

Project			
AIA #	SIS #		
Item #	Quantity	C.S.I. Section 114000	



TBC-SERIES Double Depth Roll-In/Roll-Thru Blast Chiller Self-Contained Maintenance System ST





This unit is listed to the applicable UL, CSA and NSF Standards by an approved NRTL. Consult the factory or unit's data plate for approval information.

AVAILABLE CONFIGURATIONS

Model	Hinging	Туре	Other Feature
TBC2H-7	Left	Roll-In	No
TBC2H-8	Right	Roll-In	No
TBC2HR-2	FHR/RHR	Roll-Thru	No

STANDARD PRODUCT FEATURES

- High Performance Dual Refrigeration System (requires connection to an adequately sized remote condensing unit for blast chill operation)
- Easy to Use Touch Screen Control with Automatic or Manual Operation
- Adjustable Product Target Temps (40 to -5°F) or Cycle Times
- Four Chill Settings: Blast Chill, Speed, Energy Saving & Delicate
- On-Board Cycle Data Printer
- Four (4) Removable Food Probes
- USB Port, 90-Day Cycle Data Memory
- Stainless Steel Exterior & Interior
- Long Life EZ-Clean Door Gaskets
- Accommodates Two (1) 27" W x 29" D x 72" H Roll-In Racks
 - (front to back)
- Easy to Maintain Front Facing Condenser Coils (maintenance system only)
- 3-Year Parts & Labor Warranty
- 2-Years Additional Compressor Parts Warranty

ACCESSORIES & OPTIONS (*field installed)

- Label Printer (adds "-LP" to device number)
- **D** Two (2) Automatic Electric Condensate Evaporators (field installed)
- Special Roll-In Rack
- Two (2) Air-Cooled Remote Condensing Units with R-407A Refrigerant
- Two (2) Water-Cooled Remote Condensing Units with

R-407A Refrigerant

Approved by_

Date

Approved by



MODEL

TBC2H (please note that this model ships in two cartons and requires assembly at the jobsite)



TBC-SERIES Double Depth Roll-In/Roll-Thru Blast Chiller Self-Contained Maintenance System

MODEL

TBC2HR (please note that this model ships in two cartons and requires assembly at the jobsite)





MODEL

TBC2H & TBC2HR (please note that these models ship in two cartons and require assembly at the jobsite)

MODELS	TBC2H TBC2HR
DIMENSIONAL DATA	
Net Capacity cu. ft.	72.3 (2046 l)
L x D x H - Overall in.	48 ¹ / ₂ (123.2 cm) x 37 ⁵ / ₈ (95.5 cm) ¹ x 90 ³ / ₈ (229.6 cm)
Depth - Over Body in.	68 (172.7 cm)
Depth - Door Open 90° in.	99¼ (252 cm) 130¼ (331 cm)
Clear Door W x H in.	27¼ (69.3 cm) x 74⅓ (188.3 cm)
Rack Capacity	2
Pan Capacity ² - Per Rack	(13) 18" x 26" (26) 12" x 20"
Product Capacity lbs.	600 (272.2 kg)
ELECTRICAL DATA	
Voltage Plug	(2) 115/60/1 n/a
Feed Wires with Ground	(2) 4
Full Load Amps Req'd Circuit	(2) 16.0 20 Amp
REFRIGERATION DATA	
Refrigerant	(2) R-448A
Refrigerant Charge Amt. oz.	(2) 22 (623.7 gr)
BTU/HR H.P. ² - Maintenance ³	(2) 2820 ½ HP
Recommended BTU/HR - Chill ⁴	(2) 18,700 ^₅
SHIPPING DATA - Note this p jobsite	roduct ships in two cartons for assembly at the
L x D x H Crated in.	(2) 66 (167.6 cm) x 45 (114.3 cm) x 97 (246.3 cm)
Volume Crated cu. ft.	(2) 167 (4728.9 l)
Uncrated Crated Weight lbs.	(2) 1550 (703.0 kg) (2) 1490 (675.8 kg)

NOTES:

- 1. Depth on roll-thru model TBC2HR is 75-1/,".
- 2. Rack capacities vary, estimated capacity shown.
- 3. Self-contained maintenance systems only (Based on a 90°F ambient and 0°F evaporator).
- 4. Requires provision of two remote R-407A condensing units for blast chill operation. Figure shown are recommended BTU's (using R-407A refrigerant) required at the
- evaporator. Succing 1/ and liquid line connection is 1/ "
- 5. Suction line connection is $\frac{7}{8}$ " and liquid line connection is $\frac{1}{2}$ ".

ESTIMATED PERFORMANCE CHART

TBC2H/TBC2HR Product Load	Chill Time From 135ºF to 40ºF
400 (lbs.)	90
500 (lbs.)	120
600 (lbs.)	155

EQUIPMENT SPECIFICATIONS CONSTRUCTION, HARDWARE, INSULATION

Cabinet exterior and interior are constructed of stainless steel. The exterior cabinet top, back and bottom are constructed of heavy gauge galvanized steel. The interior floor is constructed of stainless steel and insulated with 3/4" of resilient cork. Door is equipped with a cylinder lock and guaranteed for life self-closing cam-lift hinges with a stay open feature at 120°. Gasket profile and durable long life material simplify cleaning and increase overall gasket life. Anti condensate heaters are located behind the door opening. Both the cabinet and door are insulated with an average of 2" thick high density, non-CFC, 100% foamed in place polyurethane.

SELF-CONTAINED REFRIGERATION SYSTEMS

Two high-capacity, self-contained maintenance refrigeration systems using environmentally friendly, non-flammable R-448A refrigerant are coupled with an advanced air circulation system to rapidly chill hot food through the HACCP danger zone. They feature thermostatic expansion valves, high-humidity evaporator coils, high speed evaporator fans, air-cooled hermetic compressors, and hot gas defrost. A floor drain or optional condensate evaporators are required for condensate removal. The condenser coils are front facing for easy cleaning. Defrost occurs automatically, does not interrupt chill cycles in progress, nor starting new chill cycles, and intervals between defrost cycles are adjustable to better suit differing operational needs.

CONTROLLER / BASIC OPERATION

The easy to use touch screen control is water resistant and protected from damage by a heavy gauge stainless steel bezel. Using the three probes provided, it monitors cycle progress and records all HACCP required data. This information can then be printed at the end of the cycle using the on-board printer and/or retrieved later from memory, where it is stored for 90-days.

Chill cycles can be started in one of two ways using either the AUTO (touch free) or MANUAL (fully adjustable) operating mode. In AUTO mode, placing any probe in 90°F or above product will initiate a chill cycle using the default parameters (standard blast chill with a target temperature of 37°F) in approximately 30-seconds. In MANUAL mode, the operator can adjust all the cycle parameters to suit their needs. Upon pressing START the chill cycle will commence using these inputs. Failure to complete cycle programming in MANUAL mode will result in the chill cycle starting automatically in 5-minutes after the last button push (provided at least one probe had been placed in product 90°F or above).

Product and/or user names can be manually input at the beginning or end of the chill cycle if desired. Customized chill cycle parameters (i.e. chill recipes) can loaded and stored in advance, by name.

Once a chill cycle is started, it will continue without interruption until either the target temperature (using probes) or time (without using probes) is met. When using the default target temperature of 37°F, rapidly circulating air will cycle between 10-14°F or as low as -25°F when the target temperature is set at -5°F.

Upon cycle completion, the blast chiller will notify the operator with an audible alarm, and automatically revert to maintenance mode, holding the product at the target temperature until removed.

INTERIOR ARRANGEMENTS

Accommodates two roll-in racks with maximum dimensions (wheels inboard of frame) of 27" wide x 29" deep x 72" high. Racks are not supplied standard but are available as an optional accessory.

DOMESTIC WARRANTY

Both a three year parts and labor warranty and an additional two year compressor parts warranty (for a total of five) are provided standard.

CONTINUED PRODUCT DEVELOPMENT MAY NECESSITATE SPECIFICATION CHANGES WITHOUT NOTICE.



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TBC-SERIES Blast Chiller Remote Optional 4 HP Air Cooled Condensing Unit

Remote Condensing Unit For Models TBC1H, TBC1HR, TBC2H** & TBC2HR** Only

Each TBC1H (roll-in), TBC1HR (roll-thru), TBC2H (roll-in) & TBC2HR (roll-thru) must be connected to a remote R-407A refrigeration system (parallel rack or individual condensing unit(s)) capable of moving 18,700 BTU/HR (37,400 for models TBC2H & TBC2HR) from the evaporator(s) at -10°F SST after all piping losses are accounted for.

These optional condensing units are adequate for the load only when located and piped so that there is insignificant pressure drop between the condensing unit and the cabinet it serves. Models TBC2H and TBC2HR require two [2] if selecting condensing units from this page.

If condensing unit location or piping results in significant pressure drop, the party designing, installing and commissioning the system must select an appropriately-sized condensing unit from another source.

PART NUMBERS	BCACC-60111-10 BCACC-60123-10					
Evaporator Temp Range	+25 to -25°F					
Refrigerant	R-407A ¹					
Voltage	208-230/60/1 208-230/60/3					
Minimum Circuit Ampacity	38.9 31.5					
Maximum Fuse	60 Amp 50 Amp					
Comp RLA	28.2 22.3					
Comp LRA	146.0 114.0					
Liquid Line	1/2 SWT					
Suction Line	1-1/8 SWT					
Length in.	28.2					
Width in.	44.1					
Height in.	26.8					
Net Weight lbs.	300					
Receiver Capacity @ 90%	16.7 lbs.					
Air Flow - CFM	4240					

Optional Weather Hood for Condensing Unit Part# BCACC-60122-10 ** Two Required for TBC2H & TBC2HR





Note: 1. Optional R-404A & R-448A systems are available upon request





Performance Data Based On 90°F Ambient, 40°F Return Gas, 5°F Sub Cooling (BCACC-60111-10 & BCACC-60123-10)

EVAP TEMP (°F)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
UNIT CAPACITY (BTU/HR)	-	-	12,200	13,800	15,500	17,400	19,500	21,700	24,200	26,800	29,700	32,800	36,100	39,600	-	-	-	-



TBC-SERIES Blast Chiller Remote Optional 4 HP Water Cooled Condensing Unit

Remote Condensing Unit For Models TBC1H, TBC1HR, TBC2H** & TBC2HR** Only

Each TBC1H (Roll-In), TBC1HR (Roll-Thru), TBC2H (Roll-In), & TBC2HR (Roll-Thru) must be connected to a remote R-407A refrigeration system (parallel rack or individual condensing unit(s)) capable of moving approximately 18,700 BTU/HR (37,400 for models TBC2H & TBC2HR) from the evaporator(s) at -10°F SST after all piping losses are accounted for.

These optional condensing units are adequate for the load only when located and piped so there's insignificant pressure drop between the condensing unit and the cabinet it serves. Models TBC2H and TBC2HR require two (2) if selecting condensing units from this page.

If condensing unit location or piping results in significant pressure drop, the party responsible for designing, installing & commissioning the system must select an appropriately-sized condensing unit from another source.

** Two Required for TBC2H & TBC2HR

PART NUMBERS	BCACC-60228-10 BCACC-60229-00
Evaporator Temp Range	+25 to -25°F
Refrigerant	R-407A ¹
Voltage	208-230/60/1 208-230/60/3
Minimum Circuit Ampacity	35.3 27.9
Maximum Fuse	60 Amp 50 Amp
Comp RLA	28.2 22.3
Comp LRA	146.0 114.0
Water Connection In	3/4 FPT
Water Connection Out	7/8 OD Sweat
Length in.	27.2
Width in.	21.6
Height in.	21.1
Net Weight lbs.	175
Receiver Capacity @ 90%	16.6
Air Flow - CFM	n/a
Water Flow -GPM	1.7 to 5.0
Pressure Drop	1.6 to 2.1

Note: 1. Optional R-404A & R-448A systems are available upon request

Performance Data Based On 105°F Condensing, 40°F Return Gas, 5°F Sub Cooling (BCACC-60228-10 & BCACC-60229-00)

EVAP TEMP (°F)	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25
UNIT CAPACI- TY (BTU/HR)	11,200	12,700	14,400	16,200	18,200	20,400	22,900	25,600	28,600	31,900	35,500	39,400
COND WATER (GAL/MIN)	1.7	1.9	2.1	2.3	2.6	2.8	3.1	3.4	3.8	4.2	4.6	5.0

CONTINUED PRODUCT DEVELOPMENT MAY NECESSITATE SPECIFICATION CHANGES WITHOUT NOTICE.