

# AP20BCF-1T Modular Blast Chiller & Shock Freezer

PROJECT NAME:	
ITEM #:	
OTV PEOILIPED.	

### **SPECIFICATIONS**

**GENERAL:** The microprocessor control system provides a choice of operating cycles: soft chilling, hard chilling, shock freezing, thawing, sterilizing, and defrost. One core temperature probe is provided for accurate control of temperature within the product. Model AP20BCF-1T is sized for one mobile rack (not included) with maximum dimensions of 26"W x 32"D x 73.5"H. See chart on reverse side for production capacity.

**PERFORMANCE:** Blast chilling (soft or hard) lowers the food core temperature from 160°F to 38°F within 90 minutes. The shock freezing cycle will lower the temperature from 160°F to 0°F within 240 minutes. Times will vary somewhat, depending on the food quantity, initial temperature, density, moisture content, specific heat, and type of container. The airflow has a high velocity, indirect pattern designed to cool all levels at identical rates. Time/temperature chilling rates meet or exceed all FDA, NSF, and state regulations.

**CONSTRUCTION:** The chilling cabinet is constructed of polished type 304 stainless steel, with 3" of CFC-free, high density polyurethane insulation. The interior corners are fully rounded. The door is equipped with a removable magnetic gasket. All motors are sealed ball bearing wash-down type. The cabinet floor is a 7/8" thick insulated panel with NSF cove and is provided with an integral 2" long ramp to facilitate access. A minimum 15" clear space required above the cabinet for service. Provide 12" clearance on the hinge side of the cabinet to allow for door opening.

**ASSEMBLY:** Unit manufactured using insulated panels and camlock style assembly allowing for easy ingress through standard building door openings.

**REFRIGERATION SYSTEM:** The cabinet refrigeration system is complete with all components, including controls, evaporator and blower system. The evaporator is of the forced convection type and designed specifically for blast chilling operation. Air circulation motors, multi-fin and tube type coils, and fan guards are contained within the cabinet. Access to the evaporator for cleaning shall be via a convenient hinged, swing-out ventilator panel. Fan motors have inherent overload protection and the fan blades are guarded to prevent injury.

MICROPROCESSOR CONTROL SYSTEM: The solid state electronic control panel is user friendly, easy to reach, and can be set for automatic or manual operation. The core probe continuously measures the product temperature during the chilling cycles. Easy to read VFD display and buzzer alarm are standard features. All settings are programmable by the operator. The standard operating cycles include the following:



**Shock Freezing:** This cycle is designed to avoid damage to food structure, keeping the food free of large ice crystals. The air temperature is lowered to and held at a range of -25°F to -15°F. The freezing cycle is completed when the food core temperature reaches 0°F.

**Soft Chilling:** The air temperature is held in the range of 28°F to 35°F, ideal for delicate food items. The chilling cycle is completed when the food core temperature reaches 38°F to 40°F.

**Hard Chilling:** The air temperature is lowered to and held within a range of 0°F to 10°F. When the food core temperature reaches 60°F, the air temperature rises to a range of 28°F to 35°F. The chilling cycle is completed when the food core temperature reaches 38°F to 40°F.

**Thawing (Optional):** Air temperature is carefully monitored and alternates between gentle heat and refrigeration to safely thaw food product.

**Holding:** At the end of any cycle, the unit will automatically switch to a holding mode which will keep the food at holding temperature until the cycle is stopped.

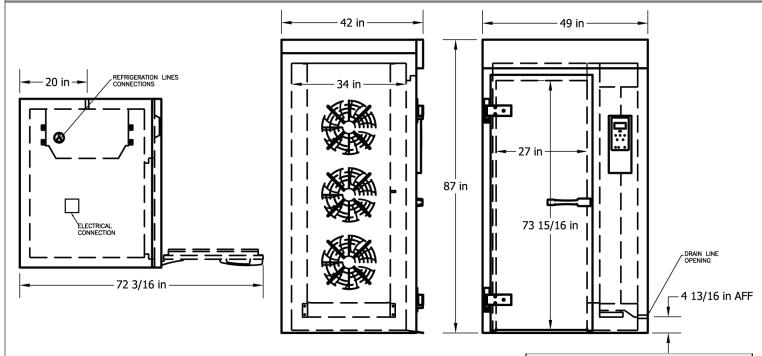
# **ADDITIONAL FEATURES:**

**Defrost:** A heated defrost cycle is included within the unit's controller programming.

**Product Names:** Up to 150 food product names can be programmed by the user for easy reference on finished product.



# AP20BCF-1T Modular Blast Chiller/Shock Freezer



CABINET DATA		CAB	SHIPPING			
MODEL	V	HZ	РН	A	REQUIRED CIRCUIT [A]	WEIGHT [LBS]
AP20BCF-1T	208	60	1	8.2	15.0	1,588

	PRODUCT TEMPERATURE RANGE				
CYCLE TIME	160°F - 38°F	160°F - 0°F			
90 Minutes	200 lbs.				
120 Minutes	230 lbs.				
240 Minutes		120 lbs.			

MODEL	CAPACITY [BTU/H] REFRIGERANT		LIQUID LINE [IN]	SUCTION LINE [IN]	CONDENSING UNIT
AP20BCF-1T	28,000	404A	1/2	1 <sup>1</sup> / <sub>8</sub>	RCU3BCF

**Note:** Refrigeration shall be a medium/low temp. system (40°F to -40°F SST), rated @ 14°F SST, 105°F Cond.

#### **OPTIONS:**

**Cabinet Sterilization:** The ultraviolet system sterilizes all metal surfaces within the cabinet in a preset time of 30 minutes.

**Data Printer:** A strip recorder provides a record of the unit's operating parameters during a cycle and the following holding period. The information recorded includes date, time, cycle identification, product name, and core temperature at prescribed intervals.

**Label Printer:** Prints a record of times and temperatures at critical points during the cycle. The data is printed on an adhesive label to affix to the food product.

**Extra Food Probes:** One probe is standard, up to three additional food probes can be provided.

**PC Connection Kit:** Allows for complete two-way communication between the unit and a remote PC. Supported functions include programming, system diagnostics, operation, and downloading of data for HACCP compliance.

## Air-Cooled Remote Condensing Unit.

### Water-Cooled Remote Condensing Unit.

**2" or 4" Insulated Floor Panels:** Allow for height increase to detail shown above.

**Thaw Cycle:** Allows for thaw cabinet functionality. Thaw capacity is 120 lbs. in 8 hours.

• **Automatic Mode:** Air temperature is controlled by monitoring the food product using a non-heated probe. Once the product reaches 38°F the cycle is complete and the unit switches into holding mode.

**Mobile Racks:** Model AP20BCF-1T can accommodate one mobile rack with maximum dimensions of 26" wide, 32" deep and 73 1/2" high.

**Second Door:** For pass-thru operation (increases depth by 2")

# **Prison Security Package.**

**INSTALLATION:** A detailed installation manual is provided. It must be carefully followed to ensure proper operation and to protect your rights under the warranty.

**WARRANTY:** The warranty covers all parts found to be defective and the labor required to replace them for a period of one year from the date of shipment. Warranty excludes food probes.