
- Built-in units must be installed by a qualified electrician. Installation must conform to all local electrical codes. Installation by unqualified personnel will void unit warranty and may lead to electric shock or burn, as well as damage to unit and/or its surroundings.
- Turn OFF power switch, unplug power cord/turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.
- DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
- Unit is not weatherproof. Locate unit indoors where ambient air temperature is a minimum of 21°C (70°F).
- Do not steam clean or use excessive water on the unit.
- This unit is not “jet-proof” construction. Do not use jet-clean spray to clean this unit.
- Do not pull unit by power cord.
- Discontinue use if power cord is frayed or worn.
- Do not attempt to repair or replace a damaged power cord. Cord must be replaced by Hatco, an Authorized Hatco Service Agent, or a person with similar qualifications.
- Do not clean unit when it is energized or hot.
- Do not allow liquids to spill into unit.
- Use only Genuine Hatco Replacement Parts when service is required. Failure to use Genuine Hatco Replacement Parts will void all warranties and may subject operators of the equipment to hazardous electrical voltage, resulting in electrical shock or burn. Genuine Hatco Replacement Parts are specified to operate safely in the environments in which they are used. Some aftermarket or generic replacement parts do not have the characteristics that will allow them to operate safely in Hatco equipment.

FIRE HAZARD:

- Locate unit a minimum of 25 mm (1”) from combustible walls and materials. If safe distances are not maintained, discoloration or combustion could occur.
- Do not use harsh chemicals such as bleach (or cleaners containing bleach), oven cleaners, or flammable cleaning solutions to clean this unit.

**WARNING**

Make sure food product has been heated to the proper food-safe temperature before placing in unit. Failure to heat food product properly may result in serious health risks. This unit is for holding preheated food product only.

This unit is not intended for use by children or persons with reduced physical, sensory, or mental capabilities. Ensure proper supervision of children and keep them away from the unit.

Make sure all operators have been instructed on the safe and proper use of the unit.

This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.

This unit has no “user-serviceable” parts. If service is required on this unit, contact an Authorized Hatco Service Agent or contact the Hatco Service Department at 414-671-6350; International fax 414-671-3976.

**CAUTION****BURN HAZARD:**

- Some exterior surfaces on the will get hot. Use caution when touching these areas.
- Use caution when opening drawer. Hot air escapes when drawer is open.

Locate unit in an area that is convenient for use. The location should be level and strong enough to support the weight of the unit and contents.

NOTICE

Do not lay unit on the front or back side. Damage to the unit could occur.

Use non-abrasive cleaners and cloths only. Abrasive cleaners and cloths could scratch the finish of the unit, marring its appearance and making it susceptible to soil accumulation.

MODEL DESCRIPTION



All Models

All Drawer Warmers are built of rugged aluminized and stainless steel with durable nylon rollers, 12 gauge stainless steel slides, and heavy-duty hardware. Each drawer features adjustable drawer vents for humidity control, a POWER ON/OFF (I/O) switch, TEMPERATURE Control knob, and a TEMPERATURE monitor. Standard size pans 152 mm (6") deep are supplied with each drawer. The insulated top and sides provide maximum energy efficiency and the heating elements are warranted for two years.

HDW-X Models

HDW-X Models are freestanding units available in one, two, three, and four-drawer versions. The one, two, and three-drawer units are equipped with 102 mm (4") legs. The four-drawer unit is equipped with 152 mm (6") stainless steel legs. Freestanding HDW-X models include an attached 1829 mm (6") power cord with plug.

HDW-XN Models

HDW-XN models have all the features of the HDW-X freestanding models but have a narrower profile for smaller space requirements. These units are available in one, two, and three-drawer versions.

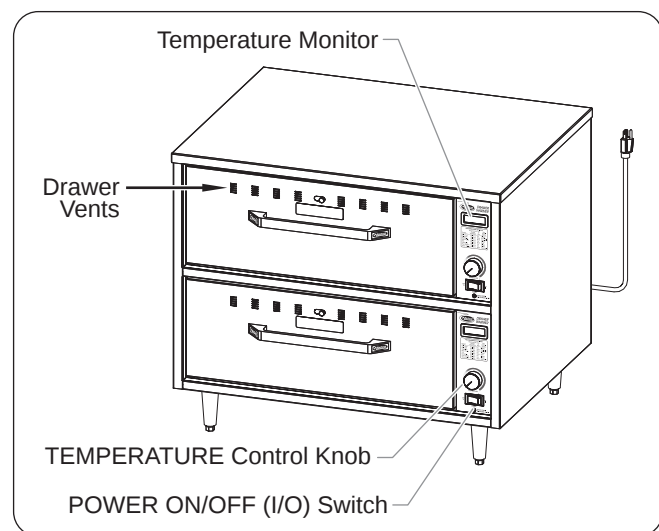


Figure 1. Model HDW-2

NOTE: Additional caster and leg sizes are available for the freestanding units. Refer to the OPTIONS AND ACCESSORIES section for details.

HDW-XB Models

HDW-XB Models are built-in units available in one, two, and three-drawer versions. Built-in HDW-XB models include 1219 mm (4') of flexible conduit for direct power connection.

HDW-XBN Models

HDW-XBN Models have all the features of the HDW-XB models but have a narrower profile for smaller space requirements. These units are available in one, two, and three-drawer versions.

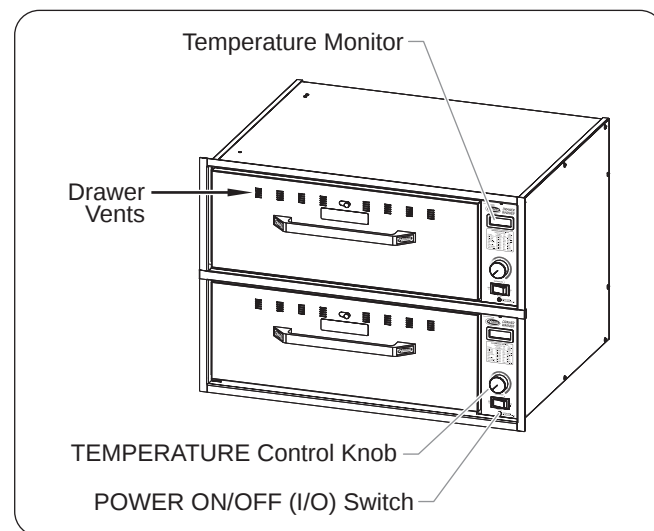


Figure 2. Model HDW-2B

MODEL DESIGNATION

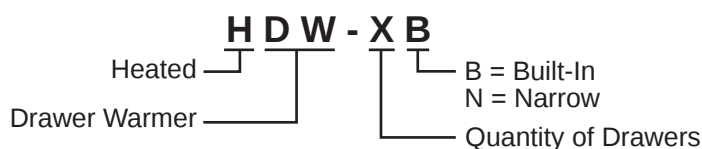


Figure 3. Model Designation

Plug Configurations

Freestanding units are supplied from the factory with an electrical cord and plug installed. Plugs are supplied according to the application.



WARNING

ELECTRIC SHOCK HAZARD: Plug unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. If plug and receptacle do not match, contact a qualified electrician to determine and install the proper voltage and size electrical receptacle.

NOTE: The specification label is located on the back of freestanding models and the inside left panel of built-in models (remove drawer to view built-in label). See label for serial number and verification of unit electrical information.

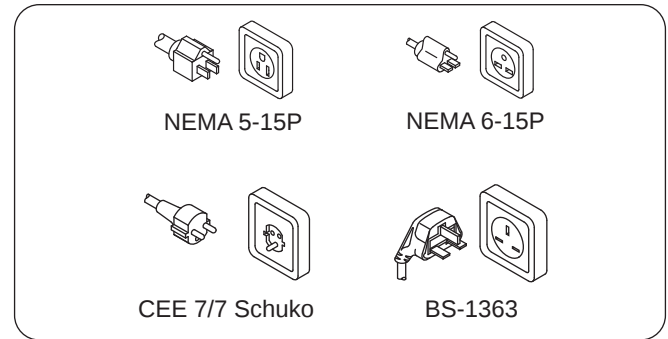


Figure 4. Plug Configurations

NOTE: Receptacle not supplied

Electrical Rating Chart — HDW-X Models

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
HDW-1	120	450	3.8	NEMA 5-15P	44 kg (97 lbs.)
	208	450	2.2	NEMA 6-15P	44 kg (97 lbs.)
	240	450	1.9	NEMA 6-15P	44 kg (97 lbs.)
	220	450	2.0	CEE 7/7 Schuko	44 kg (97 lbs.)
	240	450	1.9	BS-1363	44 kg (97 lbs.)
	220–230 (CE)	450–492	2.0–2.1	CEE 7/7 Schuko	44 kg (97 lbs.)
	230–240 (CE)	413–450	1.8–1.9	BS-1363	44 kg (97 lbs.)
HDW-2	120	900	7.5	NEMA 5-15P	76 kg (168 lbs.)
	208	900	4.3	NEMA 6-15P	76 kg (168 lbs.)
	240	900	3.8	NEMA 6-15P	76 kg (168 lbs.)
	220	900	4.1	CEE 7/7 Schuko	76 kg (168 lbs.)
	240	900	3.8	BS-1363	76 kg (168 lbs.)
	220–230 (CE)	900–984	4.1–4.3	CEE 7/7 Schuko	76 kg (168 lbs.)
	230–240 (CE)	826–900	3.6–3.8	BS-1363	76 kg (168 lbs.)
HDW-3	120	1350	11.3	NEMA 5-15P	105 kg (232 lbs.)
	208	1350	6.5	NEMA 6-15P	105 kg (232 lbs.)
	240	1350	5.6	NEMA 6-15P	105 kg (232 lbs.)
	220	1350	6.1	CEE 7/7 Schuko	105 kg (232 lbs.)
	240	1350	5.6	BS-1363	105 kg (232 lbs.)
	220–230 (CE)	1350–1476	6.1–6.4	CEE 7/7 Schuko	105 kg (232 lbs.)
	230–240 (CE)	1239–1350	5.4–5.6	BS-1363	105 kg (232 lbs.)
HDW-4	120	1800	15	NEMA 5-15P	134 kg (296 lbs.)
	208	1800	8.7	NEMA 6-15P	134 kg (296 lbs.)
	240	1800	7.5	NEMA 6-15P	134 kg (296 lbs.)
	220	1800	8.2	CEE 7/7 Schuko	134 kg (296 lbs.)
	240	1800	7.5	BS-1363	134 kg (296 lbs.)
	220–230 (CE)	1800–1968	8.2–8.6	CEE 7/7 Schuko	134 kg (296 lbs.)
	230–240 (CE)	1653–1800	7.2–7.5	BS-1363	134 kg (296 lbs.)

The shaded areas contain electrical information for **International models only**.

NOTE: Shipping weight includes packaging.

Electrical Rating Chart — HDW-XN Models

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
HDW-1N	120	450	3.8	NEMA 5-15P	44 kg (97 lbs.)
	208	450	2.2	NEMA 6-15P	44 kg (97 lbs.)
	240	450	1.9	NEMA 6-15P	44 kg (97 lbs.)
	220	450	2.0	CEE 7/7 Schuko	44 kg (97 lbs.)
	240	450	1.9	BS-1363	44 kg (97 lbs.)
	220–230 (CE)	450–492	2.0–2.1	CEE 7/7 Schuko	44 kg (97 lbs.)
	230–240 (CE)	413–450	1.8–1.9	BS-1363	44 kg (97 lbs.)
HDW-2N	120	900	7.5	NEMA 5-15P	76 kg (168 lbs.)
	208	900	4.3	NEMA 6-15P	76 kg (168 lbs.)
	240	900	3.8	NEMA 6-15P	76 kg (168 lbs.)
	220	900	4.1	CEE 7/7 Schuko	76 kg (168 lbs.)
	240	900	3.8	BS-1363	76 kg (168 lbs.)
	220–230 (CE)	900–984	4.1–4.3	CEE 7/7 Schuko	76 kg (168 lbs.)
	230–240 (CE)	826–900	3.6–3.8	BS-1363	76 kg (168 lbs.)
HDW-3N	120	1350	11.3	NEMA 5-15P	105 kg (232 lbs.)
	208	1350	6.5	NEMA 6-15P	105 kg (232 lbs.)
	240	1350	5.6	NEMA 6-15P	105 kg (232 lbs.)
	220	1350	6.1	CEE 7/7 Schuko	105 kg (232 lbs.)
	240	1350	5.6	BS-1363	105 kg (232 lbs.)
	220–230 (CE)	1350–1476	6.1–6.4	CEE 7/7 Schuko	105 kg (232 lbs.)
	230–240 (CE)	1239–1350	5.4–5.6	BS-1363	105 kg (232 lbs.)

Electrical Rating Chart — HDW-XB Models

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
HDW-1B	120	450	3.8	Hardwired w/Conduit	40 kg (88 lbs.)
	208	450	2.2	Hardwired w/Conduit	40 kg (88 lbs.)
	240	450	1.9	Hardwired w/Conduit	40 kg (88 lbs.)
	220	450	2.0	Hardwired w/Conduit	40 kg (88 lbs.)
	240	450	1.9	Hardwired w/Conduit	40 kg (88 lbs.)
	220–230 (CE)	450–492	2.0–2.1	Hardwired w/Conduit	40 kg (88 lbs.)
	230–240 (CE)	413–450	1.8–1.9	Hardwired w/Conduit	40 kg (88 lbs.)
HDW-2B	120	900	7.5	Hardwired w/Conduit	72 kg (159 lbs.)
	208	900	4.3	Hardwired w/Conduit	72 kg (159 lbs.)
	240	900	3.8	Hardwired w/Conduit	72 kg (159 lbs.)
	220	900	4.1	Hardwired w/Conduit	72 kg (159 lbs.)
	240	900	3.8	Hardwired w/Conduit	72 kg (159 lbs.)
	220–230 (CE)	900–984	4.1–4.3	Hardwired w/Conduit	72 kg (159 lbs.)
	230–240 (CE)	826–900	3.6–3.8	Hardwired w/Conduit	72 kg (159 lbs.)
HDW-3B	120	1350	11.3	Hardwired w/Conduit	101 kg (223 lbs.)
	208	1350	6.5	Hardwired w/Conduit	101 kg (223 lbs.)
	240	1350	5.6	Hardwired w/Conduit	101 kg (223 lbs.)
	220	1350	6.1	Hardwired w/Conduit	101 kg (223 lbs.)
	240	1350	5.6	Hardwired w/Conduit	101 kg (223 lbs.)
	220–230 (CE)	1350–1476	6.1–6.4	Hardwired w/Conduit	101 kg (223 lbs.)
	230–240 (CE)	1239–1350	5.4–5.6	Hardwired w/Conduit	101 kg (223 lbs.)

Electrical Rating Chart — HDW-XBN Models

Model	Voltage	Watts	Amps	Plug Configuration	Shipping Weight
HDW-1BN	120	450	3.8	Hardwired w/Conduit	40 kg (88 lbs.)
	208	450	2.2	Hardwired w/Conduit	40 kg (88 lbs.)
	240	450	1.9	Hardwired w/Conduit	40 kg (88 lbs.)
	220	450	2.0	Hardwired w/Conduit	40 kg (88 lbs.)
	240	450	1.9	Hardwired w/Conduit	40 kg (88 lbs.)
	220–230 (CE)	450–492	2.0–2.1	Hardwired w/Conduit	40 kg (88 lbs.)
	230–240 (CE)	413–450	1.8–1.9	Hardwired w/Conduit	40 kg (88 lbs.)
HDW-2BN	120	900	7.5	Hardwired w/Conduit	72 kg (159 lbs.)
	208	900	4.3	Hardwired w/Conduit	72 kg (159 lbs.)
	240	900	3.8	Hardwired w/Conduit	72 kg (159 lbs.)
	220	900	4.1	Hardwired w/Conduit	72 kg (159 lbs.)
	240	900	3.8	Hardwired w/Conduit	72 kg (159 lbs.)
	220–230 (CE)	900–984	4.1–4.3	Hardwired w/Conduit	72 kg (159 lbs.)
	230–240 (CE)	826–900	3.6–3.8	Hardwired w/Conduit	72 kg (159 lbs.)
HDW-3BN	120	1350	11.3	Hardwired w/Conduit	101 kg (223 lbs.)
	208	1350	6.5	Hardwired w/Conduit	101 kg (223 lbs.)
	240	1350	5.6	Hardwired w/Conduit	101 kg (223 lbs.)
	220	1350	6.1	Hardwired w/Conduit	101 kg (223 lbs.)
	240	1350	5.6	Hardwired w/Conduit	101 kg (223 lbs.)
	220–230 (CE)	1350–1476	6.1–6.4	Hardwired w/Conduit	101 kg (223 lbs.)
	230–240 (CE)	1239–1350	5.4–5.6	Hardwired w/Conduit	101 kg (223 lbs.)

The shaded areas contain electrical information for **International models only**.

NOTE: Shipping weight includes packaging.

Food Holding Capacity

A standard drawer has the following capacity:

Dinner Rolls:	6–8 dozen
Ribs:	11–14 kg (25–30 lbs.)
Potatoes:	3–3-1/2 dozen

Dimensions — HDW-X and HDW-XN Models

Model	Width (A)	Depth (B)	Height (C)	Footprint Width (D)	Footprint Depth (E)
HDW-1	749 mm (29-1/2")	575 mm (22-5/8")	279 mm (11-1/16")	629 mm (24-3/4")	484 mm (19-1/16")
HDW-2	749 mm (29-1/2")	575 mm (22-5/8")	537 mm (21-3/16")	629 mm (24-3/4")	484 mm (19-1/16")
HDW-3	749 mm (29-1/2")	575 mm (22-5/8")	794 mm (31-1/4")	629 mm (24-3/4")	484 mm (19-1/16")
HDW-4	749 mm (29-1/2")	575 mm (22-5/8")	1051 mm (41-3/8")	629 mm (24-3/4")	484 mm (19-1/16")
HDW-1N	530 mm (20-7/8")	686 mm (27")	279 mm (11-1/16")	408 mm (16-1/8")	594 mm (23-7/16")
HDW-2N	530 mm (20-7/8")	686 mm (27")	537 mm (21-3/16")	408 mm (16-1/8")	594 mm (23-7/16")
HDW-3N	530 mm (20-7/8")	686 mm (27")	794 mm (31-1/4")	408 mm (16-1/8")	594 mm (23-7/16")

NOTE: Add 102 mm (4") to Height (C) for units with standard 102 mm (4") plastic legs. For additional legs and casters information, refer to the OPTIONS AND ACCESSORIES section of this manual.

Dimensions — HDW-XB and HDW-XBN Models

Model	Width (A)	Depth (B)	Height (C)	Built-In Width (D)	Built-In Height (E)
HDW-1B	743 mm (29-1/4")	570 mm (22-7/16")	271 mm (10-11/16")	720 mm (28-3/8")	248 mm (9-13/16")
HDW-2B	743 mm (29-1/4")	570 mm (22-7/16")	529 mm (20-13/16")	720 mm (28-3/8")	506 mm (19-7/8")
HDW-3B	743 mm (29-1/4")	570 mm (22-7/16")	791 mm (31-1/8")	720 mm (28-3/8")	763 mm (30-1/16")
HDW-1BN	523 mm (20-9/16")	680 mm (26-3/4")	271 mm (10-11/16")	500 mm (19-11/16")	248 mm (9-3/4")
HDW-2BN	523 mm (20-9/16")	680 mm (26-3/4")	529 mm (20-13/16")	500 mm (19-11/16")	506 mm (19-7/8")
HDW-3BN	523 mm (20-9/16")	680 mm (26-3/4")	791 mm (31-1/8")	500 mm (19-11/16")	763 mm (30")

NOTE: Add 35 mm (1-3/8") to Depth (B) for the unit depth dimension including the conduit connector.

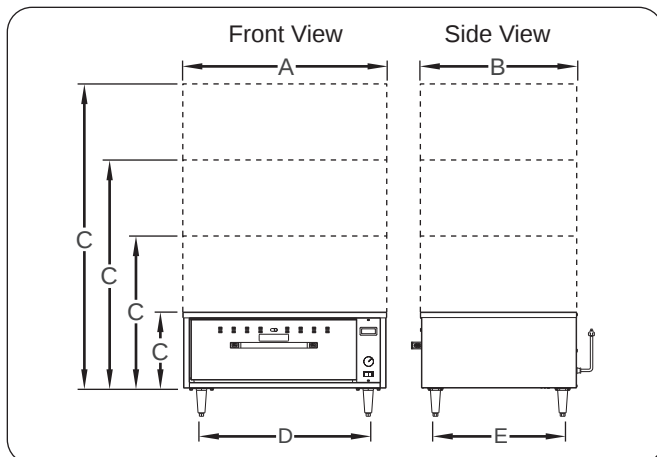


Figure 5. HDW-X and HDW-XN Dimensions

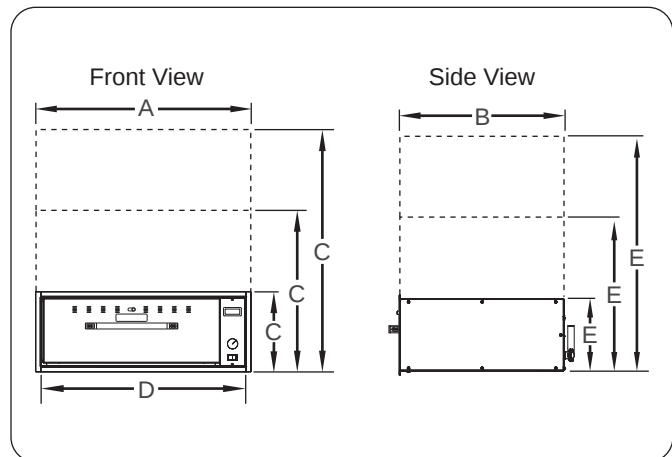


Figure 6. HDW-XB and HDW-XBN Dimensions

General

Drawer Warmers are shipped with most components pre-assembled. Care should be taken when unpacking the shipping carton to avoid damage to the unit and components enclosed.



WARNING

ELECTRIC SHOCK HAZARD: Unit is not weatherproof. Locate unit indoors where ambient air temperature is a minimum of 21°C (70°F).

FIRE HAZARD: Locate unit a minimum of 25 mm (1") from combustible walls and materials. If safe distances are not maintained, combustion or discoloration could occur.

NOTICE

Do not lay unit on the front or back side. Damage to the unit could occur.

1. Remove the unit from the carton.
2. Remove the information packet from the drawer of the unit.

NOTE: To prevent delay in obtaining warranty coverage, complete online warranty registration. See the IMPORTANT OWNER INFORMATION section for details.

3. Remove tape and protective packaging from all surfaces of unit.
4. Make sure the desired installation location is appropriate.
 - Locate the unit in an area where the ambient air temperature is constant and a minimum of 21°C (70°F). Avoid areas that may be subject to active air movements or currents (i.e., near exhaust fans/hoods and air conditioning ducts).
 - Make sure the unit is located on solid, level flooring or in sturdy cabinetry.
 - Make sure the unit is at the proper height in an area convenient for use.
5. Install the unit. Refer to the appropriate installation procedure in this section.

Installing HDW-X and HDW-XN Models

HDW-X and HDW-XN models are freestanding units that require the installation of legs or casters before operation.

1. Remove the plastic bag containing the four legs or casters from the drawer of the unit.
2. Carefully lay the unit on its side (requires two people).
3. Install each leg or caster. Refer to the appropriate procedure in this section.
4. Return the unit to its upright position (requires two people). For units on legs — If the unit is not level or rocks, turn the adjustable tip of the appropriate leg to level the unit.

Installing Legs

1. Thread a leg into the hole located at one corner of the unit.
2. Hand-tighten the leg until snug. Do not over-tighten.
3. Repeat steps 1 and 2 for the remaining three legs.

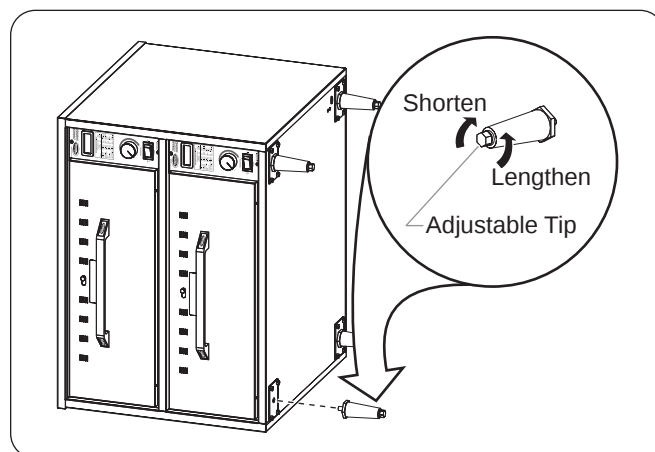


Figure 7. Leg Installation on HDW-2 Model

Installing Casters

1. Align the four holes on the caster plate with the four holes in the bottom of the unit at one corner of the unit.
2. Install a bolt through each of the holes in the caster plate and into the bottom of the unit. Tighten securely.
3. Repeat steps 1 and 2 for the remaining three casters.

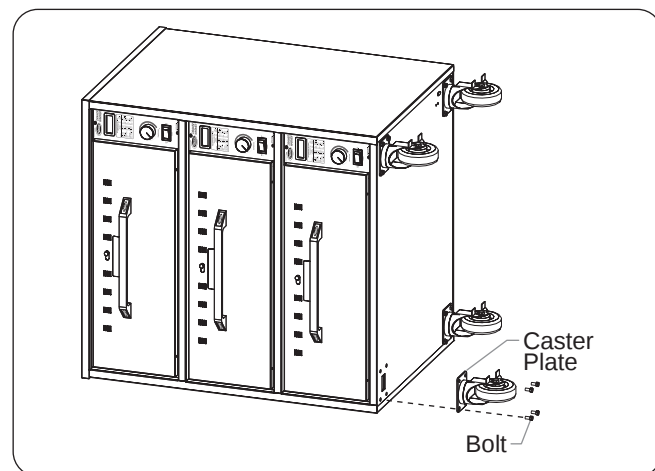


Figure 8. Caster Installation on HDW-3 Model

Installing HDW-XB and HDW-XBN Models

HDW-XB and HDW-XBN models are built-in units that require installation into a cabinet before operation.

⚠ WARNING

ELECTRIC SHOCK HAZARD: Built-in units must be installed by a qualified electrician. Installation must conform to all local electrical codes. Installation by unqualified personnel will void the unit warranty and may lead to electric shock or burn, as well as damage to unit and/or its surroundings.

1. Cut the appropriate opening in the cabinet. Refer to the chart and illustration below for dimensions.

Model	Width (A)	Depth (B)	Height (C)
HDW-1B	727 mm (28-5/8")	616 mm (24-1/4")	256 mm (10-1/16")
HDW-2B	727 mm (28-5/8")	616 mm (24-1/4")	513 mm (20-3/16")
HDW-3B	727 mm (28-5/8")	616 mm (24-1/4")	770 mm (30-5/16")
HDW-1BN	506 mm (19-15/16")	730 mm (28-3/4")	256 mm (10-1/16")
HDW-2BN	506 mm (19-15/16")	730 mm (28-3/4")	513 mm (20-3/16")
HDW-3BN	506 mm (19-15/16")	730 mm (28-3/4")	770 mm (30-5/16")

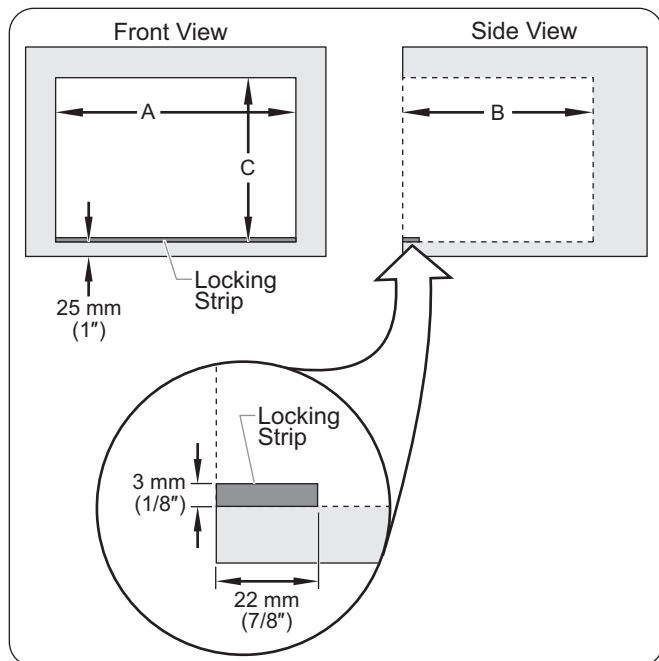


Figure 9. Cutout and Locking Strip Dimensions

NOTE: Maintain a minimum clearance of 25 mm (1") between the cutout opening and the floor.

2. Fasten a locking strip (not supplied) to the lower front inside lip of the cabinet opening.

3. Make sure a properly grounded electrical supply of the correct voltage and size is installed inside the cabinet cutout. See the SPECIFICATIONS section for details.
4. Partially insert the unit into the opening, making sure the conduit is fed into the opening first.
5. Have a qualified electrician connect the unit wires from the conduit to the electrical supply inside the cabinet.
6. Before installing the unit into the opening completely, apply a bead of National Sanitation Foundation-approved sealant between the heated drawer flange and the cabinet facing.
7. Slide the unit into the opening until the front locking studs drop behind the locking strip. To verify installation, pull out the bottom drawer completely and gently pull to ensure the unit is locked in place.

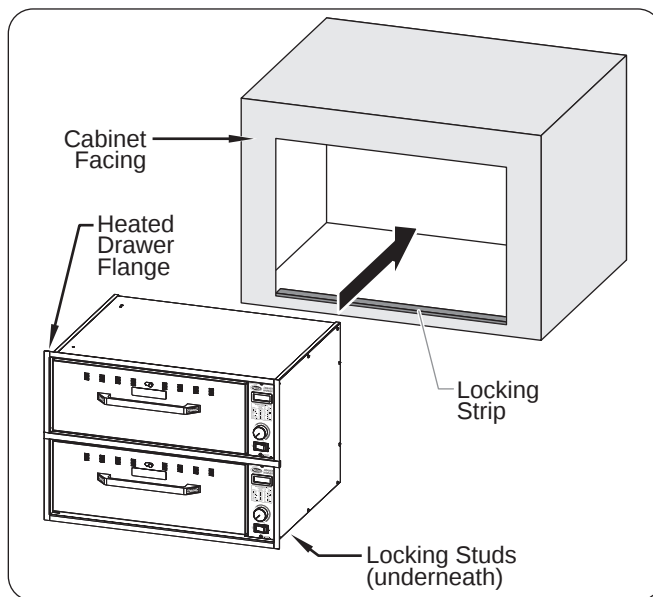


Figure 10. Built-In Installation (HDW-2B Model shown)

General

Use the following procedure to operate a Drawer Warmer. Each drawer can be controlled and monitored individually using the adjustable drawer vents for humidity control as well as the POWER ON/OFF (I/O) switch, TEMPERATURE control knob, and a temperature monitor.

⚠ WARNING

Read all safety messages in the **IMPORTANT SAFETY INFORMATION** section before operating this equipment.

Startup

1. For freestanding units, plug the unit into a properly grounded electrical receptacle of the correct voltage, size, and plug configuration. See the SPECIFICATIONS section for details.
2. Move the POWER ON/OFF (I/O) switch(es) to the ON (I) position.
3. Turn the TEMPERATURE control knob(s) to the desired setting(s). See the RECOMMENDED SETTINGS chart on the control panel or the Food Holding Guide in this section.

⚠ CAUTION

Standard and approved manufacturing oils may smoke up to 30 minutes during initial startup. This is a temporary condition. Operate unit without food product until smoke dissipates.

BURN HAZARD:

- Some exterior surfaces on unit will get hot. Use caution when touching these areas.
 - Use caution when opening drawer. Hot air escapes when drawer is open.
4. Allow unit 15–20 minutes to reach operating temperature.
 5. Adjust the drawer vents for the desired humidity by sliding the vent knob on the drawer front. Opening the vents all the way allows maximum moisture to escape.

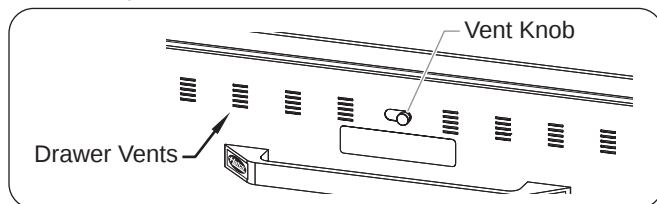


Figure 11. Drawer Vents

NOTE: Proper vent adjustment depends on the type and amount of food held, as well as the frequency of drawer opening.

NOTE: For additional moisture, water can be added (approximately 6 mm [1/4"] of water) to the optional water/spillage pan before inserting the food pan into the drawer. Check water level periodically. Add water as necessary. Use of splash baffle is recommended to prevent water from splashing into the cabinet interior when opening and closing a drawer. If hard water is used, the pan will require periodic cleaning and deliming. See MAINTENANCE section for deliming instructions.

NOTE: Damage caused by water is not covered under warranty.

Shutdown

1. Move the POWER ON/OFF (I/O) switch(es) to the OFF (O) position.
2. Allow the unit to cool before performing any cleaning or maintenance.

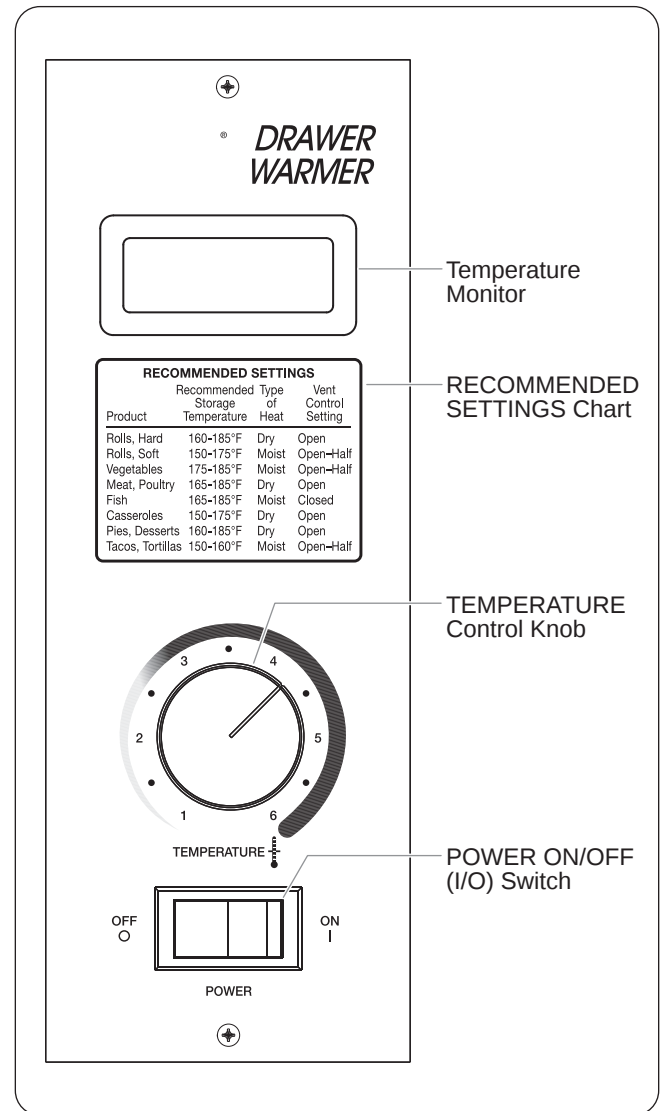


Figure 12. Drawer Warmer Control Panel

Food Holding Guide

Product	Recommended Storage Temperature	Type of Heat	Vent Setting
Rolls, Hard	160°–185°F (71°–85°C)	Dry	Open
Rolls, Soft	150°–175°F (66°–79°C)	Moist	Open–Half
Vegetables	175°–185°F (79°–85°C)	Moist	Open–Half
Meat, Poultry	165°–185°F (74°–85°C)	Dry	Open
Fish	165°–185°F (74°–85°C)	Moist	Closed
Casseroles	150°–175°F (66°–79°C)	Dry	Open
Pies, Desserts	160°–185°F (71°–85°C)	Dry	Open
Tacos, Tortillas	150°–160°F (66°–71°C)	Moist	Open–Half

General

Drawer Warmers are designed for maximum durability and performance with minimum maintenance.



ELECTRIC SHOCK HAZARD:

- Turn OFF power switch, unplug power cord/turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.
- DO NOT submerge or saturate with water. Unit is not waterproof. Do not operate if unit has been submerged or saturated with water.
- Do not steam clean or use excessive water on unit.
- This unit is not “jet-proof” construction. Do not use jet-clean spray to clean this unit.
- Do not clean unit when it is energized or hot.

This unit has no “user-serviceable” parts. If service is required on this unit, contact an Authorized Hatco Service Agent or contact the Hatco Service Department at 800-558-0607 or 414-671-6350; fax 800-690-2966; or International fax 414-671-3976.

Cleaning

To preserve the finish of the unit as well as maintain performance, it is recommended that the unit be cleaned daily.

1. Turn off the unit, unplug the power cord (freestanding models), and allow the unit to cool.
2. Remove and wash all food pans and accessories.

NOTICE

Use non-abrasive cleaners only. Abrasive cleaners could scratch the finish of the unit, marring its appearance and making it susceptible to soil accumulation.

3. Wipe down surfaces using a damp cloth. A non-abrasive, cream cleaner may be used for difficult stains.
 - Make sure to check and clean the interior of the unit. Food pieces may fall from the food pans into the drawer cavity. **CAUTION! Burn Hazard—Do not clean drawer cavity when unit is on!**
4. Wipe the entire unit dry using a clean, dry cloth.

Removing Lime and Mineral Deposits (Models with Optional Water Pan)

Use the following procedure for periodic cleaning and deliming of the water pan.

NOTE: The lime and mineral content of the water used for daily operation will determine how often the deliming procedure must be performed.

NOTE: Perform this procedure when the unit will not be used for a period of time, such as the end of the day.

1. Turn off the unit, unplug the power cord (freestanding models), and allow the unit to cool.
2. After the unit has cooled, remove and empty the water pan.
3. Fill the water pan with a mixture of 75% water and 25% white vinegar to a level where it covers the lime and mineral deposits.
4. Install the water pan with deliming solution into the unit.
5. Plug in and turn on the unit. Allow the unit to run for 30 minutes.
6. Turn off the unit and unplug the power cord (freestanding models).
7. Allow the water pan to stand with the deliming solution for at least two hours (the time required will vary depending on the amount of deposits in the water pan).
8. Remove the water pan and empty the deliming solution.
9. Continue to fill and rinse the water pan with clean water until the pan is clean.
10. Install the clean water pan into the unit. Plug in the unit and fill the water pan as usual for daily operation (6 mm [1/4"] of water is recommended).

NOTE: If lime and mineral deposits are still present in the water pan, repeat this procedure and increase the amount of time the de-liming mixture stands in the water pan.

⚠ WARNING

This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.

⚠ WARNING

ELECTRIC SHOCK HAZARD: Turn OFF power switch, unplug power cord/turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustments, or maintenance.

Symptom	Probable Cause	Corrective Action
Unit too hot.	TEMPERATURE control set too high.	Move TEMPERATURE control knob to a lower setting.
	Unit connected to incorrect power supply.	Verify with qualified personnel that power supply matches unit specification.
	Internal thermostat defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Unit not hot enough.	Unit not allowed enough time to preheat.	Allow unit 15–20 minutes to reach operating temperature.
	Temperature control set too low.	Move TEMPERATURE control knob to a higher setting.
	Drawer(s) not closed completely.	Make sure all drawers are closed completely.
	Internal thermostat defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
Product too dry.	Drawer vent in open position.	Move drawer vent to closed position.
	Optional water pan empty or not installed.	Install and/or fill water pan with clean water. Control level of moisture using drawer vents.
Product too moist.	Drawer vent in closed position.	Move drawer vent to open position.
	Optional water pan installed, but not needed.	Remove water pan from drawer.
Unit not working at all.	Unit not plugged in.	Plug unit into proper power supply.
	Unit not turned on.	Move POWER ON/OFF (I/O) switch to the ON position.
	Circuit breaker tripped.	Reset circuit breaker.
	POWER ON/OFF (I/O) switch defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Internal thermostat defective.	Contact an Authorized Hatco Service Agent or Hatco for assistance.
	Heating element burned out.	Contact an Authorized Hatco Service Agent or Hatco for assistance.

Digital Temperature Control

The Digital Temperature Control is factory installed and takes the place of the standard drawer warmer control panel. Use the following procedure to operate the Digital Temperature Control.

Startup

1. Move the POWER ON/OFF (I/O) switch(es) to the ON position.
 - The corresponding digital TEMPERATURE Controller will energize and the current temperature of the drawer or “LO” will appear on the display. “LO” indicates the drawer temperature is below 21°C (70°F).
2. Press the **SET** key on the digital TEMPERATURE Controller two times to verify the setpoint temperature. See the RECOMMENDED SETTINGS chart on the control panel or the FOOD HOLDING GUIDE in this manual.
 - The setpoint temperature will be shown for 10 seconds. After 10 seconds, the display will revert to the current temperature of the unit. To change the setpoint temperature, refer to “Changing the Setpoint Temperature” in this section.

NOTE: The digital TEMPERATURE controller is pre-set to a setpoint temperature of 85°C (185°F) at the factory. Once the setpoint temperature is changed, the new setpoint temperature will remain in memory until it is changed again. The minimum to maximum setpoint temperature range is 21°C (70°F) to 93°C (200°F).



BURN HAZARD:

- Some exterior surfaces on the unit will get hot. Use caution when touching these areas.
 - Use caution when opening drawer. Hot air escapes when drawer is open.
3. Allow unit 15–20 minutes to reach operating temperature.

Shutdown

1. Move the Power ON/OFF (I/O) switch to the OFF (O) position. The digital temperature control and heated drawer will shut off.

Changing the Setpoint Temperature

Use the following procedure to change the setpoint temperature of the heated shelf.

1. Press and release the **SET** key. The current setpoint temperature will be shown on the display.
2. Press the **▲** key or **▼** key within 15 seconds to change the setpoint temperature. Pressing and holding the **▲** key or **▼** key will scroll through the setpoints faster. If no key is pressed within 15 seconds, the display will revert to the current temperature of the drawer.
3. Press the **SET** key or wait 15 seconds to lock in the new setpoint temperature. The display will go blank for two seconds to show that the new setting has been accepted.

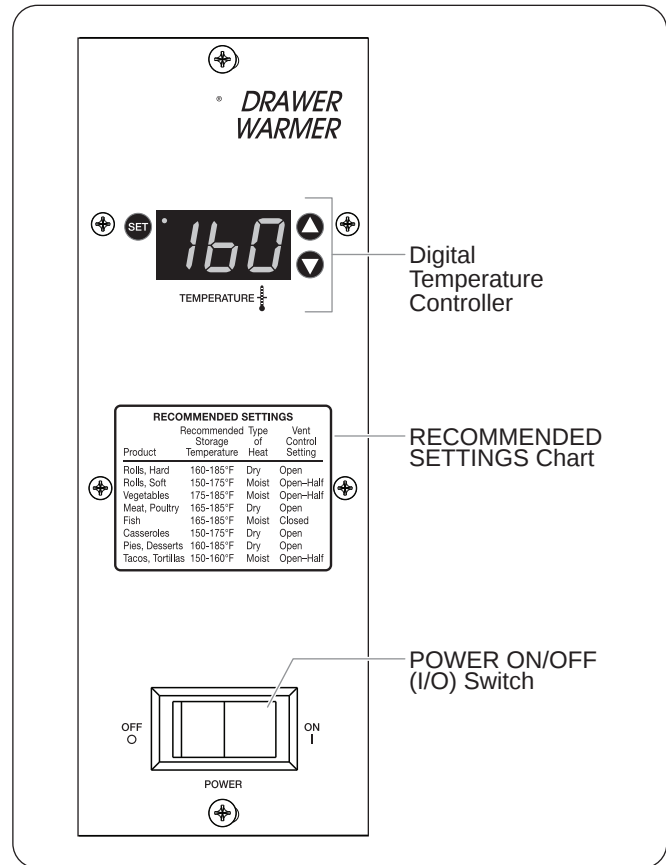


Figure 13. Digital Temperature Control Panel

76 mm (3") Locking Casters

76 mm (3") locking casters are available for the one, two, and three-drawer freestanding units in place of the legs. 76 mm (3") locking casters add 108 mm (4-1/4") to the height of the unit. Use the following procedure to install casters onto the bottom of the unit.

NOTICE

Do not lay unit on the front or back side or damage to the unit could occur.

1. Remove any pans from the drawers of the unit.
2. Carefully lay the unit on its left or right side (requires two people).
3. Remove the legs, if installed.
4. Install the caster into a hole where a leg was removed. Tighten securely.

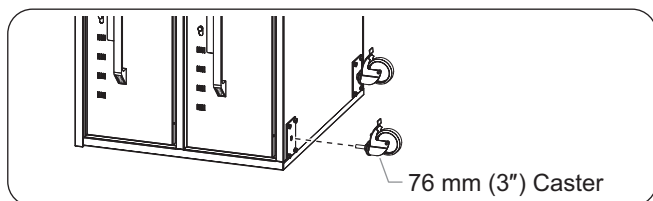


Figure 14. Installing 76 mm (3") Casters

5. Repeat steps 3 and 4 for the remaining three casters.
6. Return the unit to the upright position (requires two people).

51 mm (2") Swivel Casters

51 mm (2") swivel casters are available for one, two, and three drawer freestanding units. 51 mm (2") swivel casters add 64 mm (2-1/2") to the height of the unit.

102 mm (4") Locking Casters

102 mm (4") locking casters are available for one, two, three, and four drawer freestanding units. 102 mm (4") locking casters add 133 mm (5-1/4") to the height of the unit.

127 mm (5") Locking Casters

127 mm (5") locking casters are available for one, two, three, and four drawer freestanding units. 127 mm (5") locking casters add 159 mm (6-1/4") to the height of the unit.

152 mm (6") Adjustable Legs

152 mm (6") stainless steel adjustable legs are available for one, two, three, and four drawer freestanding units. 152 mm (6") adjustable legs add 152 mm (6") to the height of the unit.

Food Pans

Accessory stainless steel food pans are available in various sizes.

ST PAN 2.....Full size stainless steel pan at 64 mm (2-1/2") deep — 324 W x 527 D x 64 H mm (12-3/4" x 20-3/4" x 2-1/2")

ST PAN 4.....Full size stainless steel pan at 102 mm (4") deep — 324 W x 527 D x 102 H mm (12-3/4" x 20-3/4" x 4")

HDW 6" PAN.....Full size stainless steel pan at 152 mm (6") deep — 324 W x 527 D x 152 H mm (12-3/4" x 20-3/4" x 6")

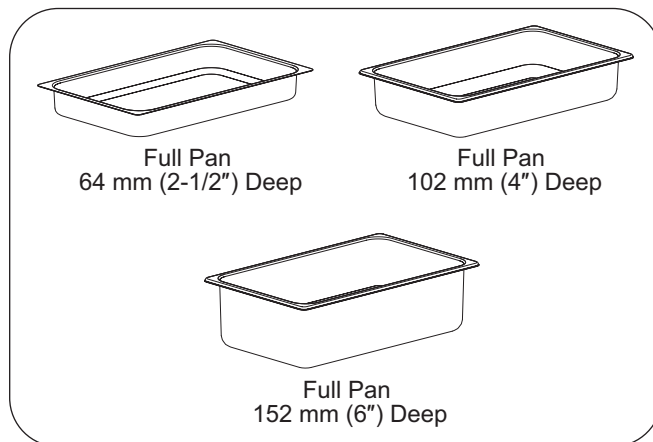


Figure 15. Stainless Steel Food Pans

Water/Spillage Pan

The water/spillage pan fits in the drawer underneath the food pan and can be used to humidify the heating area or keep spillage from the cabinet interior. A Splash baffle is recommended for use with a water/spillage pan.

Splash Baffle

The splash baffle is used with the optional water/spillage pan. Fabricated of stainless steel, the baffle fits into the bottom of the water/spillage pan, over the water bath. The splash baffle prevents water from splashing into the cabinet interior when opening and closing a drawer, while allowing humidity to escape.

Chip Guard

The chip guard completely shields the heating element, preventing any food product, such as tortilla chips, from coming in contact with the heating element.

Trivet

A trivet raises food product 13 mm (1/2") off the bottom of a full-size food pan.

1. PRODUCT WARRANTY

Hatco warrants the products that it manufactures (the "Products") to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of purchase when installed and maintained in accordance with Hatco's written instructions or 18 months from the date of shipment from Hatco. Buyer must establish the Product's purchase date by means satisfactory to Hatco in its sole discretion.

Hatco warrants the following Product components to be free from defects in materials and workmanship from the date of purchase (subject to the foregoing conditions) for the period(s) of time and on the conditions listed below:

a) Two (2) Year Parts Warranty:

- Conveyor Toaster Elements (metal sheathed)
- Drawer Warmer Elements (metal sheathed)
- Drawer Warmer Drawer Rollers and Slides
- Food Warmer Elements (metal sheathed)
- Display Warmer Elements (metal sheathed air heating)
- Holding Cabinet Elements (metal sheathed air heating)
- Built-In Heated Well Elements —
HWB and HWBI Series (metal sheathed)

b) One (1) Year Parts PLUS Four (4) Years Parts Warranty on pro-rated terms that Hatco will explain at Buyer's request:

- 3CS and FR Tanks

c) Ten (10) Year Parts Warranty:

- Electric Booster Heater Tanks
- Gas Booster Heater Tanks

d) Ninety (90) Day Parts Warranty:

- Replacement Parts

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT INFRINGEMENT. Without limiting the generality of the foregoing, SUCH WARRANTIES DO NOT COVER: Coated incandescent light bulbs, fluorescent lights, heat lamp bulbs, coated halogen light bulbs, halogen heat lamp bulbs, glass components, and fuses; Product failure in booster tank, fin tube heat exchanger, or other water heating equipment caused by liming, sediment buildup, chemical attack, or freezing; or Product misuse, tampering or misapplication, improper installation, or application of improper voltage.

2. LIMITATION OF REMEDIES AND DAMAGES

Hatco's liability and Buyer's exclusive remedy hereunder will be limited solely to replacement of part or Product using, at Hatco's option, new or refurbished parts or Product by Hatco or a Hatco-authorized service agency with respect to any claim made within the applicable warranty period referred to above. Hatco reserves the right to accept or reject any such claim in whole or in part. In the context of this Limited Warranty, "refurbished" means a part or Product that has been returned to its original specifications by Hatco or a Hatco-authorized service agency. Hatco will not accept the return of any Product without prior written approval from Hatco, and all such approved returns shall be made at Buyer's sole expense. HATCO WILL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING BUT NOT LIMITED TO LABOR COSTS OR LOST PROFITS RESULTING FROM THE USE OF OR INABILITY TO USE THE PRODUCTS OR FROM THE PRODUCTS BEING INCORPORATED IN OR BECOMING A COMPONENT OF ANY OTHER PRODUCT OR GOODS.