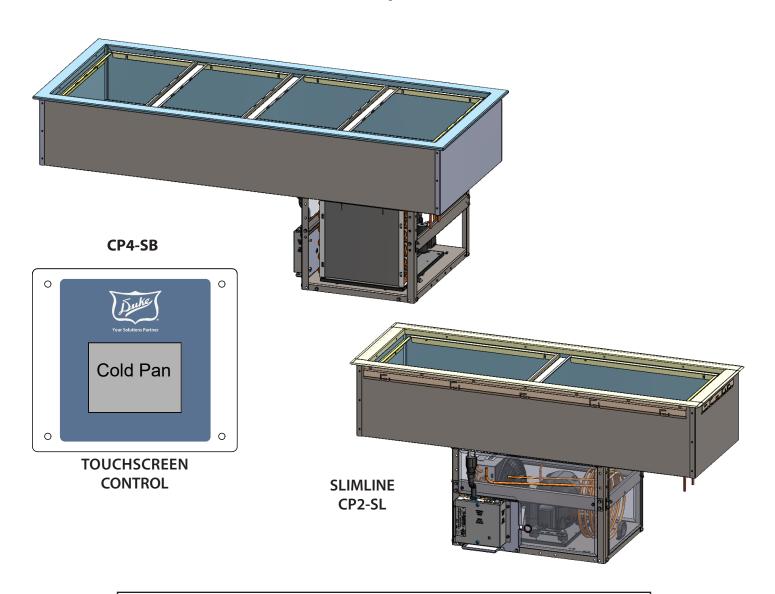


Installation and Operation Manual

R290 Drop-In Cold Pans:

Mechanical NSF7-8" Deep Standard and Slimline



CAUTION:

Please read this manual completely before attempting to install, operate or service this equipment

<u>.</u>

WARNING for CA residents: go to www.dukemfg.com/prop65 for prop 65 warning

TABLE OF CONTENTS

Important Safety Instructions	2-3
Specifications	
Specifications R290 Drop In Cold Pan	4
Specifications R290 Drop-in Slimline	5
Installation	6-9
Operation	10-12
Cleaning Instructions	13
Preventive Maintenance	13

IMPORTANT SAFETY INSTRUCTIONS

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the equipment.



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



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



Indicates Important Information



Indicates electrical shock hazard which, if not avoided, could result in death or serious injury and/or equipment damage.



Indicates Fire Hazard

In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of the unit.

- Read all instructions before using equipment.
- For your safety, the equipment is furnished with a properly grounded cord connector. Do not attempt to remove or disconnect the grounded connector.
- Install or locate the equipment only for its intended use as described in this manual.
- Do not use corrosive chemicals on this equipment.
- Do not operate this equipment if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- This equipment should be serviced by qualified personnel only. Contact the nearest Duke authorized service facility for adjustment or repair.
- Do not block or cover any openings on the unit.
- Do not immerse cord or plug in water.
- Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.

The following warnings and cautions appear throughout this manual and should be carefully observed.

- Turn the unit off, disconnect the power source and allow unit to cool down before performing any service or maintenance on the unit.
- The procedures in this manual may include the use of chemical products. You must read the Material Safety Data Sheets before using any of these products.
- The unit should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with dedicated electrical lines, protected by fuses or circuit breaker of the proper rating, in accordance with all applicable regulations.
- Disposal of the unit must be in accordance with local environmental codes and/or any other applicable codes.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

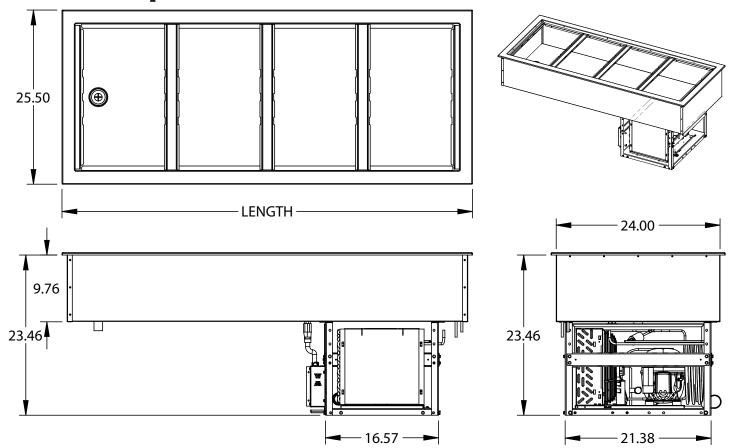


WARNINGDo Not store explosive substances such as aerosol cans with a flammable propellant in this appliance.



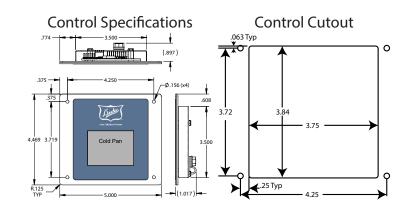
Do not drop or jar this unit as it contains a flammable WARNING refrigerant that could be released if the braised connections are damaged.

R290 Drop In Cold Pan



ELECTRICAL SPECIFICATIONS:*"If using optional electric condensate evaporator add 300 Watts, 2.6 Amps"

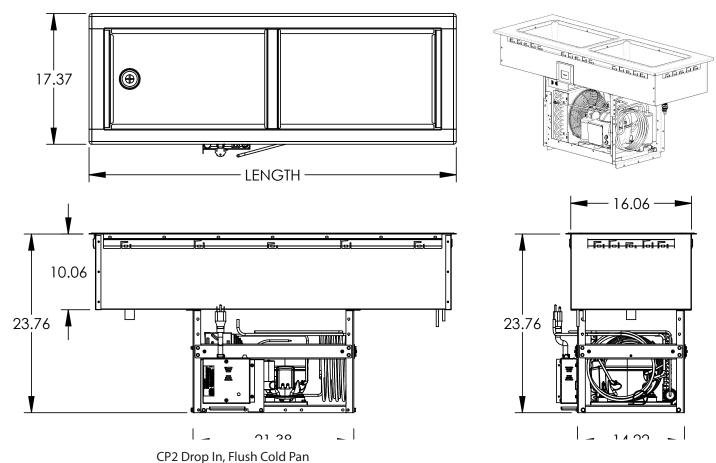
	120 Volt - HZ 60						
Model	Watts*	Amps*	NEMA				
CP1-SB	528	4.4	5-15				
CP2-SB	624	5.2	5-15				
CP3-SB	624	5.2	5-15				
CP4-SB	828	6.9	5-15				
CP5-SB	828	6.9	5-15				
CP6-SB	828	6.9	5-15				



DIMENSIONS: Freight Class: 100													
Model	Height		Length		Width		Counter Top Cutouts		R290 🙈	R290 Cube		Crated Ship Weight	
	in.	cm	in.	cm	in.	cm	Width.	Length	Grams	crated	lbs.	kg	
CP1-SB	24.58	62.4	18.3	46.5	25.5	64.8	24.75	17.25	70	10.2	150	68.2	
CP2-SB	24.58	62.4	32.13	81.6	25.5	64.8	24.75	31.25	110	16.2	160	72.3	
CP3-SB	24.58	62.4	46.13	117.2	25.5	64.8	24.75	45.25	110	22.1	175	90.9	
CP4-SB	24.58	62.4	60.13	152.7	25.5	64.8	24.75	59.25	110	28.1	200	113.6	
CP5-SB	24.58	62.4	74.13	188.3	25.5	64.8	24.75	73.25	110	34.0	230	138.6	
CP6-SB	24.58	62.4	88.13	223.9	25.5	64.8	24.75	87.25	120	40.0	280	159.1	

This product may be covered by one or more patents or pending patent applications. For more details, see: www.dukemfg.com/patents

R290 Drop In Cold Pan - Slimline



2-section With Drains - Shown

ELECTRICAL SPECIFICATIONS:

*"If using optional electric condensate evaporator add 300 Watts, 2.6 Amps"

Model	120 Volt - HZ 60							
Model	Watts*	Amps*	NEMA					
CP2-SL	528	4.4	5-15					
CP3-SL	528	4.4	5-15					

Control Specifications Control Cutout 3.500 4.250 6.08 3.72 3.84 3.75 Cold Pan Cold Pan

Freight Class: 100

DIMENSIONS:

Transport and the state of the												
Model	Height		Length		Width		Counter Top Cutouts		R290	Cube ft.	Crated Ship Weight	
	in.	cm	in.	cm	in.	cm	Length	Width	Grams	crated	lbs.	kg
CP2-SL	24.58	62.4	48.83	124.0	17.37	44.1	47.75	16.75	80	20.2	165	74.84
CP3-SL	24.58	62.4	70.83	179.9	17.37	44.1	47.75	16.75	100	28.4	225	102.06

INSTALLATION

WHEN MOUNTING BY THE OVERHANGING TOP RIM (IN A CUT-OUT IN THE COUNTER TOP):

The underside of the overhanging top rim should have applied to it a generous bead of food grade silicone sealant before the unit is set into the cut-out in the counter top. In order to relieve part of the load from the top rim, the unit should be supported from below with metal components in a manner compatible with the construction of the counter. Any excess sealant which squeezes out between the unit top rim and counter top should be wiped off before the sealant cures or stripped away with a sharp knife after curing.

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing this equipment.

When installing a drop-in refrigerated unit it is essential to insure proper air flow into and out of the cabinet surrounding the unit. Improper ventilation will cause your compressor to burn out and will void the warranty.

This equipment is to be installed to comply with applicable Federal, State or Local Plumbing Code. Consult local codes as to the type of drain hook-up required in your area.

DRAIN CONNECTION:

The unit is designed to be used with or without a drain hook-up. The drain is supplied with a hose attached for use with a drain pan, or may be hooked up to a floor or sink drain.

Electricity and water do not mix. Unplug the unit before cleaning. If repairs are required, use a qualified service agent. While repairs are being made, be sure the unit is not plugged in. Do not store highly combustible substances on or near the unit. Be sure the compressor compartment has adequate ventilation.

ACAUTION

ELECTRICAL CONNECTIONS:

The unit is designed to be operated on one (1) 15 amp dedicated circuit. The unit must be grounded. The receptacle, wired circuit, and protection should meet the required local codes for proper operation. If the supply cord is damaged, it must be replaced by the manufacturer, it's service agent or an authorized service company in order to avoid a hazard.

ACAUTION

The cold pan is designed to hold pre-chilled products at suitable serving temperature. It is **not** designed to chill products or store them for long periods of time. Due to the variety of food products served from the cold pan, they should be stirred periodically to maintain consistent temperature. Foods that are not stirred periodically can become too warm on the top surface and freeze at the bottom.

Prior to use, the unit should be turned on to lower the pan temperature before the chilled product is set in place. The unit should shut down daily for defrosting and cleaning.

INSTALLATION - Continued



EXPLOSION HAZARD:

 Do NOT puncture refrigerant tubing. Use extreme caution and follow all local/regional codes for transportation or relocation of hydrocarbon equipment.

This unit uses R290 flammable refrigerant. Follow handling instructions carefully in compliance with US and/or Canadian governmentregulations.

This unit must be installed in an isolated cabinet with a partition when necessary.

Keep all ventilation openings clear of obstructions at all times.

Do NOT use electrical appliances inside of the food storage compartments or inside the cabinet under the unit.

Do NOT use mechanical devices or any other means to accelerate the defrosting process.

- Cut the appropriate opening in the countertop for the unit being installed. Refer to "Countertop Cutout Dimensions" in this section.
- 2. Cut opening in the cabinet for intake vent.
 - a. The cutout must be 100% of the condenser coil size.
- 3. Cut opening in the cabinet for exhaust vent.
 - a. The opening for the exhaust must be cut no more than 1" (25 mm) from cabinet floor.
 - b. The opening should be a minimum of 150% of the intake area
 - c. The opening for the exhaust must be located on the opposite side of the condensing unit.

Survey the installation site

Take into account the need for louvered or grill-style openings in the cabinetry to provide proper ventilation for the unit as well as access to the control panel.

One of these ventilation openings must be in front of the condensing coils with the other on the opposite side of the condensing coils. If multiple refrigerated wells are installed in the same counter, each unit must intake cool air and expel hot air. The user side of the cabinet can be fully open or the cabinet may be enclosed on all four sides. The condensing unit/ condenser mechanical assembly must be isolated from GFCI outlets, adjacent appliances and other electronic devices not supplied with the original appliance using full partitions.

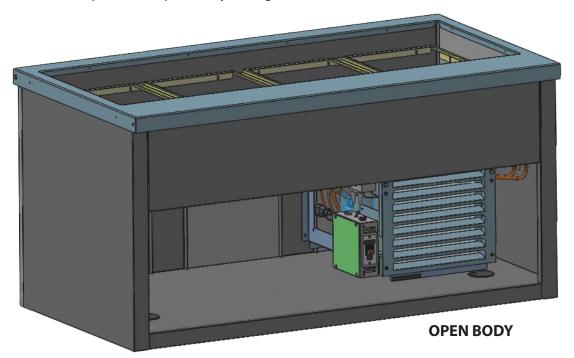
Partitions must fully extend from the back of the unit to the front user side and from the bottom base shelf to the bottom of the counter top.

The cabinet must be designed to allow access for ventilation of 100% intake area and a minimum of 150% exhaust area, control access, and maintenance/cleaning access.

INSTALLATION - continued

DROP-IN COLD PAN - SELF CONTAINED - USER SIDE OPEN BODY

Air intake louver mounts directly to cage support. No shroud or exhaust required for open body configuration.

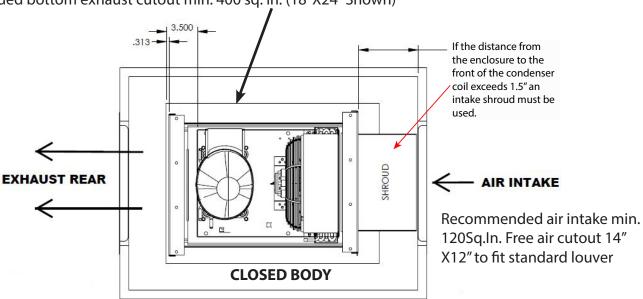


DROP-IN COLD PAN - AIR FLOW CLOSED BODY

Exhaust options rear or bottom required for closed body configuration.

EXHAUST OPTION-1

Recommended bottom exhaust cutout min. 400 sq. in. (18"X24" Shown)



EXHAUST OPTION 2

Recommended rear exhaust min. 200 Sq. In. Free air cutout 18"X16" to fit standard louver.

INSTALLATION - continued

MARNING

- Cabinet design may be fully enclosed as show in installation figure A, or in a cabinet with the user side open as shown in figure B.
- Unit must be isolated using a full partition within the cabinet between all other appliances and electrical devices
- If a GFCI is to be installed in any cabinet configuration, a full partition is required to isolate it from the condenser coil assembly. In addition to isolating the GFIC.i
- Convenience Outlets are prohibited and cannot be used with R290 models.
- DO NOT use installation cabinet for storage of any items. Cabinet must be used only to keep condensing unit isolated from all other objects.

KNOCKOUT FOR PARTITION WALL

If the application requires that a hole or an electrical knockout be placed in the partition wall, please adhere to the following requirements.

- The electrical cut-out shall be located at the bottom rear of the partition wall, 3" from the rear wall and 3" from the base and be no more than 2-34" in diameter to allow the usage of a 3" diameter bladder grommet or air-block grommet must be used.
- Once the electrical cord has been installed, verify that the there are not air gaps surrounding the grommet or supply cord. If there are any air gaps present, the area must be sealed with silicone sealant.

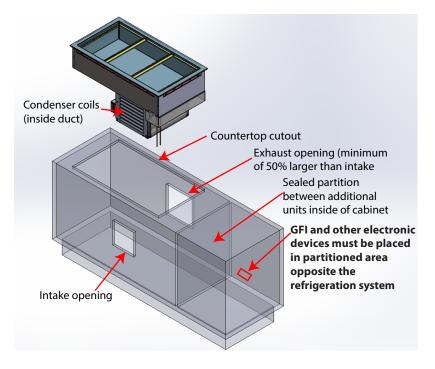


Figure A

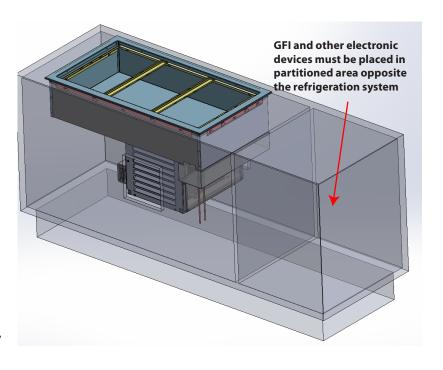


Figure B

OPERATION - Touch Screen Control

Step 1 Touch on/off button.

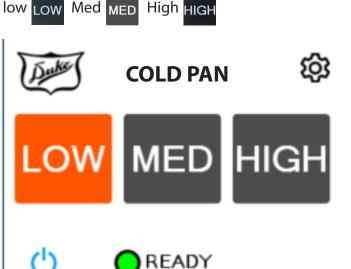


Step 2

low Low

Select the applicable mode of the unit:

Med MED

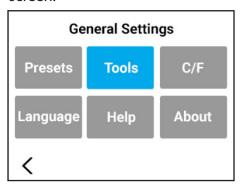


OPERATION - Changing Settings

Step 1 Press settings button (to enter General Settings Screen.

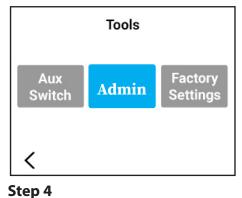


Step 2 Press "Tools" to enter the Config screen.

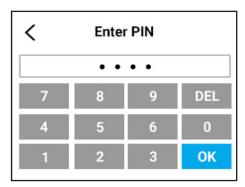


Step 3

Press "Admin" button.

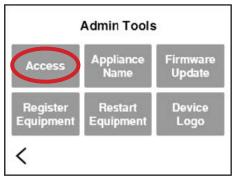


Enter pin number. "0654" and select OK.



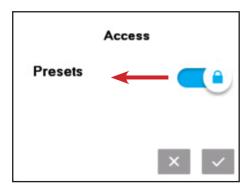
Step 5

Press "Access."



Step 6

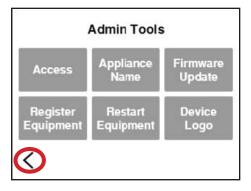
Slide the lock icon to unlock the presets. Press the check √ to save the setting.



OPERATION - Changing Settings

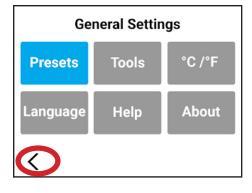
Step 7

You will need to select the back arrow 2 times to get back to the Genneral Settings screen.



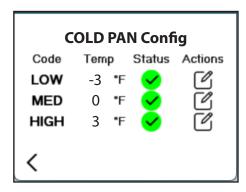
Step 8

Press the Presets button to enter the Configuration page.



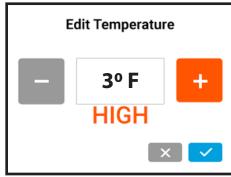
Step 9

Select the edit icon next to the well to be reprogrammed.



Step 10

Using the plus or minus buttons set the new temperature and touch the check " $\sqrt{}$ " to save. To abort touch the X button.

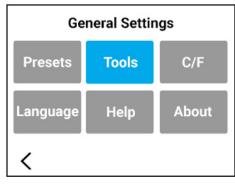




NOTE: Settings are not food temperatures.

Step 11

Pressing the back arrow will take you to the General setting screen where you press "Tools"

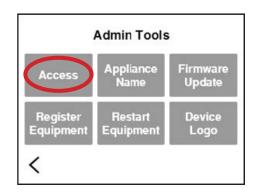


Step 12

Press "Admin."

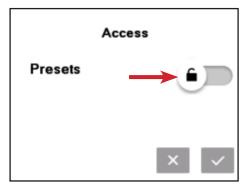
Step 13

Press "Access."



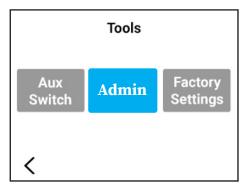
Step 14

Slide the lock icon to lock the presets, Press the check to save the setting.



Step 15

Press the back arrow 3 times to return to the main screen.





OPERATION - Optional Mecanical Control

General Operating Instructions:

Turn Cold Panl Unit on by positioning power switch to the up position.



Adjusting Thermostatic Digital Control:

Your cold pan has been preset in the factory to satisfy most applications. Due to conditions which may exist in your operation, you may need to adjust the thermostat on your unit for colder or warmer temperature. The thermostat is located under the unit and to the left of the condensing unit. The temperature of your unit may be adjusted by pressing the up (to raise) or down (to lower) arrow. The set point is shown in the display and starts blinking. Press up or down arrow to change set point. After 3 seconds the display stops blinking and returns to actual temperature.

CLEANING INSTRUCTIONS - DROP-IN COLD PAN

GENERAL CLEANING:

- Always clean equipment thoroughly before first use.
- · Scoop out any remaining ice.
- Drain any ice melt from unit.

ACAUTION Make sure there is a bucket or that the unit is above a floor drain.

DAILY CLEANING:

- Clean unit, using warm, soapy water or mild detergent.
- A plastic scouring pad and a mild detergent may be used to remove hardened food.

AWARNING Do not use steel wool as this will cause the unit to rust and void any warranty.

PREVENTIVE MAINTENANCE

REFRIGERATED UNIT CONDENSER COILS:

- Turn off unit at breaker before doing extensive refrigeration compartment cleaning or servicing.
 - If any buildup is present on the coil take the following steps:
- If the buildup on the coil consists of only light dust and debris the condenser coil can be cleaned with a simple brush, heavier dust build up may require a vacuum or even compressed air to blow through the condenser coil.
- If heavy grease is present degreasing agents are available for refrigeration use and specifically for the condenser coils. The condenser coil may require a spray with the degreasing agent and then blown through from the inside out, with compressed air.
- Failure to maintain a clean condenser coil can initially cause high temperatures and
 excessive run times. Continuous operation with dirty or clogged condenser coils can
 result in compressor or fan failures. Neglecting the condenser coil cleaning procedures
 will void any warranties associated with the compressor or cost to replace the
 compressor and/or fan.

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