
	<p align="center">Lancaster County School District</p> <p align="center"><i>Amendment #2</i></p>	<p>Solicitation Number 202305 Amendment Issue Date 10/13/2022 Solicitation Issue Date 10/4/2022 Procurement Officer Trevor Hammond, NIGP-CPP, CPPB Phone (803) 416-8828 E-Mail Address Procurement@lcsd.k12.sc.us</p>	
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DESCRIPTION: Custom Bally Walk-In Cooler & Freezer Units for Multiple School Locations

The Term "Offer" Means Your "Bid" or "Proposal".

SUBMIT OFFER BY (Opening Date/Time): **10/25/22 at 10:00 AM – EST**

See "Deadline for Submission of Offer" provision

QUESTIONS MUST BE RECEIVED BY: **10/20/22 at 10:00 AM - EST**

See "Questions from Offerors" provision

NUMBER OF COPIES TO BE SUBMITTED: **One (1) original**

Offers must be submitted in a sealed package. Solicitation Number & Opening Date must appear on package exterior.

SUBMIT YOUR OFFER TO THE FOLLOWING ADDRESS:

<p>PHYSICAL & MAILING ADDRESS:</p> <p>Lancaster County School District Attn: Melinda Adams 300 South Catawba Street Lancaster, SC 29720</p> <p align="right"><small>See "Submitting Your Offer" provision</small></p>

CONFERENCE TYPE: N/A DATE & TIME: <small>(As appropriate, see "Conferences - Pre-Bid/Proposal" & "Site Visit" provisions)</small>		PRE-BID LOCATION: N/A	
AWARD & AMENDMENTS		Notice of Intent to Award will be posted on or about 10/26/2022 at the physical address stated above and at the following web address: https://sites.google.com/lcsd.k12.sc.us/lcsd-procurement/solicitations-awards .	
You must submit a signed copy of this form with your offer. By submitting a bid or proposal, you agree to be bound by the terms of the solicitation. You agree to hold your offer open for a minimum of sixty (60) calendar days after the opening date.			
NAME OF OFFEROR <small>(Full legal name of business submitting the offer)</small>		OFFEROR'S TYPE OF ENTITY: <small>(Check one)</small> <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Partnership <input type="checkbox"/> Corporate entity (not tax-exempt) <input type="checkbox"/> Tax exempt corporate entity <input type="checkbox"/> Government entity (federal, state, or local) <input type="checkbox"/> Other _____	
AUTHORIZED SIGNATURE <small>(Person signing must be authorized to submit binding offer to enter contract on behalf of Offeror named above.)</small>		(See "Signing your Offer" provision)	
TITLE <small>(Business title of person signing above)</small>		(See "Signing your Offer" provision)	
PRINTED NAME <small>(Printed name of person signing above)</small>		DATE SIGNED	
Instructions regarding Offeror's name: Any award issued will be issued to, and the contract will be formed with, the entity identified as the offeror above. An offer may be submitted by only one legal entity. The entity named as the offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, i.e., a separate corporation, partnership, sole proprietorship, etc.			
STATE OF INCORPORATION		<small>(If offeror is a corporation, identify the State of Incorporation.)</small>	
TAXPAYER IDENTIFICATION NO.		<small>(See "Taxpayer Identification Number" provision)</small>	

PAGE TWO
(Return Page Two with Your Offer)

HOME OFFICE ADDRESS (Address for offeror's home office / principal place of business)	NOTICE ADDRESS (Address to which all procurement and contract related notices should be sent.) (See "Notice" clause)
	Area Code - Number - Extension Facsimile
	E-mail Address

PAYMENT ADDRESS (Address to which payments will be sent.) (See "Payment" clause)	ORDER ADDRESS (Address to which purchase orders will be sent) (See "Purchase Orders and "Contract Documents" clauses)
___ Payment Address same as Home Office Address ___ Payment Address same as Notice Address (check only one)	___ Order Address same as Home Office Address ___ Order Address same as Notice Address (check only one)

ACKNOWLEDGMENT OF AMENDMENTS							
Offeror acknowledges receipt of amendments by indicating amendment number and its date of issue. (See "Amendments to Solicitation" Provision)							
Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date	Amendment No.	Amendment Issue Date

DISCOUNT FOR PROMPT PAYMENT (See "Discount for Prompt Payment" clause)	10 Calendar Days (%)	20 Calendar Days (%)	30 Calendar Days (%)	___ Calendar Days (%)
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Minority Participation: Are you a SC Certified Minority Vendor: Yes No ; If yes, SC Certification # _____
 Are you a Non SC Certified Minority Vendor - Yes No

PREFERENCES - A NOTICE TO VENDORS (SEP. 2009): On June 16, 2009, the South Carolina General Assembly rewrote the law governing preferences available to in-state vendors, vendors using in-state subcontractors, and vendors selling in-state or US end products. This law appears in Section 11-35-1524 of the South Carolina Code of Laws. A summary of the new preferences is available at www.procurement.sc.gov/preferences. **ALL THE PREFERENCES MUST BE CLAIMED AND ARE APPLIED BY LINE ITEM, REGARDLESS OF WHETHER AWARD IS MADE BY ITEM OR LOT. VENDORS ARE CAUTIONED TO CAREFULLY REVIEW THE STATUTE BEFORE CLAIMING ANY PREFERENCES. THE REQUIREMENTS TO QUALIFY HAVE CHANGED. IF YOU REQUEST A PREFERENCE, YOU ARE CERTIFYING THAT YOUR OFFER QUALIFIES FOR THE PREFERENCE YOU'VE CLAIMED. IMPROPERLY REQUESTING A PREFERENCE CAN HAVE SERIOUS CONSEQUENCES.**

PREFERENCES - ADDRESS AND PHONE OF IN-STATE OFFICE: Please provide the address and phone number for your in-state office in the space provided below. An in-state office is necessary to claim either the Resident Vendor Preference (11-35-1524(C)(1)(i)&(ii)) or the Resident Contractor Preference (11-35-1524(C)(1)(iii)). Accordingly, you must provide this information to qualify for the preference. An in-state office is not required, but can be beneficial, if you are claiming the Resident Subcontractor Preference (11-35-1524(D)).

___ In-State Office Address same as Home Office Address
 ___ In-State Office Address same as Notice Address

Effective this date, this amendment forms part of the contract documents and modifies the original IFB.

The Revised Bid Schedule included in Amendment #1 must reflect the revised specifications attached to Amendment #2. The revised specifications removes the Smart Vap.

All other requirements of the solicitation remain unchanged.



Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2744-001-R03-LC
Item No:
Job Name: Buford Middle School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Attn:

Phone: **Fax:** (704)521-8801

Outdoor Next To Building

NSF APPROVED

Bally Prefabricated Exterior Dimensions:

23'-6³/₄"(l*) x 8'-2³/₄"(w*) x 8'-6"(h)
 2 Compartments 1 Tiers With Floor 4" Floor
 Ceiling: Single Span

Panel Thickness:

4 in. Exterior Vertical Used (7'-10") with 4 in. Partition, 4 in. Floor, 4 in. Ceiling

Details and specifications for Quote No: 2744-001-R03-LC

Comments:

Base Finish

Vertical and Ceiling Panels: Embossed Galvalume (26 GA)

Special Finishes:

- Exterior Door - Embossed Tan
- Exterior Door Frame - Embossed Tan
- Exterior Floor - Embossed Tan
- Interior Floor - Aluminum Treadplate .125" Thick
- Wall 1 - Exterior Verticals - Embossed Tan
- Wall 2 - Exterior Verticals - Embossed Tan
- Wall 3 - Exterior Verticals - Embossed Tan
- Wall 4 - Exterior Verticals - Embossed Tan

Doors/Openings:

- Wall 2 Door 1 (1) 36" x 78" Hinged Door In a 46"
- Wall 2 Door 1 (1) Ext.Alum Diam/Tread Ramp (30-36" Door)
- Wall 2 Door 1 (1) Locking Bar (2 piece) (with Release)
- Wall 2 Door 1 (1) Strip Curtain (36" Door and Under)
- Wall 2 Door 1 (1) Super Door 36" Wide and Under, 30" High
- Wall 2 Door 1 (1) Tamperproof Screws (per door) - Non Prison
- Partition 1 Door 1 (1) 30" x 78" Hinged Door In a 46"
- Partition 1 Door 1 (1) Bally Standard Pressure Relief Port (< 400 sq/ft)
- Partition 1 Door 1 (1) Super Door 36" Wide and Under, 30" High

Accessories and Extras:



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2744-001-R03-LC
Item No:
Job Name: Buford Middle School
Date: 10/12/2022 **PVD:** 10/3/2022
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 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

- (3) 48" LED KEIL 48x754-CL-N Light
 - 40° F to 100° F(Range)
- (67) L/F REB(Reinforced Exterior Bottom)'s
- (209) S/F Outdoor Membrane Roof
 40 mil standard
- (209) S/F Tapered Insul 1/8" on 12"
 (1) The loads are 26 Lbs psf live and 115 Mph RC II Wind. The customer must verify that the loads shown on this quote comply with local building codes.
- (28) WA-3 Wall Anchor
 Outside Vertical 4"
- (8) WA-4 Wall Anchor
 Outside Corner 4"

Floor Options:

- (209) S/F 1/2" Plywood Foamed in Panel

Refrigeration:

- (1) BEZA 007 H8 HS2DB (208-230/1/60) w/ smart speed
 Scroll Unit 7190 BTU
- (1) BEZA 020 L8 HS2D (208-230/1/60) w/ smart speed
 Includes defrost contactor for 1 Evap.
- (1) BLP207LE-S2D 208-230/1/60
 2 Fan 7160 BTU/h
- (1) BLP209-MA-S1D 115/1/60
 2 Fan 8700 BTU/h
- (1) Refrigeration is calculated for standard use at a box temperature of
 35° F. for the cooler and -10° F. for the freezer with a condensing
 unit ambient of 105° F.
- (1) Time Clock 8145 (shipped loose) 115/1/60

Estimated Shipping:

Weight: 6,731.35
 Destination: Lancaster, SC, 29720



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Deviations (Alternates, Remarks, Clarifications, Etc.):

Bally Floor Panels are capable of supporting up to 800 lbs. Per Sq/Ft uniformly distributed stationary loading. Bally does not recommend the use rolling loads of heavy carts, pallet jacks or fork lifts on top of the floors. Warranty for floors subjected to this type of use would not be covered by Bally.

Exclusions (Items Not Supplied by Bally):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Shelving, Racks, Interior Accessories | <input checked="" type="checkbox"/> Caulking and Sealants |
| <input type="checkbox"/> Labor on Warranties | <input type="checkbox"/> Refrigeration Systems |
| <input checked="" type="checkbox"/> Alarm Systems | <input checked="" type="checkbox"/> Refrigeration Accessories |
| <input checked="" type="checkbox"/> Supervision | <input checked="" type="checkbox"/> Closure Panel and Trim |
| <input checked="" type="checkbox"/> Tubing, Wiring for Rfg. Equipment | <input checked="" type="checkbox"/> Sleeves, Penetrations, Escutcheon Plates |
| <input checked="" type="checkbox"/> Compressor Rack | <input checked="" type="checkbox"/> Floor Insulation and Vapor Barrier |

Cancelled Orders: Cancelled unshipped standard walk-ins will be charged a 30% restocking fee plus the cost of special panels. Cancelled refrigeration systems will be charged a 30% restocking fee and the cost of any freight accrued. Buy-out items will be charged a 25% restocking fee plus any freight accrued.

Agency Ratings: Bally units comply or surpass applicable Flame Spread-25, UL, UL 723, & NSF standards in a manner conforming to ASTM E-84, and Factory Mutual standards.

Quotation Limitations: This quotation was based upon the specifications given to Bally which may possibly be incomplete. Bally is not responsible for items missing from the quotation due to incomplete or excluded items in the specifications received from the customer. The customer is responsible for reviewing the quotation for omissions or deviations from the specifications given to Bally. All portions of the quotation are subject to revision upon receipt of detailed specifications or if changes are made following the delivery of the original quotation. Quotations expire on the date indicated on Page 1 of the Quote. Approval drawings must be returned within 60 days of receipt of the purchase order. The order must ship within the agreed upon time frames or current lead times, but no later than 7 months. Any deviations to this quotation (dimensions or specification changes) will require updated pricing.

Panel Construction: Bally Panels are manufactured with environmentally friendly HFC 245-FA polyurethane foam. This polyurethane foam offers the highest thermal insulation value and the most energy efficiency per cubic inch in comparison to similar foams. It has a zero Ozone Depletion Potential (ODP) and a low Global Warming Potential (GWP). It is not considered a Volatile Organic Compound (VOC) in the US. Standard 4" Bally panels meet the 2009 Federal Energy Standards.

Refrigerants: Unless otherwise specified, refrigeration systems are quoted with environmentally friendly HFO R448A refrigerant. It has a Low Global Warming Potential (GWP) and the EPA lists it as an acceptable substitute for R404A and other high GWP refrigerants.

Automatic Door Closers: Bally includes automatic door closers and spring loaded hinges on all doors 42" wide and smaller as a standard feature with no additional charge that meet the 2009 Federal Energy Standards.

Motors: Bally units are quoted with EC and PSC motors in compliance with federal energy standards, for increased energy savings.

Lighting: Bally units are quoted with lighting in compliance with federal Energy Standards for increased energy savings.

Optional Features: Bally offers additional optional energy-saving features such as Walk-In Alarm & Light Management systems that comply or surpass the 2009 Federal energy regulations.



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Morehead City, NC 28557 (800) 242-2559

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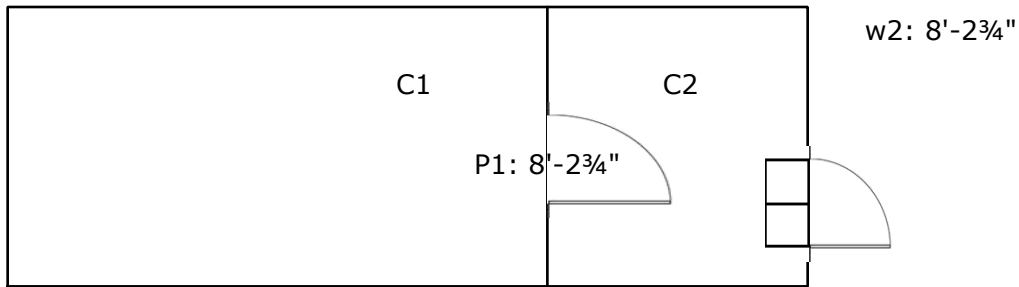
Attn:

Phone: **Fax:** (704)521-8801

This drawing is for reference purposes only and it not intended to be a formal scale model.

w3: 23'-6³/₄"

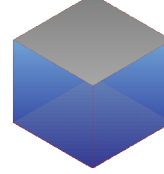
w4: 8'-2³/₄"



w1: 23'-6³/₄"

DOOR 1: Wall2 36" x 78" Hinged Door In a 46" Centered Hinge:Left Orientaion:Regular
 PARTITION 1: Wall 1 Offset:7'-8" from wall 2 Partition Length:8'-2³/₄"
 PARTITION DOOR 1: Partition1 30" x 78" Hinged Door In a 46" Offset:4'-0" from wall 2 Hinge:Left

Buford Middle School Cooler LOAD CALCULATION



COOLING REQUIREMENTS									
Application	General Walk-in Cooler			Location	Outdoor Warm				
Internal Temp	35 °F	Internal RH	84%	External Temp	95 °F	External RH	55%		
Wall Load	859 BTUH	Infiltration	2,140 BTUH	Products	367 BTUH	Miscellaneous	639 BTUH		
	21%		53%		9%		16%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.11	35.0	8.20	8.50	50	
	Door			15.00	35.0	3.00	6.50	20	
Right End	Urethane, Standard panels	4.000	0.14	28.11	99.0	8.20	8.50	70	159
Front	Urethane, Standard panels	4.000	0.14	28.11	99.0	8.20	8.50	50	114
	Door			15.00	99.0	3.00	6.50	20	83
Left End	Urethane, Standard panels	4.000	0.14	28.11	99.0	8.20	8.50	70	159
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		8.20	8.20	67	179
Ceiling	Urethane, Standard panels	4.000	0.14	28.11	104.0	8.20	8.20	67	165
VOLUME (ft³)		572	TOTAL WALL, FLOOR AND CEILING LOAD					859	
INFILTRATION LOAD : ESTIMATED BY VOLUME AND USAGE									
Box Usage	Internal Temp (°F)	Internal Rh (%)	External Temp (°F)	External Rh (%)	Ventilation (CFM)	Load (BTUH)			
Heavy	35	84	95	55		2,140			
PRODUCT LOADS									
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)				
General, Mixed Products, Approximation	1,143	45.0	35.0	24	367				
TOTAL PRODUCT WEIGHT (lbs)		1,143	TOTAL PRODUCT LOAD			367			
MISCELLANEOUS LOADS									
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)				
	LIGHTING	1	W/ft²	24	229				
2	EVAPORATOR MOTORS	60	W	24	409				
TOTAL MISCELLANEOUS LOAD					639				
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
4,004	10%	4,405	16	6,607	R448A	60	10.1	0.5	105
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number	Description	Voltage	Rating (BTUH)				
Condensing Unit	1	BEZA007H8-HS2D	EZ-Line Scroll Condensing Units-Air	208-230/1/60	6,591				
Evaporator	1	BLP209MA-S1D	Low Profile Evaporator	115/1/60	8,843				
SYSTEM BALANCE									
Fan Load (BTUH)	Suction Temp (°F)	Evaporator TD (°F)	System Capacity (BTUH)						
	26.6	7.9	6,892						

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA007H8-HS2D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 1
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|--|---|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Anti-short cycle time delay Adjustable pressure fan cycling control on 2 fan models only Copper tubing secured with cushion clamps Crankcase heater Discharge line temperature sensor Fan Guard | <ul style="list-style-type: none"> Fan motors are inherently protected with internal overloads Pre-formed piping Receiver with fusible plug and liquid shut off valve Suction Service valve Adjustable flooded head pressure control (unless otherwise indicated) Units are shipped with Helium holding charge Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> Welded hermetic Scroll compressor Adjustable low pressure control with flex hose / fixed high pressure control ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design Compatible with Low GWP Refrigerants Outdoor weatherproof pre-painted steel cabinet |

MODEL OPTIONS (* = Shipped Loose)		
OPTION PACKAGES <input checked="" type="checkbox"/> Small B (Good@Warm/Moderate) <input type="checkbox"/> Small N (Better@Warm/Moderate) <input type="checkbox"/> Small P (Best@Warm/Moderate) <input type="checkbox"/> Small D (Good@Moderate/Cold) <input type="checkbox"/> Small J (Better@Moderate/Cold) <input type="checkbox"/> Small Q (Best@Moderate/Cold) <input type="checkbox"/> Small K <input type="checkbox"/> Small H <input type="checkbox"/> 115V Control Circuit ADJUSTABLE PRESSURE CONTROLS <input type="checkbox"/> Johnson Dual with flex hose <input type="checkbox"/> Separate High/Low <input type="checkbox"/> Separate High/Low: MAN Reset on HP BALL VALVE <input type="checkbox"/> *Liquid Line <input type="checkbox"/> Liquid Line <input type="checkbox"/> *Suction Line <input type="checkbox"/> Suction Line CAPACITY CONTROL - HOT GAS BYPASS <input type="checkbox"/> To Inlet of Evaporator <input type="checkbox"/> To Suction Line <input type="checkbox"/> Compressor Circuit Breaker CONDENSING UNIT PRISON PACKAGE <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Crankcase Pressure Regulator CONTACTORS <input type="checkbox"/> 30A Contactor <input type="checkbox"/> 40A Contactor <input type="checkbox"/> 60A Contactor	DEFROST KIT (USE W/KE2 EVAP EFF) <input type="checkbox"/> Up to 30A per Evap <input type="checkbox"/> 35A to 50A per Evap <input type="checkbox"/> Over 50A per Evap <input type="checkbox"/> Discharge Air Hood <input type="checkbox"/> Discharge Line Check Valve DISCONNECT SWITCH <input type="checkbox"/> Fused <input type="checkbox"/> Non-Fused EC FAN MOTORS + SPEED CONTROLLER <input type="checkbox"/> All Motors Variable Speed - 230V Units ELECTRONIC PRESSURE CONTROL <input type="checkbox"/> Low Pressure Control <input type="checkbox"/> High Pressure Control <input type="checkbox"/> Export Crating EXTENDED 4-YEAR COMPRESSOR WARRANTY <input type="checkbox"/> Copeland <input type="checkbox"/> Extended Leg Kit COIL COATING <input type="checkbox"/> E-Coat FIN MATERIAL <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Hail Guard for Condenser <input type="checkbox"/> Heated and Insulated Receiver HOUSING MATERIAL <input type="checkbox"/> Stainless Steel <input type="checkbox"/> Insulated Suction Line	LIQUID LINE FILTER + SIGHT GLASS <input checked="" type="checkbox"/> Sealed <input type="checkbox"/> Replaceable <input type="checkbox"/> Liquid Line Lock-Out Relay LIQUID LINE SOLENOID VALVE <input type="checkbox"/> *Standard 230V Coil <input type="checkbox"/> *Standard 115V Coil OIL SEPARATOR <input type="checkbox"/> With Oil Filter and Solenoid <input type="checkbox"/> One Time Pump Down <input type="checkbox"/> Oversized Receiver <input type="checkbox"/> Pump Down Toggle Switch <input type="checkbox"/> QuickVac Valves <input type="checkbox"/> Receiver Inlet Ball Valve <input type="checkbox"/> Single Point Electrical SUCTION ACCUMULATOR <input type="checkbox"/> With Heat Exchanger <input type="checkbox"/> Without Heat Exchanger SUCTION FILTER <input type="checkbox"/> Sealed Type <input type="checkbox"/> Replaceable Core TIME CLOCK <input type="checkbox"/> Paragon 8145 Style <input type="checkbox"/> *230V Paragon 8145 Style <input checked="" type="checkbox"/> *115V Paragon 8145 Style <input type="checkbox"/> Wind Guard <input type="checkbox"/> Less Flooding Valve(s)

VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY
208-230/1/60		R448A			0.7Hp		26.6 °F		105 °F		6892 BTUH
FANS			COMPRESSOR			CIRCUIT TOTAL					
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡	
1	100W	1	ZB06KAE-PFV	1	6	36	7		8.5	15	
LIQUID		3/8 in	SOUND	-		REC CAPACITY	5 lb		APPROVALS		
SUCTION		5/8 in	WEIGHT	183 lb		REF CHARGE	3 lb				

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection
 MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.
 AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA007H8-HS2D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 1
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Time Clock - 115V Paragon 8145 Style

115V Defrost timer is time initiated, temperature or pressure terminated with a timed failsafe. Timer is shipped loose in a box for field installation.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 1
BEZA007H8-HS2D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **Buford Middle School SC**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

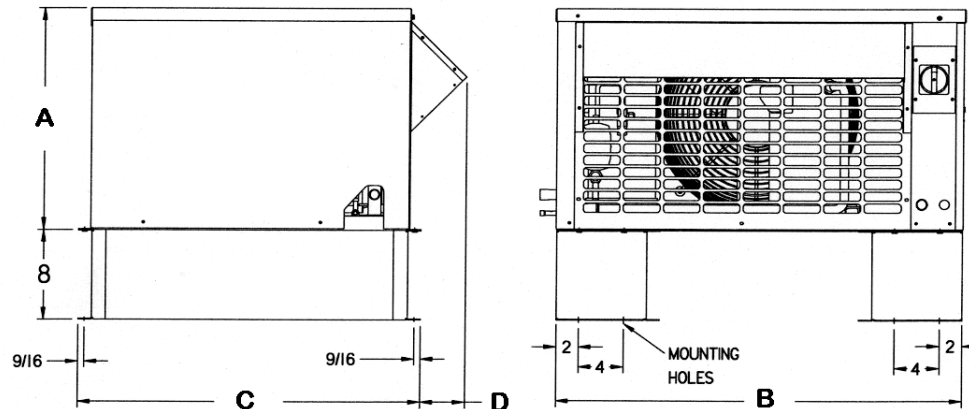
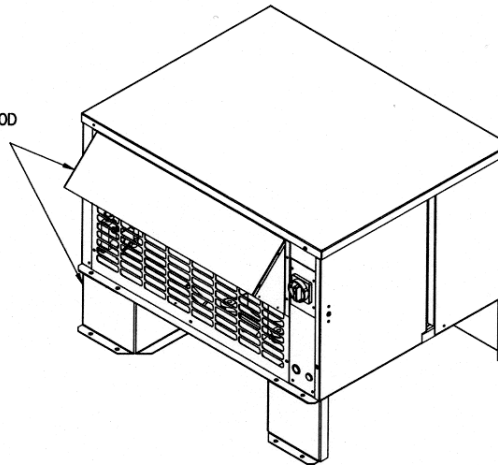
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	5/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	183 lb
REFRIGERANT CHARGE	3 lb
RECEIVER CAPACITY	5 lb

APPROVALS			

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NOTES:

AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP209MA-S1D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 3
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|---|--|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Factory installed solenoid valve wire harness Heavy gauge textured aluminum cabinet construction resists scratches/corrosion Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> Hinged drain pan with central universal drain connection (3/4" drain) Front access to spacious electrical and header compartments Schrader connection on suction header Attractive and durable high density polyethylene fan guards Ultra efficient Electronically Commutated Motor (ECM) | <ul style="list-style-type: none"> ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design 6 FPI AWEF = 9.0 Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A/R407C |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> Sporlan TXV, LLSV,T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit ELECTRONIC CONTROLLER <input type="checkbox"/> KE2 Temp+Defrost <input type="checkbox"/> SmartVap+ Control Board and Display	<p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <input type="checkbox"/> Evaporator Disconnect Switch <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed <p>ROOM THERMOSTATS</p> <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> P-trap per evap required outside of box

VOLTAGE		SYSTEM REFRIGERANT			AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
115/1/60		R448A			1500 CFM		27.1 °F		35 °F		6892 BTUH	
FANS				HEATERS				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡			
2	0.07HP	1				2	120	2.3	15			
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY					APPROVALS		
SUCTION		7/8 in	WEIGHT	70 lb	REF CHARGE	1 lb						

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP209MA-S1D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 3
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV,T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 3

BLP209MA-S1D

LOW PROFILE EVAPORATOR

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **Buford Middle School SC**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

Dimensions shown are for standard unit less options.

DIMENSIONS

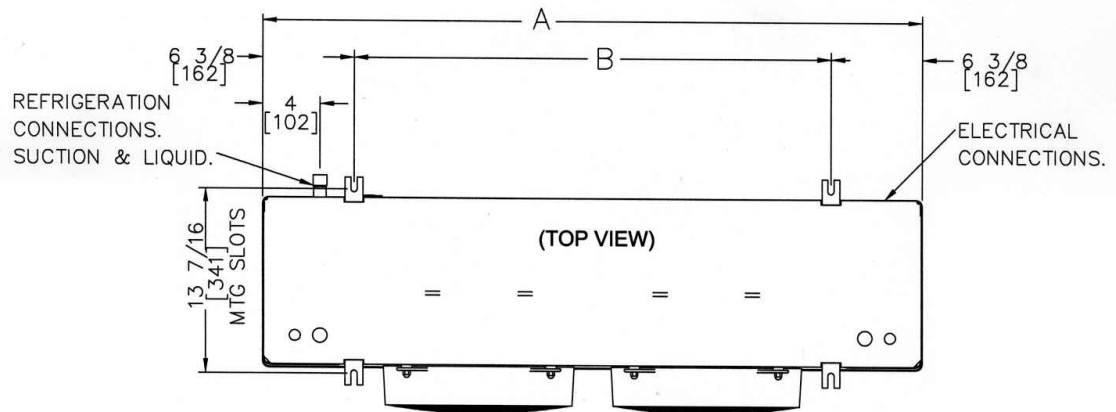
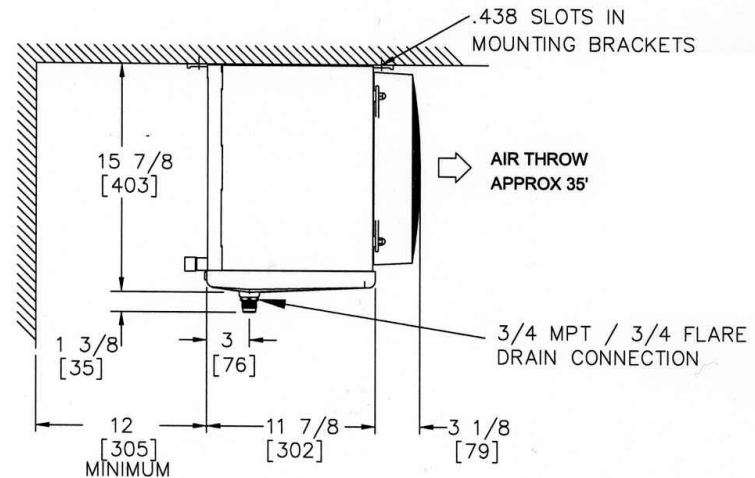
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	70 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

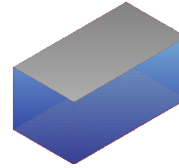
APPROVALS

NOTES:





Revised Specifications
Freezer LOAD CALCULATION



COOLING REQUIREMENTS									
Application	General Walk-in Freezer			Location	Outdoor Warm				
Internal Temp	-10 °F	Internal RH	95%	External Temp	95 °F	External RH	55%		
Wall Load	2,533 BTUH	Infiltration	640 BTUH	Products	196 BTUH	Miscellaneous	814 BTUH		
	61%		15%		5%		19%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft ²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.11	99.0	15.50	8.50	132	511
Right End	Urethane, Standard panels	4.000	0.14	28.11	45.0	8.30	8.50	51	100
	Door			15.00	45.0	3.00	6.50	20	71
Front	Urethane, Standard panels	4.000	0.14	28.11	99.0	15.50	8.50	132	511
Left End	Urethane, Standard panels	4.000	0.14	28.11	99.0	8.30	8.50	71	274
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		15.50	8.30	129	546
Ceiling	Urethane, Standard panels	4.000	0.14	28.11	104.0	15.50	8.30	129	522
VOLUME (ft³)		1,094	TOTAL WALL, FLOOR AND CEILING LOAD					2,533	
INFILTRATION LOAD : ESTIMATED BY DOORS AND OPENINGS									
Quantity	Door or Opening Type	Height (in)	Width (in)	External Temp (°F)	External Rh (%)	Open Time (hrs)	Curtains	Load (BTUH)	
1	Door	78.00	36.00	45.0	55.0	0.18	None	640	
TOTAL INFILTRATION LOAD ESTIMATED BY DOORS AND OPENINGS								640	
PRODUCT LOADS									
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)				
General, Mixed Products, Approximation	1,094	0.0	-10.0	24	196				
TOTAL PRODUCT WEIGHT (lbs)	1,094	TOTAL PRODUCT LOAD			196				
MISCELLANEOUS LOADS									
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)				
	LIGHTING	1	W/ft ²	24	439				
2	EVAPORATOR MOTORS	60	W	22	375				
TOTAL MISCELLANEOUS LOAD					814				
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
4,184	10%	4,602	18	6,136	R448A	60	10	0.5	105
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number	Description	Voltage	Rating (BTUH)				
Condensing Unit	1	BEZA020L8-HS2D	EZ-Line Scroll Condensing Units-Air	208-230/1/60	6,384				
Evaporator	1	BLP207LE-S2D	Low Profile Evaporator	208-230/1/60	7,189				
SYSTEM BALANCE									
Fan Load (BTUH)		Suction Temp (°F)		Evaporator TD (°F)		System Capacity (BTUH)			
		-19.5		9		6,516			

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA020L8-HS2D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 4
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|---|---|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Anti-short cycle time delay Adjustable pressure fan cycling control on 2 fan models only Copper tubing secured with cushion clamps Crankcase heater Fan Guard | <ul style="list-style-type: none"> Fan motors are inherently protected with internal overloads Pre-formed piping Receiver with fusible plug and liquid shut off valve Suction Service valve Adjustable flooded head pressure control (unless otherwise indicated) Units are shipped with Helium holding charge Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> Welded hermetic Scroll compressor Adjustable low pressure control with flex hose / fixed high pressure control ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design Compatible with Low GWP Refrigerants Outdoor weatherproof pre-painted steel cabinet |
|---|---|---|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> 1 Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p>ELECTRIC DEFROST KIT</p> <p><input checked="" type="checkbox"/> 1 DFK-02</p> <p>115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p><input type="checkbox"/> Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p><input type="checkbox"/> Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p><input type="checkbox"/> Discharge Air Hood</p> <p><input type="checkbox"/> Discharge Line Check Valve</p> <p><input type="checkbox"/> Discharge Line Temperature Sensor</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p><input type="checkbox"/> Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p><input type="checkbox"/> Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p><input type="checkbox"/> Hail Guard for Condenser</p> <p><input type="checkbox"/> Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p><input type="checkbox"/> Insulated Suction Line</p> <p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input type="checkbox"/> 1 Sealed</p> <p><input type="checkbox"/> Replaceable</p>	<p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p><input type="checkbox"/> One Time Pump Down</p> <p><input type="checkbox"/> Oversized Receiver</p> <p><input type="checkbox"/> Pump Down Toggle Switch</p> <p><input type="checkbox"/> QuickVac Valves</p> <p><input type="checkbox"/> Receiver Inlet Ball Valve</p> <p><input type="checkbox"/> Single Point Electrical</p> <p><input type="checkbox"/> Sub Cooling Circuit</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input type="checkbox"/> *115V Paragon 8145 Style</p> <p><input type="checkbox"/> Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
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VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY	
208-230/1/60		R448A			2Hp		-19.5 °F		105 °F		6516 BTUH	
FANS				COMPRESSOR				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡		
1	100W	1	ZF07KAE-PFV	1	13.9	75	14.9		18.4	30		
LIQUID		3/8 in	SOUND	-		REC CAPACITY	11 lb					APPROVALS
SUCTION		7/8 in	WEIGHT	315 lb		REF CHARGE	4 lb					

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 3.1 for R404A/R507/ AWEF = 3.08 for R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants.

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA020L8-HS2D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 4
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Electric Defrost Kit - DFK-02

Electric Defrost Kit includes:

Mechanical Time Clock:

Time initiated temperature terminated with a timed failsafe.

Contactors:

Three pole definite purpose, 230V or 115V coil as defined by the control circuit voltage

HtrCont1x 40A

Fuse Blocks:

1x 30A (2P) Class CC

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

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NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 4
BEZA020L8-HS2D
EZ-LINE SCROLL
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **Buford Middle School SC**
SUBMITTED BY : **Laura Craig**

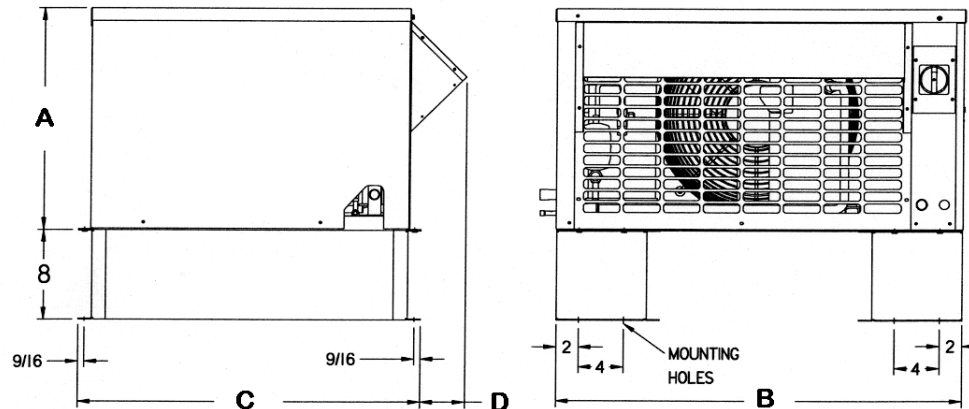
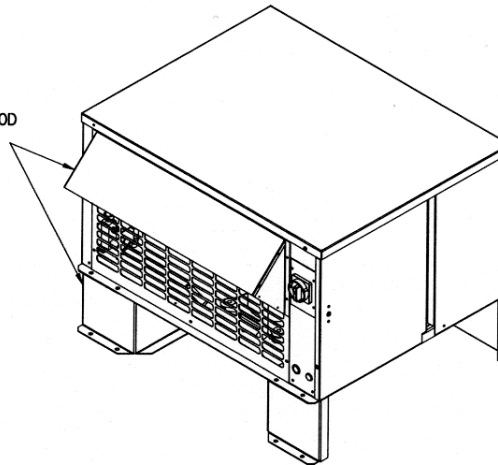
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	7/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	315 lb
REFRIGERANT CHARGE	4 lb
RECEIVER CAPACITY	11 lb

APPROVALS			

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NOTES:

AWEF = 3.1 for R404A/R507/ AWEF = 3.08 for R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP207LE-S2D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 5
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|--|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Factory installed solenoid valve wire harness Heavy gauge textured aluminum cabinet construction resists scratches/corrosion Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> Hinged drain pan with central universal drain connection (3/4" drain) Front access to spacious electrical and header compartments Schrader connection on suction header Attractive and durable high density polyethylene fan guards | <ul style="list-style-type: none"> Ultra efficient Electronically Commutated Motor (ECM) ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design 6 FPI Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV, T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Adaptive Control <input type="checkbox"/> *KE2 Adaptive Control <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit	<p>ELECTRONIC CONTROLLER</p> <input type="checkbox"/> SmartVap+ Control Board and Display <p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed ROOM THERMOSTATS <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box <input checked="" type="checkbox"/> 1 Insulated drain line requires heat - 20W/ft

VOLTAGE		SYSTEM REFRIGERANT		AIR FLOW	EVAP. TEMP	BOX TEMP	CAPACITY
208-230/1/60		R448A		1500 CFM	-19 °F	-10 °F	6516 BTUH
FANS			HEATERS			CIRCUIT TOTAL	
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS
2	0.07HP	0.6				1.2	120
			DEFROST HTRS		8.2		1890
							10.3
							15
DISTRIBUTOR	3/8 in	SOUND	-	REC CAPACITY			APPROVALS
SUCTION	7/8 in	WEIGHT	76 lb	REF CHARGE	1 lb		

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP207LE-S2D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Buford Middle School SC	DATE : 11 Oct 2022
ORDER # : 06338.47502.00469-A00	ITEM # : 5
QUOTE # : Q10EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

**Installation Requirements - Insulated drain line
requires heat - 20W/ft**

Freezer condensate drain lines must be insulated and heated with a minimum of 20 watts per foot.

**Installation Requirements - Minimum slope of 1" per
foot on all drain lines**

Bally recommends a minimum slope of 1" per foot on all drain lines.

**Installation Requirements - P-trap per evap required
outside of box**

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV, T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 5
BLP207LE-S2D
LOW PROFILE
EVAPORATOR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

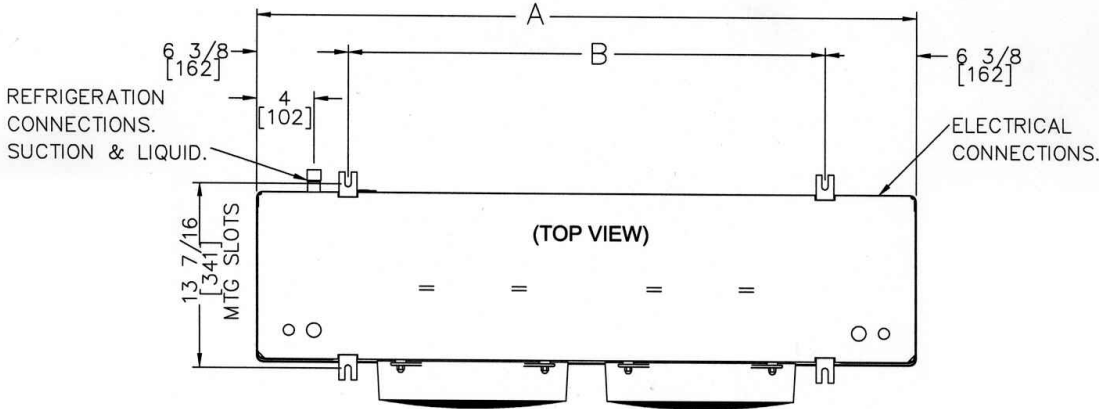
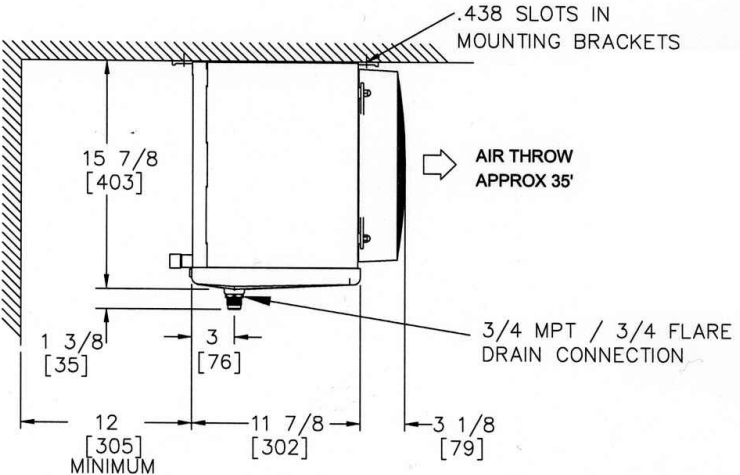
DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **Buford Middle School SC**
SUBMITTED BY : **Laura Craig**

Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	76 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

APPROVALS			



NOTES:



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2760-002-R03-LC
Item No:
Job Name: Clinton Elementary School Lancaster SC
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Indoor Structure

NSF APPROVED

Bally Prefabricated Exterior Dimensions:

7'-9"(l) x 6'-9½"(w) x 8'-6"(h)
 1 Compartments 1 Tiers With Floor 4" Floor
 Ceiling: Single Span

Panel Thickness:

4 in. Exterior Vertical Used (7'-10") with 4 in. Floor, 4 in. Ceiling

Details and specifications for Quote No: 2760-002-R03-LC

Comments:

Base Finish

Vertical and Ceiling Panels: Embossed Galvalume (26 GA)

Special Finishes:

Interior Floor - Aluminum Treadplate .125" Thick

Doors/Openings:

- Wall 1 Door 1 (1) 36" x 78" Hinged Door In a 46"
- Wall 1 Door 1 (1) 57 1/2" Door Section
- Wall 1 Door 1 (1) Bally Standard Pressure Relief Port (< 400 sq/ft)
- Wall 1 Door 1 (1) Ext.Alum Diam/Tread Ramp (30-36" Door)
- Wall 1 Door 1 (1) Strip Curtain (36" Door and Under)
- Wall 1 Door 1 (1) Super Door 36" Wide and Under, 30" High

Accessories and Extras:

- (1) 48" LED KEIL 48x754-CL-N Light
 - 40° F to 100° F(Range)

Floor Options:

- (56) S/F 1/2" Plywood Foamed in Panel

Refrigeration:

- (1) BEZA 020 L8 HT3D (208-230/3/60) w/ smart speed
 Includes defrost contactor for 1 Evap.
- (1) BLP207LE-S2D 208-230/1/60
 2 Fan 7160 BTU/h
- (1) Refrigeration is calculated for standard use at a box temperature of
 -10° F. with a condensing unit ambient of 105° F.

Estimated Shipping:

Weight: 2,320.70
Destination: Lancaster, SC, 29720



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2760-002-R03-LC
Item No:
Job Name: Clinton Elementary School Lancaster SC
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Deviations (Alternates, Remarks, Clarifications, Etc.):

Quoting Bally Standard Pre-assembled Remote Refrigeration.

Bally Floor Panels are capable of supporting up to 800 lbs. Per Sq/Ft uniformly distributed stationary loading. Bally does not recommend the use rolling loads of heavy carts, pallet jacks or fork lifts on top of the floors. Warranty for floors subjected to this type of use would not be covered by Bally.

Exclusions (Items Not Supplied by Bally):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Shelving, Racks, Interior Accessories | <input checked="" type="checkbox"/> Caulking and Sealants |
| <input type="checkbox"/> Labor on Warranties | <input type="checkbox"/> Refrigeration Systems |
| <input checked="" type="checkbox"/> Alarm Systems | <input checked="" type="checkbox"/> Refrigeration Accessories |
| <input checked="" type="checkbox"/> Supervision | <input checked="" type="checkbox"/> Closure Panel and Trim |
| <input checked="" type="checkbox"/> Tubing, Wiring for Rfg. Equipment | <input checked="" type="checkbox"/> Sleeves, Penetrations, Escutcheon Plates |
| <input checked="" type="checkbox"/> Compressor Rack | <input checked="" type="checkbox"/> Floor Insulation and Vapor Barrier |

Cancelled Orders: Cancelled unshipped standard walk-ins will be charged a 30% restocking fee plus the cost of special panels. Cancelled refrigeration systems will be charged a 30% restocking fee and the cost of any freight accrued. Buy-out items will be charged a 25% restocking fee plus any freight accrued.

Agency Ratings: Bally units comply or surpass applicable Flame Spread-25, UL, UL 723, & NSF standards in a manner conforming to ASTM E-84, and Factory Mutual standards.

Quotation Limitations: This quotation was based upon the specifications given to Bally which may possibly be incomplete. Bally is not responsible for items missing from the quotation due to incomplete or excluded items in the specifications received from the customer. The customer is responsible for reviewing the quotation for omissions or deviations from the specifications given to Bally. All portions of the quotation are subject to revision upon receipt of detailed specifications or if changes are made following the delivery of the original quotation. Quotations expire on the date indicated on Page 1 of the Quote. Approval drawings must be returned within 60 days of receipt of the purchase order. The order must ship within the agreed upon time frames or current lead times, but no later than 7 months. Any deviations to this quotation (dimensions or specification changes) will require updated pricing.

Panel Construction: Bally Panels are manufactured with environmentally friendly HFC 245-FA polyurethane foam. This polyurethane foam offers the highest thermal insulation value and the most energy efficiency per cubic inch in comparison to similar foams. It has a zero Ozone Depletion Potential (ODP) and a low Global Warming Potential (GWP). It is not considered a Volatile Organic Compound (VOC) in the US. Standard 4" Bally panels meet the 2009 Federal Energy Standards.

Refrigerants: Unless otherwise specified, refrigeration systems are quoted with environmentally friendly HFO R448A refrigerant. It has a Low Global Warming Potential (GWP) and the EPA lists it as an acceptable substitute for R404A and other high GWP refrigerants.

Automatic Door Closers: Bally includes automatic door closers and spring loaded hinges on all doors 42" wide and smaller as a standard feature with no additional charge that meet the 2009 Federal Energy Standards.

Motors: Bally units are quoted with EC and PSC motors in compliance with federal energy standards, for increased energy savings.

Lighting: Bally units are quoted with lighting in compliance with federal Energy Standards for increased energy savings.

Optional Features: Bally offers additional optional energy-saving features such as Walk-In Alarm & Light Management systems that comply or surpass the 2009 Federal energy regulations.



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2760-002-R03-LC
Item No:
Job Name: Clinton Elementary School Lancaster SC
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Attn:

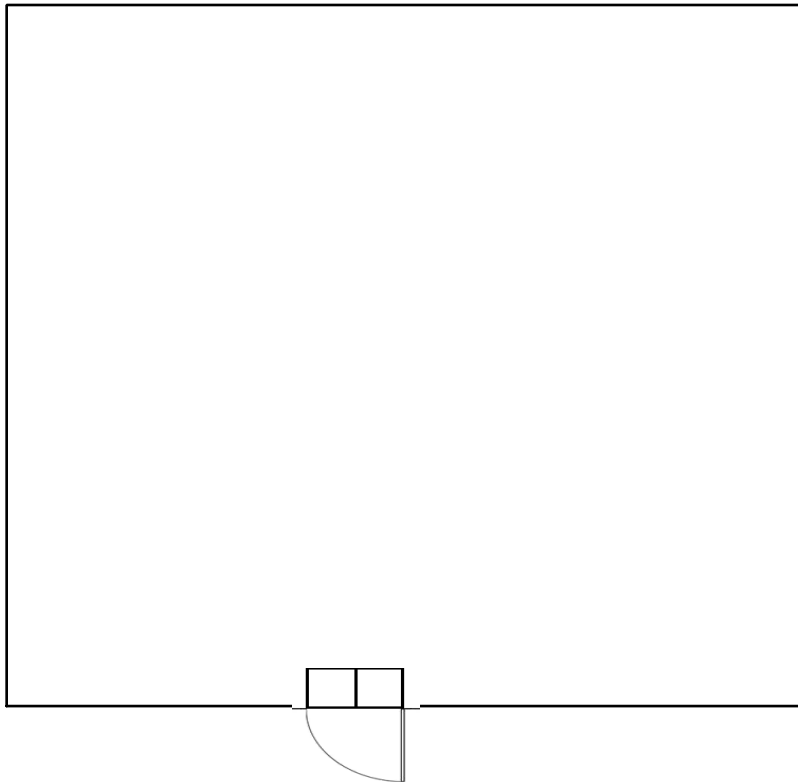
Phone: **Fax:** (704)521-8801

This drawing is for reference purposes only and it not intended to be a formal scale model.

w3: 7'-9"

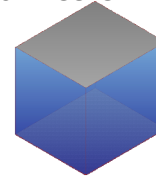
w4: 6'-9½"

w2: 6'-9½"



w1: 7'-9"

DOOR 1: Wall1 36" x 78" Hinged Door In a 46" Centered Hinge:Right Orientaion:Regular



COOLING REQUIREMENTS										
Application	General Walk-in Freezer				Location	Indoor				
Internal Temp	-10 °F	Internal RH	95%	External Temp	85 °F	External RH	55%			
Wall Load	1,320 BTUH	Infiltration	1,830 BTUH	Products	82 BTUH	Miscellaneous	559 BTUH			
	35%		48%		2%		15%			
WALL, FLOOR AND CEILING LOADS										
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)	
Rear	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.80	8.50	66	220	
Right End	Urethane, Standard panels	4.000	0.14	28.57	85.0	6.90	8.50	39	130	
	Door			15.00	85.0	3.00	6.50	20	123	
Front	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.80	8.50	66	220	
Left End	Urethane, Standard panels	4.000	0.14	28.57	85.0	6.90	8.50	59	195	
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		7.80	6.90	54	252	
Ceiling	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.80	6.90	54	179	
VOLUME (ft³)		457		TOTAL WALL, FLOOR AND CEILING LOAD					1,320	
INFILTRATION LOAD : ESTIMATED BY DOORS AND OPENINGS										
Quantity	Door or Opening Type	Height (in)	Width (in)	External Temp (°F)	External Rh (%)	Open Time (hrs)	Curtains	Load (BTUH)		
1	Door	78.00	36.00	85.0	55.0	0.18	None	1,830		
TOTAL INFILTRATION LOAD ESTIMATED BY DOORS AND OPENINGS									1,830	
PRODUCT LOADS										
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)					
General, Mixed Products, Approximation	457	0.0	-10.0	24	82					
TOTAL PRODUCT WEIGHT (lbs)		457		TOTAL PRODUCT LOAD				82		
MISCELLANEOUS LOADS										
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)					
	LIGHTING	1	W/ft²	24	184					
2	EVAPORATOR MOTORS	60	W	22	375					
TOTAL MISCELLANEOUS LOAD									559	
SYSTEM DESIGN SUMMARY										
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)	
3,791	10%	4,170	18	5,561	R448A	60	10	0.5	105	
SYSTEM EQUIPMENT SELECTION										
Equipment Type	Quantity	Model Number	Description			Voltage	Rating (BTUH)			
Condensing Unit	1	BEZA020L8-HT3D	EZ-Line Scroll, Condensing Units-Air			208-230/3/60				
Evaporator	1	BLP207LE-S2D	Low Profile, Evaporator			208-230/1/60				
SYSTEM BALANCE										
Fan Load (BTUH)		Suction Temp (°F)			Evaporator TD (°F)		System Capacity (BTUH)			
		-19.5			9		6,516			

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA020L8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Clinton Elementary School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06339.41918.00469-A00	ITEM # : 1
QUOTE # : Q11EULCB	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|---|---|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Anti-short cycle time delay Adjustable pressure fan cycling control on 2 fan models only Copper tubing secured with cushion clamps Crankcase heater Fan Guard | <ul style="list-style-type: none"> Fan motors are inherently protected with internal overloads Pre-formed piping Receiver with fusible plug and liquid shut off valve Suction Service valve Adjustable flooded head pressure control (unless otherwise indicated) Units are shipped with Helium holding charge Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> Welded hermetic Scroll compressor Adjustable low pressure control with flex hose / fixed high pressure control ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design Compatible with Low GWP Refrigerants Outdoor weatherproof pre-painted steel cabinet |
|---|---|---|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> 1 Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p>ELECTRIC DEFROST KIT</p> <p><input checked="" type="checkbox"/> 1 DFK-02</p> <p>115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p>Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p>Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p>Discharge Air Hood</p> <p>Discharge Line Check Valve</p> <p>Discharge Line Temperature Sensor</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p>Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p>Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p>Hail Guard for Condenser</p> <p>Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p>Insulated Suction Line</p> <p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input type="checkbox"/> 1 Sealed</p> <p><input type="checkbox"/> Replaceable</p>	<p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p>One Time Pump Down</p> <p>Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p>Pump Down Toggle Switch</p> <p>QuickVac Valves</p> <p>Receiver Inlet Ball Valve</p> <p>Single Point Electrical</p> <p>Sub Cooling Circuit</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input type="checkbox"/> *115V Paragon 8145 Style</p> <p>Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
--	---	---

VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY
208-230/3/60		R448A			2Hp		-19.5 °F		105 °F		6516 BTUH
FANS				COMPRESSOR				CIRCUIT TOTAL			
QTY	POWER	FLA/FAN	TYPE		QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡
1	100W	1	ZF07KAE-TF5		1	8.6	58	9.6		11.8	20
LIQUID		3/8 in	SOUND		-		REC CAPACITY		11 lb		APPROVALS
SUCTION		7/8 in	WEIGHT		315 lb		REF CHARGE		4 lb		

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 3.1 for R404A/R507/ AWEF = 3.08 for R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants.

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA020L8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Clinton Elementary School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06339.41918.00469-A00	ITEM # : 1
QUOTE # : Q11EULCB	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Electric Defrost Kit - DFK-02

Electric Defrost Kit includes:

Mechanical Time Clock:

Time initiated temperature terminated with a timed failsafe.

Contactors:

Three pole definite purpose, 230V or 115V coil as defined by the control circuit voltage

HtrCont1x 40A

Fuse Blocks:

1x 30A (2P) Class CC

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 1
BEZA020L8-HT3D
EZ-LINE SCROLL
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **Clinton Elementary School Lancaster SC**
SUBMITTED BY : **Laura Craig**

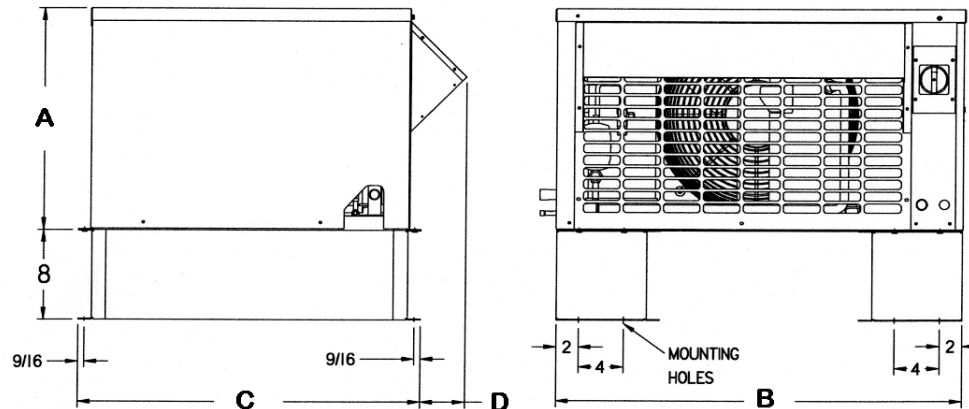
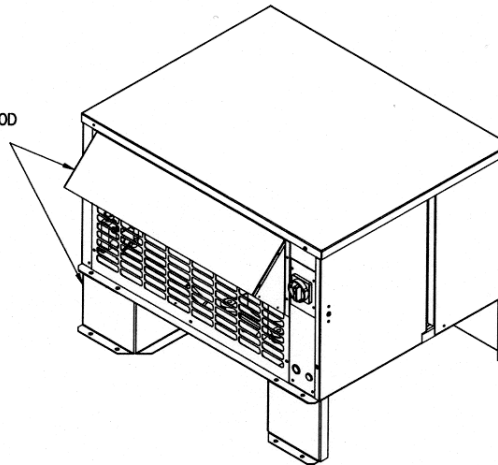
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	7/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	315 lb
REFRIGERANT CHARGE	4 lb
RECEIVER CAPACITY	11 lb

APPROVALS			

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NOTES:

AWEF = 3.1 for R404A/R507/ AWEF = 3.08 for R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP207LE-S2D LOW PROFILE EVAPORATOR
---	--

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Clinton Elementary School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06339.41918.00469-A00	ITEM # : 2
QUOTE # : Q11EULCB	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|--|---|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Factory installed solenoid valve wire harness • Heavy gauge textured aluminum cabinet construction resists scratches/corrosion • Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> • Hinged drain pan with central universal drain connection (3/4" drain) • Front access to spacious electrical and header compartments • Schrader connection on suction header • Attractive and durable high density polyethylene fan guards | <ul style="list-style-type: none"> • Ultra efficient Electronically Commutated Motor (ECM) • ECM with SmartSpeed Technology • High efficiency enhanced copper tube and aluminium fin coil design • 6 FPI • Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV, T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Adaptive Control <input type="checkbox"/> *KE2 Adaptive Control <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit	<p>ELECTRONIC CONTROLLER</p> <input type="checkbox"/> SmartVap+ Control Board and Display <p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed ROOM THERMOSTATS <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box <input checked="" type="checkbox"/> 1 Insulated drain line requires heat - 20W/ft

VOLTAGE		SYSTEM REFRIGERANT		AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
208-230/1/60		R448A		1500 CFM		-19 °F		-10 °F		6516 BTUH	
FANS			HEATERS			CIRCUIT TOTAL					
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡		
2	0.07HP	0.6				1.2	120	1.4	15		
DEFROST HTRS								1890	10.3	15	
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY				APPROVALS		
SUCTION		7/8 in	WEIGHT	76 lb	REF CHARGE	1 lb					

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP207LE-S2D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Clinton Elementary School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06339.41918.00469-A00	ITEM # : 2
QUOTE # : Q11EULCB	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Insulated drain line requires heat - 20W/ft

Freezer condensate drain lines must be insulated and heated with a minimum of 20 watts per foot.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV, T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

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NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 2

BLP207LE-S2D

LOW PROFILE EVAPORATOR

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **Clinton Elementary School Lancaster SC**

SUBMITTED BY : **Laura Craig**

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Dimensions shown are for standard unit less options.

DIMENSIONS

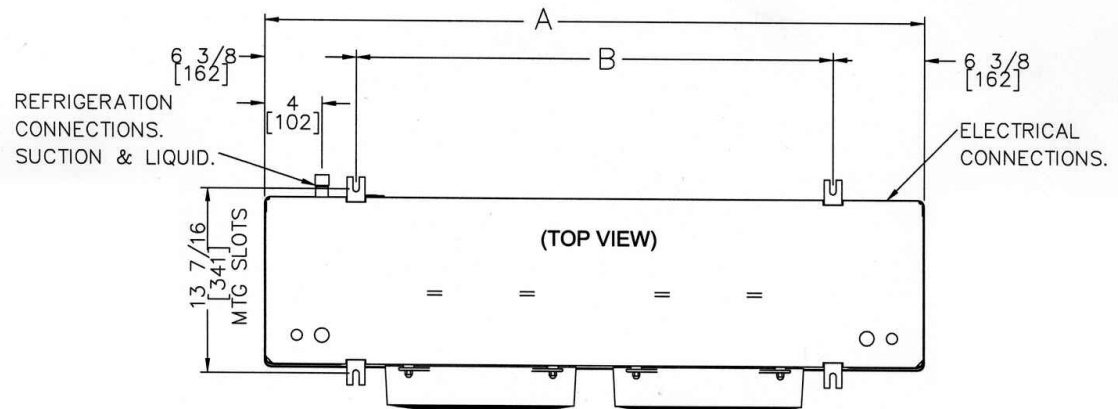
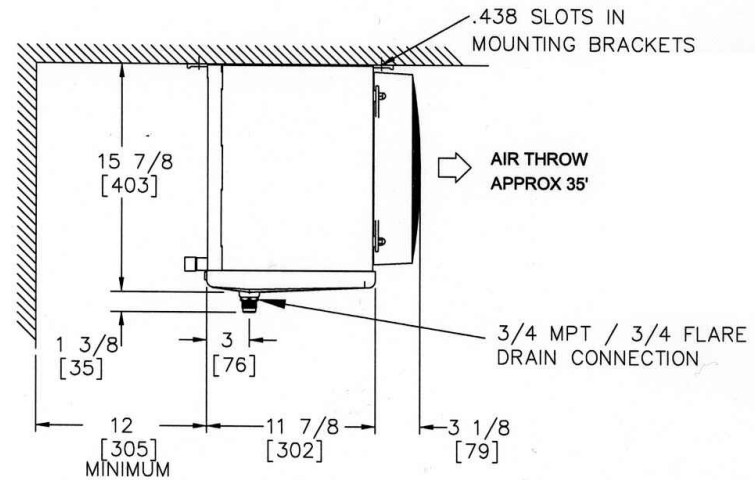
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	76 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

APPROVALS

NOTES:





Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2759-001-R05-LC
Item No:
Job Name: Erwin Elementary
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Outdoor Stand Alone

NSF APPROVED

Bally Prefabricated Exterior Dimensions:

24'-0½"(l) x 11'-7"(w) x 8'-6"(h)
 2 Compartments 1 Tiers With Floor 4" Floor
 Ceiling: Single Span

Panel Thickness:

4 in. Exterior Vertical Used (7'-10") with 4 in. Partition, 4 in. Floor, 4 in. Ceiling

Details and specifications for Quote No: 2759-001-R05-LC

Comments:

Base Finish

Vertical and Ceiling Panels: Embossed Galvalume (26 GA)

Special Finishes:

- Exterior Door - Embossed Tan
- Exterior Door Frame - Embossed Tan
- Exterior Floor - Embossed Tan
- Interior Floor - Aluminum Treadplate .125" Thick
- Wall 1 - Exterior Verticals - Embossed Tan
- Wall 2 - Exterior Verticals - Embossed Tan
- Wall 3 - Exterior Verticals - Embossed Tan
- Wall 4 - Exterior Verticals - Embossed Tan

Doors/Openings:

- Wall 1 Door 1 (1) 36" x 78" Hinged Door In a 46"
- Wall 1 Door 1 (1) Ext.Alum Diam/Tread Ramp (30-36" Door)
- Wall 1 Door 1 (1) Strip Curtain (36" Door and Under)
- Wall 1 Door 1 (1) Super Door 36" Wide and Under, 30" High
- Wall 1 Door 2 (1) 36" x 78" Hinged Door In a 46"
- Wall 1 Door 2 (1) Bally Standard Pressure Relief Port (< 400 sq/ft)
- Wall 1 Door 2 (1) Ext.Alum Diam/Tread Ramp (30-36" Door)
- Wall 1 Door 2 (1) Strip Curtain (36" Door and Under)
- Wall 1 Door 2 (1) Super Door 36" Wide and Under, 30" High

Accessories and Extras:



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
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Quote No: 2759-001-R05-LC
Item No:
Job Name: Erwin Elementary
Date: 10/12/2022 **PVD:** 10/3/2022
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 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Attn:

Phone: **Fax:** (704)521-8801

- (4) 48" LED KEIL 48x754-CL-N Light
 - 40° F to 100° F(Range)
- (74) L/F REB(Reinforced Exterior Bottom)'s
- (300) S/F Outdoor Membrane Roof
 40 mil standard
- (300) S/F Tapered Insul 1/8" on 12"
- (64) Shear Plates (Galvanized)
 - (1) The loads are 20 Lbs psf live and 114 Mph RC II Wind. The customer must verify that the loads shown on this quote comply with local building codes.
- (8) WA-3 Wall Anchor
 Outside Vertical 4"
- (30) WA-4 Wall Anchor
 Outside Corner 4"

Floor Options:

- (300) S/F 1/2" Plywood Foamed in Panel

Refrigeration:

- (1) BEZA 007 H8 HT3DB (208-230/3/60) w/ smart speed
 Scroll Unit 7190 BTU
- (1) BEZA 045 L8 HT3DN (208-230/3/60)
 Includes: Suction Accumulator
- (1) BLP107-MA-S1D 115/1/60
 1 Fan 7000 BTU/h
- (1) BLP316LE-S2D 208-230/1/60
 3 Fan 16200 BTU/h
- (1) Refrigeration is calculated for standard use at a box temperature of 35° F. for the cooler and -10° F. for the freezer with a condensing unit ambient of 105° F.
- (1) The refrigeration is calculated for a line run of less 50 ft.
- (1) Time Clock 8145 (shipped loose) 115/1/60

Estimated Shipping:

Weight: 8,456.66

Destination: Lancaster, SC, 297**



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2759-001-R05-LC
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Job Name: Erwin Elementary
Date: 10/12/2022 **PVD:** 10/3/2022
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 10420 Southern Loop Blvd
 Pineville, NC 28134

Attn:

Phone: **Fax:** (704)521-8801

Deviations (Alternates, Remarks, Clarifications, Etc.):

Bally Floor Panels are capable of supporting up to 800 lbs. Per Sq/Ft uniformly distributed stationary loading. Bally does not recommend the use rolling loads of heavy carts, pallet jacks or fork lifts on top of the floors. Warranty for floors subjected to this type of use would not be covered by Bally.

Quoting Bally Standard Pre-Assembled Remote Refrigeration

Exclusions (Items Not Supplied by Bally):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Shelving, Racks, Interior Accessories | <input checked="" type="checkbox"/> Caulking and Sealants |
| <input type="checkbox"/> Labor on Warranties | <input type="checkbox"/> Refrigeration Systems |
| <input checked="" type="checkbox"/> Alarm Systems | <input checked="" type="checkbox"/> Refrigeration Accessories |
| <input checked="" type="checkbox"/> Supervision | <input checked="" type="checkbox"/> Closure Panel and Trim |
| <input checked="" type="checkbox"/> Tubing, Wiring for Rfg. Equipment | <input checked="" type="checkbox"/> Sleeves, Penetrations, Escutcheon Plates |
| <input checked="" type="checkbox"/> Compressor Rack | <input checked="" type="checkbox"/> Floor Insulation and Vapor Barrier |

Cancelled Orders: Cancelled unshipped standard walk-ins will be charged a 30% restocking fee plus the cost of special panels. Cancelled refrigeration systems will be charged a 30% restocking fee and the cost of any freight accrued. Buy-out items will be charged a 25% restocking fee plus any freight accrued.

Agency Ratings: Bally units comply or surpass applicable Flame Spread-25, UL, UL 723, & NSF standards in a manner conforming to ASTM E-84, and Factory Mutual standards.

Quotation Limitations: This quotation was based upon the specifications given to Bally which may possibly be incomplete. Bally is not responsible for items missing from the quotation due to incomplete or excluded items in the specifications received from the customer. The customer is responsible for reviewing the quotation for omissions or deviations from the specifications given to Bally. All portions of the quotation are subject to revision upon receipt of detailed specifications or if changes are made following the delivery of the original quotation. Quotations expire on the date indicated on Page 1 of the Quote. Approval drawings must be returned within 60 days of receipt of the purchase order. The order must ship within the agreed upon time frames or current lead times, but no later than 7 months. Any deviations to this quotation (dimensions or specification changes) will require updated pricing.

Panel Construction: Bally Panels are manufactured with environmentally friendly HFC 245-FA polyurethane foam. This polyurethane foam offers the highest thermal insulation value and the most energy efficiency per cubic inch in comparison to similar foams. It has a zero Ozone Depletion Potential (ODP) and a low Global Warming Potential (GWP). It is not considered a Volatile Organic Compound (VOC) in the US. Standard 4" Bally panels meet the 2009 Federal Energy Standards.

Refrigerants: Unless otherwise specified, refrigeration systems are quoted with environmentally friendly HFO R448A refrigerant. It has a Low Global Warming Potential (GWP) and the EPA lists it as an acceptable substitute for R404A and other high GWP refrigerants.

Automatic Door Closers: Bally includes automatic door closers and spring loaded hinges on all doors 42" wide and smaller as a standard feature with no additional charge that meet the 2009 Federal Energy Standards.

Motors: Bally units are quoted with EC and PSC motors in compliance with federal energy standards, for increased energy savings.

Lighting: Bally units are quoted with lighting in compliance with federal Energy Standards for increased energy savings.

Optional Features: Bally offers additional optional energy-saving features such as Walk-In Alarm & Light Management systems that comply or surpass the 2009 Federal energy regulations.



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

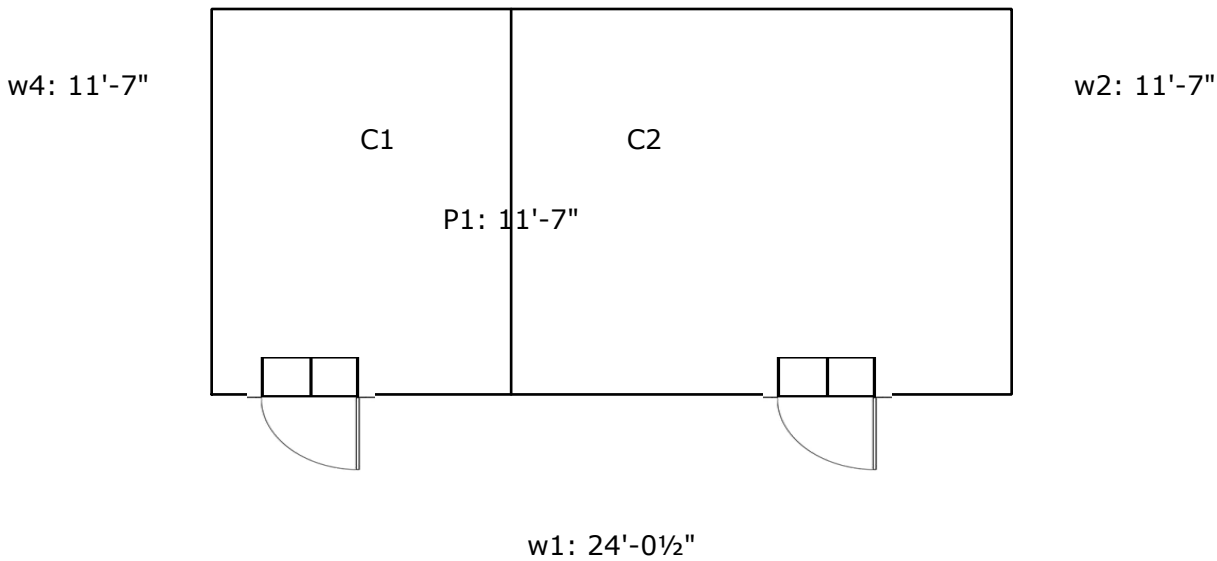
Last Update: 10/12/2022
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Quote No: 2759-001-R05-LC
Item No:
Job Name: Erwin Elementary
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
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 10420 Southern Loop Blvd
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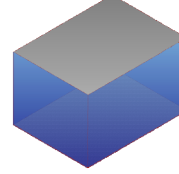
This drawing is for reference purposes only and it not intended to be a formal scale model.

w3: 24'-0½"



DOOR 1: Wall1 36" x 78" Hinged Door In a 46" Offset:4'-6" Hinge:Right Orientaion:Regular
 DOOR 2: Wall1 36" x 78" Hinged Door In a 46" Offset:20'-0" Hinge:Right Orientaion:Regular
 PARTITION 1: Wall 1 Offset:9'-0" from wall 4 Connect

Erwin Elementary Cooler LOAD CALCULATION



COOLING REQUIREMENTS									
Application	General Walk-in Cooler			Location	Outdoor Warm				
Internal Temp	35 °F	Internal RH	84%	External Temp	95 °F	External RH	55%		
Wall Load	1,091 BTUH	Infiltration	1,306 BTUH	Products	550 BTUH	Miscellaneous	549 BTUH		
	31%		37%		16%		16%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.11	35.0	11.58	8.50	98	
Right End	Urethane, Standard panels	4.000	0.14	28.11	99.0	8.71	8.50	55	124
	Door			15.00	99.0	3.00	6.50	20	83
Front	Urethane, Standard panels	4.000	0.14	28.11	99.0	11.58	8.50	98	224
Left End	Urethane, Standard panels	4.000	0.14	28.11	99.0	8.71	8.50	74	169
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		11.58	8.71	101	244
Ceiling	Urethane, Standard panels	4.000	0.14	28.11	104.0	11.58	8.71	101	248
VOLUME (ft³)		857		TOTAL WALL, FLOOR AND CEILING LOAD				1,091	
INFILTRATION LOAD : ESTIMATED BY DOORS AND OPENINGS									
Quantity	Door or Opening Type		Height (in)	Width (in)	External Temp (°F)	External Rh (%)	Open Time (hrs)	Curtains	Load (BTUH)
1	Door		78.00	36.00	99.0	55.0	0.18	None	1,306
TOTAL INFILTRATION LOAD ESTIMATED BY DOORS AND OPENINGS									1,306
PRODUCT LOADS									
Type			Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)		
General, Mixed Products, Approximation			1,715	45.0	35.0	24	550		
TOTAL PRODUCT WEIGHT (lbs)			1,715	TOTAL PRODUCT LOAD			550		
MISCELLANEOUS LOADS									
Quantity	Description			Power	Units	Run Time (hrs)	Load (BTUH)		
	LIGHTING			1	W/ft²	24	344		
1	EVAPORATOR MOTORS			60	W	24	205		
TOTAL MISCELLANEOUS LOAD									549
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
3,496	10%	3,846	16	5,769	R448A	60	10.1	0.5	105
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number		Description			Voltage	Rating (BTUH)	
Condensing Unit	1	BEZA007H8-HT3D		EZ-Line Scroll Condensing Units-Air			208-230/3/60	6,591	
Evaporator	1	BLP107MA-S1D		Low Profile Evaporator			115/1/60	7,106	
SYSTEM BALANCE									
Fan Load (BTUH)		Suction Temp (°F)			Evaporator TD (°F)		System Capacity (BTUH)		
		25			9.5		6,672		

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA007H8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 1
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|--|---|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Anti-short cycle time delay Adjustable pressure fan cycling control on 2 fan models only Copper tubing secured with cushion clamps Crankcase heater Discharge line temperature sensor Fan Guard | <ul style="list-style-type: none"> Fan motors are inherently protected with internal overloads Pre-formed piping Receiver with fusible plug and liquid shut off valve Suction Service valve Adjustable flooded head pressure control (unless otherwise indicated) Units are shipped with Helium holding charge Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> Welded hermetic Scroll compressor Adjustable low pressure control with flex hose / fixed high pressure control ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design Compatible with Low GWP Refrigerants Outdoor weatherproof pre-painted steel cabinet |
|--|---|---|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p><input type="checkbox"/> 115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p><input type="checkbox"/> Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p><input type="checkbox"/> Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p><input type="checkbox"/> Discharge Air Hood</p> <p><input type="checkbox"/> Discharge Line Check Valve</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p><input type="checkbox"/> Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p><input type="checkbox"/> Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p><input type="checkbox"/> Hail Guard for Condenser</p> <p><input type="checkbox"/> Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p><input type="checkbox"/> Insulated Suction Line</p>	<p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> Sealed</p> <p><input type="checkbox"/> Replaceable</p> <p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p><input type="checkbox"/> One Time Pump Down</p> <p><input type="checkbox"/> Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p><input type="checkbox"/> Pump Down Toggle Switch</p> <p><input type="checkbox"/> QuickVac Valves</p> <p><input type="checkbox"/> Receiver Inlet Ball Valve</p> <p><input type="checkbox"/> Single Point Electrical</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input checked="" type="checkbox"/> *115V Paragon 8145 Style</p> <p><input type="checkbox"/> Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
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VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY
208-230/3/60		R448A			0.7Hp		25 °F		105 °F		6672 BTUH
FANS				COMPRESSOR				CIRCUIT TOTAL			
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡	
1	100W	1	ZB06KAE-TF5	1	4.8	37.8	5.8		7	15	
LIQUID		3/8 in		SOUND		-		REC CAPACITY		5 lb	
SUCTION		5/8 in		WEIGHT		183 lb		REF CHARGE		3 lb	

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA007H8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 1
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Time Clock - 115V Paragon 8145 Style

115V Defrost timer is time initiated, temperature or pressure terminated with a timed failsafe. Timer is shipped loose in a box for field installation.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 1
BEZA007H8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **Erwin Elementary**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

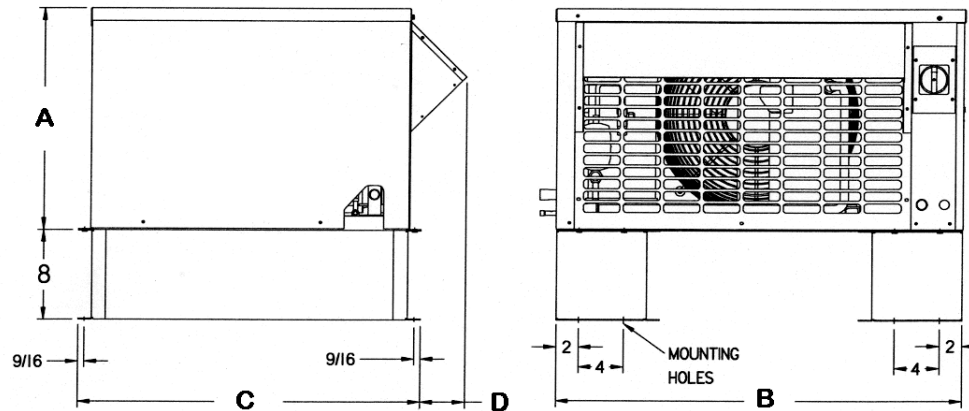
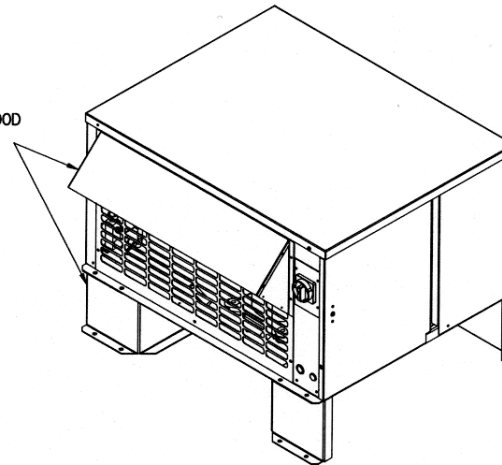
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	5/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	183 lb
REFRIGERANT CHARGE	3 lb
RECEIVER CAPACITY	5 lb

APPROVALS			

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NOTES:

AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP107MA-S1D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 3
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|---|--|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Factory installed solenoid valve wire harness Heavy gauge textured aluminum cabinet construction resists scratches/corrosion Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> Hinged drain pan with central universal drain connection (3/4" drain) Front access to spacious electrical and header compartments Schrader connection on suction header Attractive and durable high density polyethylene fan guards Ultra efficient Electronically Commutated Motor (ECM) | <ul style="list-style-type: none"> ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design 6 FPI AWEF = 9.0 Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A/R407C |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> Sporlan TXV, LLSV,T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit ELECTRONIC CONTROLLER <input type="checkbox"/> KE2 Temp+Defrost <input type="checkbox"/> SmartVap+ Control Board and Display	<p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <input type="checkbox"/> Evaporator Disconnect Switch <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed <p>ROOM THERMOSTATS</p> <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> P-trap per evap required outside of box

VOLTAGE		SYSTEM REFRIGERANT			AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
115/1/60		R448A			680 CFM		25.5 °F		35 °F		6672 BTUH	
FANS				HEATERS				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡			
1	0.07HP	1				1	60	1.3	15			
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY				APPROVALS			
SUCTION		5/8 in	WEIGHT	48 lb	REF CHARGE	1 lb						

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP107MA-S1D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 3
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV,T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 3

BLP107MA-S1D

LOW PROFILE EVAPORATOR

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **Erwin Elementary**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

Dimensions shown are for standard unit less options.

DIMENSIONS

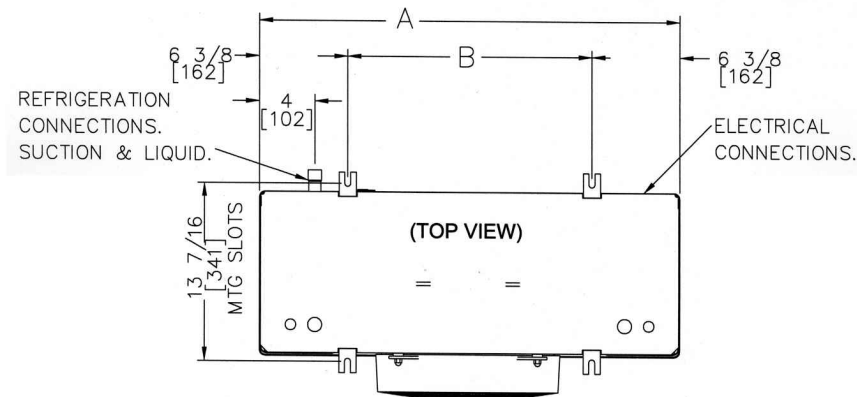
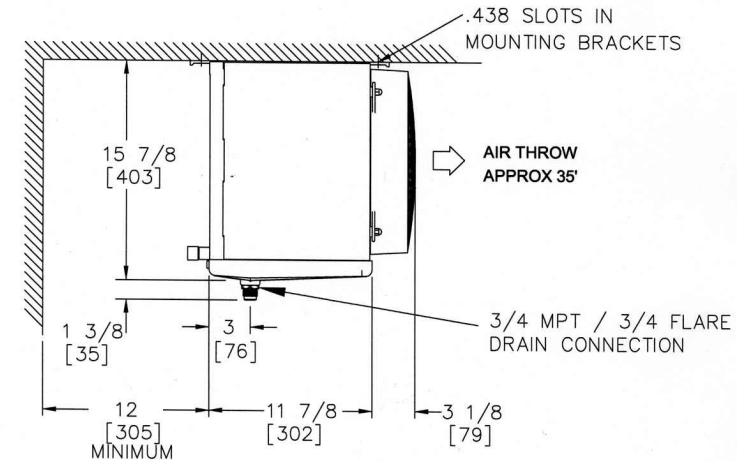
DIMENSION A	30 1/4 in
DIMENSION B	17 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

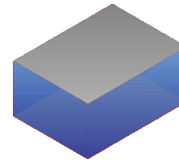
DISTRIBUTOR	3/8 in
SUCTION	5/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	48 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

APPROVALS

NOTES:



Erwin Elementary Freezer LOAD CALCULATION



COOLING REQUIREMENTS									
Application	General Walk-in Freezer			Location	Outdoor Warm				
Internal Temp	-10 °F	Internal RH	95%	External Temp	95 °F	External RH	55%		
Wall Load	3,079 BTUH	Infiltration	3,070 BTUH	Products	272 BTUH	Miscellaneous	1,172 BTUH		
	41%		40%		4%		15%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft ²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.11	99.0	15.42	8.50	131	508
Right End	Urethane, Standard panels	4.000	0.14	28.11	99.0	11.58	8.50	98	382
Front	Urethane, Standard panels	4.000	0.14	28.11	99.0	15.42	8.50	112	433
	Door			15.00	99.0	3.00	6.50	20	141
Left End	Urethane, Standard panels	4.000	0.14	28.11	45.0	11.58	8.50	98	193
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		15.42	11.58	179	699
Ceiling	Urethane, Standard panels	4.000	0.14	28.11	104.0	15.42	11.58	179	724
VOLUME (ft³)		1,518	TOTAL WALL, FLOOR AND CEILING LOAD					3,079	
INFILTRATION LOAD : ESTIMATED BY VOLUME AND USAGE									
Box Usage	Internal Temp (°F)	Internal Rh (%)	External Temp (°F)	External Rh (%)	Ventilation (CFM)	Load (BTUH)			
Regular	-10	95	95	55		3,070			
PRODUCT LOADS									
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)				
General, Mixed Products, Approximation	1,518	0.0	-10.0	24	272				
TOTAL PRODUCT WEIGHT (lbs)	1,518	TOTAL PRODUCT LOAD			272				
MISCELLANEOUS LOADS									
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)				
	LIGHTING	1	W/ft ²	24	609				
3	EVAPORATOR MOTORS	60	W	22	563				
TOTAL MISCELLANEOUS LOAD					1,172				
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
7,593	10%	8,353	18	11,137	R448A	60	10	0.5	105
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number	Description		Voltage	Rating (BTUH)			
Condensing Unit	1	BEZA045L8-HT3D	EZ-Line Scroll Condensing Units-Air		208-230/3/60	12,860			
Evaporator	1	BLP316LE-S2D	Low Profile Evaporator		208-230/1/60	16,274			
SYSTEM BALANCE									
Fan Load (BTUH)	Suction Temp (°F)		Evaporator TD (°F)		System Capacity (BTUH)				
	-18.7		8.2		13,438				

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA045L8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 4
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Anti-short cycle time delay • Adjustable pressure fan cycling control on 2 fan models only • Copper tubing secured with cushion clamps • Crankcase heater • Discharge line temperature sensor • Fan Guard | <ul style="list-style-type: none"> • Fan motors are inherently protected with internal overloads • Pre-formed piping • Receiver with fusible plug and liquid shut off valve • Suction Service valve • Adjustable flooded head pressure control (unless otherwise indicated) • Units are shipped with Helium holding charge • Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> • Welded hermetic Scroll compressor • Adjustable low pressure control with flex hose / fixed high pressure control • High efficiency enhanced copper tube and aluminium fin coil design • Compatible with Low GWP Refrigerants • Outdoor weatherproof pre-painted steel cabinet • AWEF = 3.15 |
|--|---|--|

MODEL OPTIONS (* = Shipped Loose)

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p>ELECTRIC DEFROST KIT</p> <p><input checked="" type="checkbox"/> DFK-02</p> <p>115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p>Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p>Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p>Discharge Air Hood</p> <p>Discharge Line Check Valve</p> <p>Discharge Line Temperature Sensor</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p><input type="checkbox"/> SmartSpeed</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p>Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p>Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p>Hail Guard for Condenser</p> <p>Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p>Insulated Suction Line</p> <p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> Sealed</p>	<p>LIQUID LINE FILTER + SIGHT GLASS Continued</p> <p><input type="checkbox"/> Replaceable</p> <p>Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p>One Time Pump Down</p> <p>Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p>Pump Down Toggle Switch</p> <p>QuickVac Valves</p> <p>Receiver Inlet Ball Valve</p> <p>Single Point Electrical</p> <p>Sub Cooling Circuit</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input type="checkbox"/> *115V Paragon 8145 Style</p> <p>Wind Guard</p> <p>Less Flooding Valve(s)</p>
--	--	--

VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY
208-230/3/60		R448A			4.5Hp		-18.7 °F		105 °F		13438 BTUH
FANS				COMPRESSOR				CIRCUIT TOTAL			
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡	
1	400W	2.1	ZF13K4E-TF5	1	13.8	99	15.9		19.4	30	
LIQUID		1/2 in		SOUND		-		REC CAPACITY		22 lb	
SUCTION		1 1/8 in		WEIGHT		435 lb		REF CHARGE		9 lb	

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA045L8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 4
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Electric Defrost Kit - DFK-02

Electric Defrost Kit includes:

Mechanical Time Clock:

Time initiated temperature terminated with a timed failsafe.

Contactors:

Three pole definite purpose, 230V or 115V coil as defined by the control circuit voltage

HtrCont1x 40A

Fuse Blocks:

1x 30A (2P) Class CC

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 4
BEZA045L8-HT3D
EZ-LINE SCROLL
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

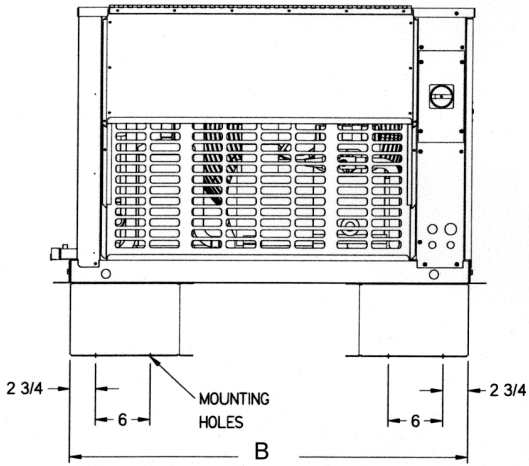
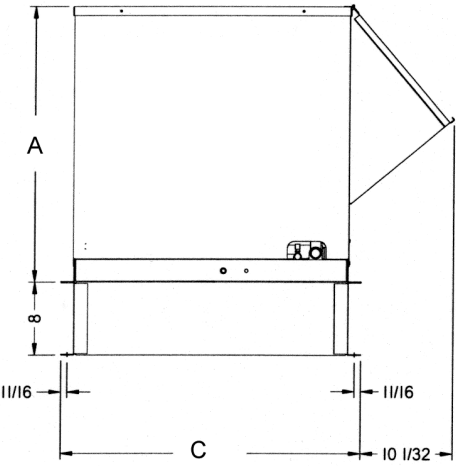
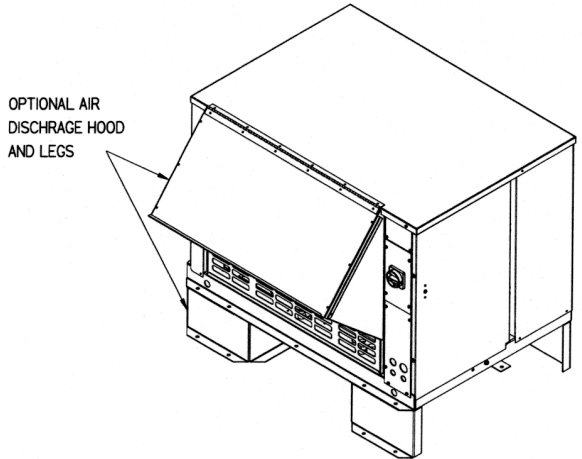
DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **Erwin Elementary**
SUBMITTED BY : **Laura Craig**

Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	30 3/8 in
DIMENSION B	43 7/8 in
DIMENSION C	32 7/8 in
DIMENSION D	10 1/8 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	1/2 in
SUCTION	1 1/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	435 lb
REFRIGERANT CHARGE	9 lb
RECEIVER CAPACITY	22 lb

APPROVALS			



NOTES:

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP316LE-S2D LOW PROFILE EVAPORATOR
---	--

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 5
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|--|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Factory installed solenoid valve wire harness Heavy gauge textured aluminum cabinet construction resists scratches/corrosion Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> Hinged drain pan with central universal drain connection (3/4" drain) Front access to spacious electrical and header compartments Schrader connection on suction header Attractive and durable high density polyethylene fan guards | <ul style="list-style-type: none"> Ultra efficient Electronically Commutated Motor (ECM) ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design 6 FPI Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV, T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Adaptive Control <input type="checkbox"/> *KE2 Adaptive Control <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit	<p>ELECTRONIC CONTROLLER</p> <input type="checkbox"/> SmartVap+ Control Board and Display <p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed ROOM THERMOSTATS <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box <input checked="" type="checkbox"/> 1 Insulated drain line requires heat - 20W/ft

VOLTAGE		SYSTEM REFRIGERANT		AIR FLOW	EVAP. TEMP	BOX TEMP	CAPACITY
208-230/1/60		R448A		2040 CFM	-18.2 °F	-10 °F	13438 BTUH
FANS			HEATERS			CIRCUIT TOTAL	
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS
3	0.07HP	0.6				1.8	180
DEFROST HTRS						2730	14.8
DISTRIBUTOR		SOUND	-	REC CAPACITY			APPROVALS
SUCTION		WEIGHT	115 lb	REF CHARGE	4 lb		

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP316LE-S2D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : Erwin Elementary	DATE : 11 Oct 2022
ORDER # : 06339.36374.00469-A00	ITEM # : 5
QUOTE # : Q11EULCA-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

**Installation Requirements - Insulated drain line
requires heat - 20W/ft**

Freezer condensate drain lines must be insulated and heated with a minimum of 20 watts per foot.

**Installation Requirements - Minimum slope of 1" per
foot on all drain lines**

Bally recommends a minimum slope of 1" per foot on all drain lines.

**Installation Requirements - P-trap per evap required
outside of box**

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV, T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 5

BLP316LE-S2D

LOW PROFILE EVAPORATOR

DATE : 11 Oct 2022

PURCHASER :

PROJECT : **Erwin Elementary**

SUBMITTED BY : **Laura Craig**

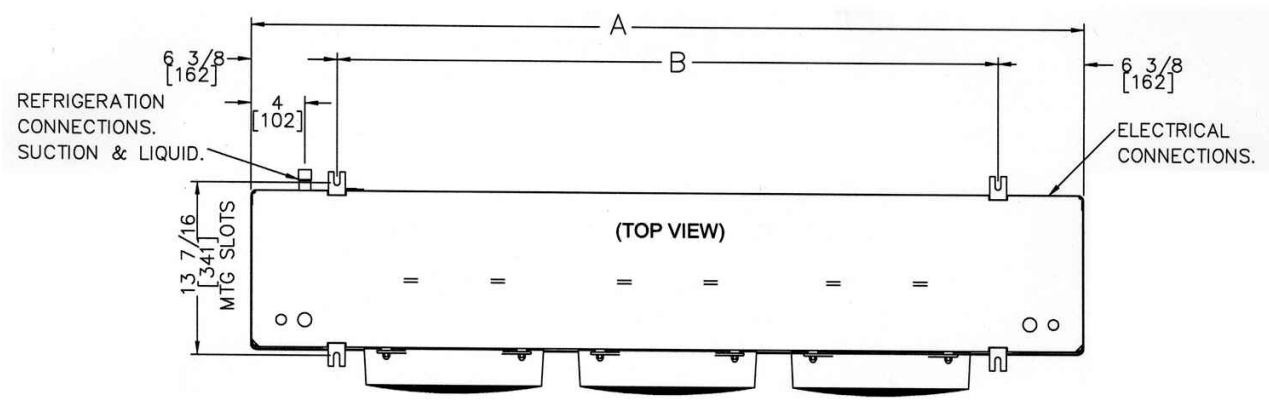
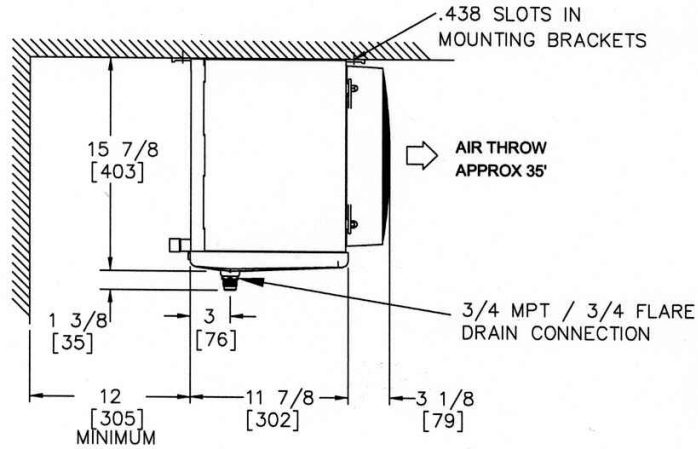
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Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	62 1/4 in
DIMENSION B	49 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
DISTRIBUTOR	3/8 in
SUCTION	1 1/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	115 lb
REFRIGERANT CHARGE	4 lb
RECEIVER CAPACITY	

APPROVALS			



NOTES:



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2757-001-R04-LC
Item No:
Job Name: McDonald Green Elementary School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Indoor Structure

NSF APPROVED

Bally Prefabricated Exterior Dimensions:

15'-5"(l) x 9'-8"(w) x 8'-6"(h)
 2 Compartments 1 Tiers With Floor 4" Floor
 Ceiling: Single Span

Panel Thickness:

4 in. Exterior Vertical Used (7'-10") with 4 in. Partition, 4 in. Floor, 4 in. Ceiling

Details and specifications for Quote No: 2757-001-R04-LC

Comments:

Base Finish

Vertical and Ceiling Panels: Embossed Galvalume (26 GA)

Special Finishes:

Interior Floor - Aluminum Treadplate .125" Thick

Doors/Openings:

Wall 1 Door 1 (1) 36" x 78" Hinged Door In a 46"
 Wall 1 Door 1 (1) Bally Standard Pressure Relief Port (< 400 sq/ft)
 Wall 1 Door 1 (1) Strip Curtain (36" Door and Under)
 Wall 1 Door 1 (1) Super Door 36" Wide and Under, 30" High
 Wall 1 Door 2 (1) 36" x 78" Hinged Door In a 69"
 Wall 1 Door 2 (1) Super Door 36" Wide and Under, 30" High

Accessories and Extras:

(4) 48" LED KEIL 48x754-CL-N Light
 - 40° F to 100° F(Range)
 (1) Box set in 4" depression from top of finished floor.
 (48) S/F Emboss Galvalume (Closure Metal)

Floor Options:

(160) S/F 1/2" Plywood Foamed in Panel

Refrigeration:

(1) BEZA 007 H8 HT3DB (208-230/3/60) w/ smart speed
 Scroll Unit 7190 BTU
 (1) BEZA 020 L8 HT3D (208-230/3/60) w/ smart speed
 Includes defrost contactor for 1 Evap.
 (1) BLP207LE-S2D 208-230/1/60
 2 Fan 7160 BTU/h
 (1) BLP209-MA-S1D 115/1/60
 2 Fan 8700 BTU/h
 (1) Refrigeration is calculated for standard use at a box temperature of
 35° F. for the cooler and -10° F. for the freezer with a condensing
 unit ambient of 105° F.
 (1) Time Clock 8145 (shipped loose) 115/1/60



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
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Quote No: 2757-001-R04-LC
Item No:
Job Name: McDonald Green Elementary School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
Swanson-Girard & Associates
10420 Southern Loop Blvd
Pineville, NC 28134

Attn:

Phone: **Fax:** (704)521-8801

Estimated Shipping:

Weight: 5,050.89

Destination: Lancaster, SC, 29720



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2757-001-R04-LC
Item No:
Job Name: McDonald Green Elementary School
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From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Deviations (Alternates, Remarks, Clarifications, Etc.):

Bally Floor Panels are capable of supporting up to 800 lbs. Per Sq/Ft uniformly distributed stationary loading. Bally does not recommend the use rolling loads of heavy carts, pallet jacks or fork lifts on top of the floors. Warranty for floors subjected to this type of use would not be covered by Bally.

Quoting Bally Standard Pre-Assembled Remote Refrigeration.

Exclusions (Items Not Supplied by Bally):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Shelving, Racks, Interior Accessories | <input checked="" type="checkbox"/> Caulking and Sealants |
| <input type="checkbox"/> Labor on Warranties | <input type="checkbox"/> Refrigeration Systems |
| <input checked="" type="checkbox"/> Alarm Systems | <input checked="" type="checkbox"/> Refrigeration Accessories |
| <input checked="" type="checkbox"/> Supervision | <input type="checkbox"/> Closure Panel and Trim |
| <input checked="" type="checkbox"/> Tubing, Wiring for Rfg. Equipment | <input checked="" type="checkbox"/> Sleeves, Penetrations, Escutcheon Plates |
| <input checked="" type="checkbox"/> Compressor Rack | <input checked="" type="checkbox"/> Floor Insulation and Vapor Barrier |

Cancelled Orders: Cancelled unshipped standard walk-ins will be charged a 30% restocking fee plus the cost of special panels. Cancelled refrigeration systems will be charged a 30% restocking fee and the cost of any freight accrued. Buy-out items will be charged a 25% restocking fee plus any freight accrued.

Agency Ratings: Bally units comply or surpass applicable Flame Spread-25, UL, UL 723, & NSF standards in a manner conforming to ASTM E-84, and Factory Mutual standards.

Quotation Limitations: This quotation was based upon the specifications given to Bally which may possibly be incomplete. Bally is not responsible for items missing from the quotation due to incomplete or excluded items in the specifications received from the customer. The customer is responsible for reviewing the quotation for omissions or deviations from the specifications given to Bally. All portions of the quotation are subject to revision upon receipt of detailed specifications or if changes are made following the delivery of the original quotation. Quotations expire on the date indicated on Page 1 of the Quote. Approval drawings must be returned within 60 days of receipt of the purchase order. The order must ship within the agreed upon time frames or current lead times, but no later than 7 months. Any deviations to this quotation (dimensions or specification changes) will require updated pricing.

Panel Construction: Bally Panels are manufactured with environmentally friendly HFC 245-FA polyurethane foam. This polyurethane foam offers the highest thermal insulation value and the most energy efficiency per cubic inch in comparison to similar foams. It has a zero Ozone Depletion Potential (ODP) and a low Global Warming Potential (GWP). It is not considered a Volatile Organic Compound (VOC) in the US. Standard 4" Bally panels meet the 2009 Federal Energy Standards.

Refrigerants: Unless otherwise specified, refrigeration systems are quoted with environmentally friendly HFO R448A refrigerant. It has a Low Global Warming Potential (GWP) and the EPA lists it as an acceptable substitute for R404A and other high GWP refrigerants.

Automatic Door Closers: Bally includes automatic door closers and spring loaded hinges on all doors 42" wide and smaller as a standard feature with no additional charge that meet the 2009 Federal Energy Standards.

Motors: Bally units are quoted with EC and PSC motors in compliance with federal energy standards, for increased energy savings.

Lighting: Bally units are quoted with lighting in compliance with federal Energy Standards for increased energy savings.

Optional Features: Bally offers additional optional energy-saving features such as Walk-In Alarm & Light Management systems that comply or surpass the 2009 Federal energy regulations.



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders
 C1 C2

Quote No: 2757-001-R04-LC
Item No:
Job Name: McDonald Green Elementary School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

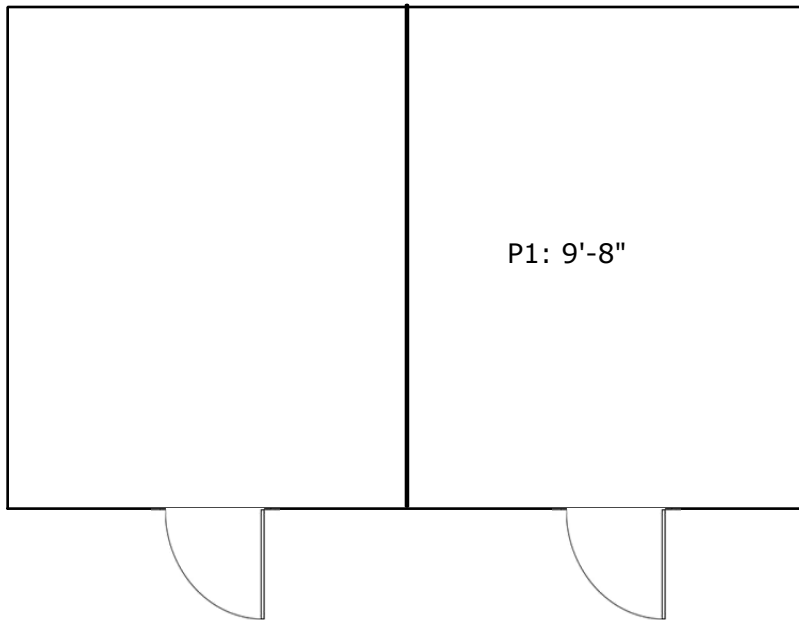
Phone: **Fax:** (704)521-8801

This drawing is for reference purposes only and it not intended to be a formal scale model.

w3: 15'-5"

w4: 9'-8"

w2: 9'-8"

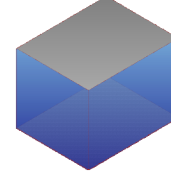


P1: 9'-8"

w1: 15'-5"

DOOR 1: Wall1 36" x 78" Hinged Door In a 46" Offset:4'-0" Hinge:Right Orientaion:Regular
 DOOR 2: Wall1 36" x 78" Hinged Door In a 69" Offset:12'-0" Hinge:Right Orientaion:Regular
 PARTITION 1: Wall 1 Centered Connect

McDonald Green Elem Cooler LOAD CALCULATION



COOLING REQUIREMENTS									
Application	General Walk-in Cooler			Location	Indoor				
Internal Temp	35 °F	Internal RH	84%	External Temp	85 °F	External RH	55%		
Wall Load	719 BTUH	Infiltration	1,659 BTUH	Products	409 BTUH	Miscellaneous	665 BTUH		
	21%		48%		12%		19%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.67	8.50	82	144
Right End	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.75	8.50	46	81
	Door			15.00	85.0	3.00	6.50	20	65
Front	Urethane, Standard panels	4.000	0.14	28.57	35.0	9.67	8.50	82	
Left End	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.75	8.50	66	115
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		9.67	7.75	75	183
Ceiling	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.67	7.75	75	131
VOLUME (ft³)		637	TOTAL WALL, FLOOR AND CEILING LOAD					719	
INFILTRATION LOAD : ESTIMATED BY VOLUME AND USAGE									
Box Usage	Internal Temp (°F)	Internal Rh (%)	External Temp (°F)	External Rh (%)	Ventilation (CFM)	Load (BTUH)			
Heavy	35	84	85	55		1,659			
PRODUCT LOADS									
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)				
General, Mixed Products, Approximation	1,274	45.0	35.0	24	409				
TOTAL PRODUCT WEIGHT (lbs)		1,274	TOTAL PRODUCT LOAD			409			
MISCELLANEOUS LOADS									
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)				
	LIGHTING	1	W/ft²	24	256				
2	EVAPORATOR MOTORS	60	W	24	409				
TOTAL MISCELLANEOUS LOAD					665				
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
3,452	10%	3,797	16	5,696	R448A	60	10.1	0.5	100
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number	Description			Voltage	Rating (BTUH)		
Condensing Unit	1	BEZA007H8-HT3D	EZ-Line Scroll Condensing Units-Air			208-230/3/60	6,868		
Evaporator	1	BLP209MA-S1D	Low Profile Evaporator			115/1/60	8,843		
SYSTEM BALANCE									
Fan Load (BTUH)	Suction Temp (°F)		Evaporator TD (°F)		System Capacity (BTUH)				
	26.3		8.2		7,141				

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA007H8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 1
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|--|---|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Anti-short cycle time delay Adjustable pressure fan cycling control on 2 fan models only Copper tubing secured with cushion clamps Crankcase heater Discharge line temperature sensor Fan Guard | <ul style="list-style-type: none"> Fan motors are inherently protected with internal overloads Pre-formed piping Receiver with fusible plug and liquid shut off valve Suction Service valve Adjustable flooded head pressure control (unless otherwise indicated) Units are shipped with Helium holding charge Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> Welded hermetic Scroll compressor Adjustable low pressure control with flex hose / fixed high pressure control ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design Compatible with Low GWP Refrigerants Outdoor weatherproof pre-painted steel cabinet |
|--|---|---|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p><input type="checkbox"/> 115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p><input type="checkbox"/> Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p><input type="checkbox"/> Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p><input type="checkbox"/> Discharge Air Hood</p> <p><input type="checkbox"/> Discharge Line Check Valve</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p><input type="checkbox"/> Export Crating</p> <p><input type="checkbox"/> EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p><input type="checkbox"/> Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p><input type="checkbox"/> Hail Guard for Condenser</p> <p><input type="checkbox"/> Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p><input type="checkbox"/> Insulated Suction Line</p>	<p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> Sealed</p> <p><input type="checkbox"/> Replaceable</p> <p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p><input type="checkbox"/> One Time Pump Down</p> <p><input type="checkbox"/> Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p><input type="checkbox"/> Pump Down Toggle Switch</p> <p><input type="checkbox"/> QuickVac Valves</p> <p><input type="checkbox"/> Receiver Inlet Ball Valve</p> <p><input type="checkbox"/> Single Point Electrical</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input checked="" type="checkbox"/> *115V Paragon 8145 Style</p> <p><input type="checkbox"/> Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
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VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY
208-230/3/60		R448A			0.7Hp		26.3 °F		100 °F		7141 BTUH
FANS				COMPRESSOR				CIRCUIT TOTAL			
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡	
1	100W	1	ZB06KAE-TF5	1	4.8	37.8	5.8		7	15	
LIQUID		3/8 in	SOUND	-		REC CAPACITY	5 lb				
SUCTION		5/8 in	WEIGHT	183 lb		REF CHARGE	3 lb				

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA007H8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 1
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Time Clock - 115V Paragon 8145 Style

115V Defrost timer is time initiated, temperature or pressure terminated with a timed failsafe. Timer is shipped loose in a box for field installation.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 1
BEZA007H8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **McDonald Green Elem**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

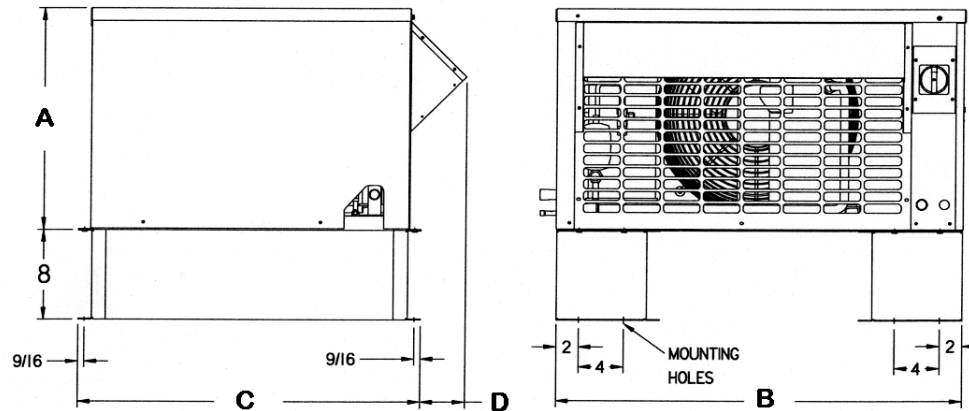
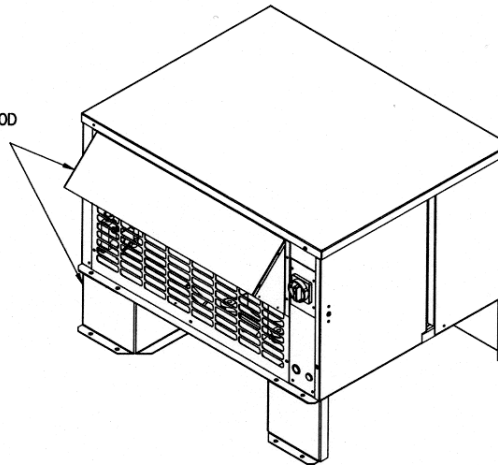
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	5/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	183 lb
REFRIGERANT CHARGE	3 lb
RECEIVER CAPACITY	5 lb

APPROVALS			

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NOTES:

AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP209MA-S1D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 3
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|---|--|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Factory installed solenoid valve wire harness • Heavy gauge textured aluminum cabinet construction resists scratches/corrosion • Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> • Hinged drain pan with central universal drain connection (3/4" drain) • Front access to spacious electrical and header compartments • Schrader connection on suction header • Attractive and durable high density polyethylene fan guards • Ultra efficient Electronically Commutated Motor (ECM) | <ul style="list-style-type: none"> • ECM with SmartSpeed Technology • High efficiency enhanced copper tube and aluminium fin coil design • 6 FPI • AWEF = 9.0 • Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A/R407C |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV,T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit ELECTRONIC CONTROLLER <input type="checkbox"/> KE2 Temp+Defrost <input type="checkbox"/> SmartVap+ Control Board and Display	<p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <input type="checkbox"/> Evaporator Disconnect Switch <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed <p>ROOM THERMOSTATS</p> <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box

VOLTAGE		SYSTEM REFRIGERANT			AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
115/1/60		R448A			1500 CFM		26.8 °F		35 °F		7141 BTUH	
FANS				HEATERS				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡			
2	0.07HP	1				2	120	2.3	15			
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY					APPROVALS		
SUCTION		7/8 in	WEIGHT	70 lb	REF CHARGE	1 lb						

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP209MA-S1D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 3
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV,T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 3
BLP209MA-S1D
LOW PROFILE
EVAPORATOR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

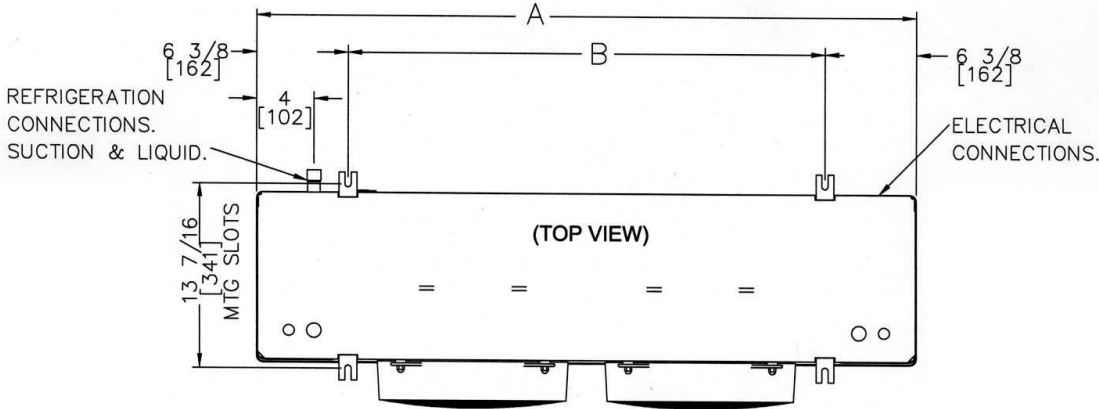
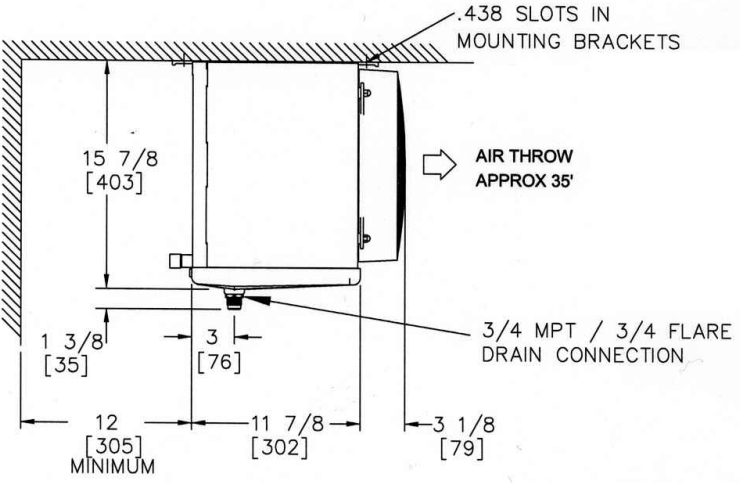
DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **McDonald Green Elem**
SUBMITTED BY : **Laura Craig**

Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

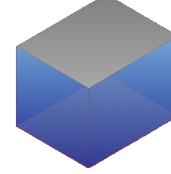
CONNECTIONS	
DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	70 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

APPROVALS			



NOTES:

McDonald Green Elem Freezer LOAD CALCULATION



COOLING REQUIREMENTS										
Application	General Walk-in Freezer				Location	Indoor				
Internal Temp	-10 °F	Internal RH	95%	External Temp	85 °F	External RH	55%			
Wall Load	1,512 BTUH	Infiltration	1,830 BTUH	Products	114 BTUH	Miscellaneous	631 BTUH			
	37%		45%		3%		15%			
WALL, FLOOR AND CEILING LOADS										
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)	
Rear	Urethane, Standard panels	4.000	0.14	28.57	45.0	9.67	8.50	82	158	
Right End	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.75	8.50	46	154	
	Door			15.00	85.0	3.00	6.50	20	123	
Front	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.67	8.50	82	273	
Left End	Urethane, Standard panels	4.000	0.14	28.57	85.0	7.75	8.50	66	219	
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		9.67	7.75	75	336	
Ceiling	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.67	7.75	75	249	
VOLUME (ft³)		637		TOTAL WALL, FLOOR AND CEILING LOAD					1,512	
INFILTRATION LOAD : ESTIMATED BY DOORS AND OPENINGS										
Quantity	Door or Opening Type	Height (in)	Width (in)	External Temp (°F)	External Rh (%)	Open Time (hrs)	Curtains	Load (BTUH)		
1	Door	78.00	36.00	85.0	55.0	0.18	None	1,830		
TOTAL INFILTRATION LOAD ESTIMATED BY DOORS AND OPENINGS									1,830	
PRODUCT LOADS										
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)					
General, Mixed Products, Approximation	637	0.0	-10.0	24	114					
TOTAL PRODUCT WEIGHT (lbs)		637		TOTAL PRODUCT LOAD			114			
MISCELLANEOUS LOADS										
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)					
	LIGHTING	1	W/ft²	24	256					
2	EVAPORATOR MOTORS	60	W	22	375					
TOTAL MISCELLANEOUS LOAD									631	
SYSTEM DESIGN SUMMARY										
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)	
4,088	10%	4,497	18	5,995	R448A	60	10	0.5	105	
SYSTEM EQUIPMENT SELECTION										
Equipment Type	Quantity	Model Number	Description			Voltage	Rating (BTUH)			
Condensing Unit	1	BEZA020L8-HT3D	EZ-Line Scroll Condensing Units-Air			208-230/3/60	6,384			
Evaporator	1	BLP207LE-S2D	Low Profile Evaporator			208-230/1/60	7,189			
SYSTEM BALANCE										
Fan Load (BTUH)		Suction Temp (°F)			Evaporator TD (°F)		System Capacity (BTUH)			
		-19.5			9		6,516			

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA020L8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 4
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Anti-short cycle time delay • Adjustable pressure fan cycling control on 2 fan models only • Copper tubing secured with cushion clamps • Crankcase heater • Fan Guard | <ul style="list-style-type: none"> • Fan motors are inherently protected with internal overloads • Pre-formed piping • Receiver with fusible plug and liquid shut off valve • Suction Service valve • Adjustable flooded head pressure control (unless otherwise indicated) • Units are shipped with Helium holding charge • Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> • Welded hermetic Scroll compressor • Adjustable low pressure control with flex hose / fixed high pressure control • ECM with SmartSpeed Technology • High efficiency enhanced copper tube and aluminium fin coil design • Compatible with Low GWP Refrigerants • Outdoor weatherproof pre-painted steel cabinet |
|---|---|---|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> 1 Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p>ELECTRIC DEFROST KIT</p> <p><input checked="" type="checkbox"/> 1 DFK-02</p> <p>115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p>Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p>Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p>Discharge Air Hood</p> <p>Discharge Line Check Valve</p> <p>Discharge Line Temperature Sensor</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p>Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p>Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p>Hail Guard for Condenser</p> <p>Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p>Insulated Suction Line</p> <p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> 1 Sealed</p> <p><input type="checkbox"/> Replaceable</p>	<p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p>One Time Pump Down</p> <p>Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p>Pump Down Toggle Switch</p> <p>QuickVac Valves</p> <p>Receiver Inlet Ball Valve</p> <p>Single Point Electrical</p> <p>Sub Cooling Circuit</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input type="checkbox"/> *115V Paragon 8145 Style</p> <p>Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
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VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY	
208-230/3/60		R448A			2Hp		-19.5 °F		105 °F		6516 BTUH	
FANS				COMPRESSOR				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡		
1	100W	1	ZF07KAE-TF5	1	8.6	58	9.6		11.8	20		
LIQUID		3/8 in	SOUND	-		REC CAPACITY	11 lb					
SUCTION		7/8 in	WEIGHT	315 lb		REF CHARGE	4 lb					

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 3.1 for R404A/R507/ AWEF = 3.08 for R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants.

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA020L8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 4
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Electric Defrost Kit - DFK-02

Electric Defrost Kit includes:

Mechanical Time Clock:

Time initiated temperature terminated with a timed failsafe.

Contactors:

Three pole definite purpose, 230V or 115V coil as defined by the control circuit voltage

HtrCont1x 40A

Fuse Blocks:

1x 30A (2P) Class CC

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 4
BEZA020L8-HT3D
EZ-LINE SCROLL
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **McDonald Green Elem**
SUBMITTED BY : **Laura Craig**

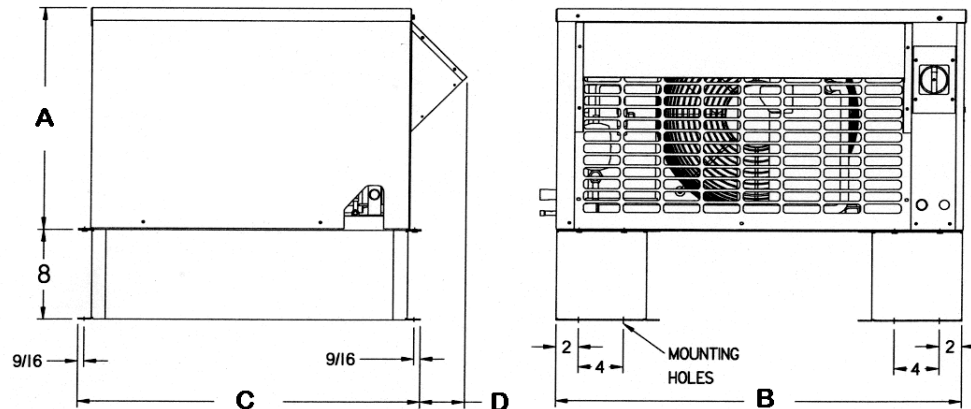
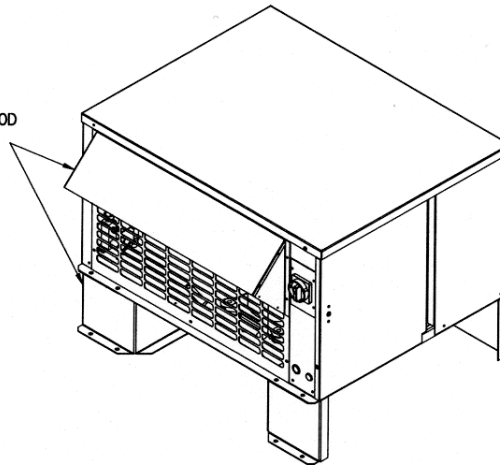
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	7/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	315 lb
REFRIGERANT CHARGE	4 lb
RECEIVER CAPACITY	11 lb

APPROVALS			

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NOTES:

AWEF = 3.1 for R404A/R507/ AWEF = 3.08 for R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP207LE-S2D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 5
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|--|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Factory installed solenoid valve wire harness Heavy gauge textured aluminum cabinet construction resists scratches/corrosion Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> Hinged drain pan with central universal drain connection (3/4" drain) Front access to spacious electrical and header compartments Schrader connection on suction header Attractive and durable high density polyethylene fan guards | <ul style="list-style-type: none"> Ultra efficient Electronically Commutated Motor (ECM) ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design 6 FPI Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV, T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Adaptive Control <input type="checkbox"/> *KE2 Adaptive Control <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit	<p>ELECTRONIC CONTROLLER</p> <input type="checkbox"/> SmartVap+ Control Board and Display <p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed ROOM THERMOSTATS <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box <input checked="" type="checkbox"/> 1 Insulated drain line requires heat - 20W/ft

VOLTAGE		SYSTEM REFRIGERANT		AIR FLOW	EVAP. TEMP	BOX TEMP	CAPACITY
208-230/1/60		R448A		1500 CFM	-19 °F	-10 °F	6516 BTUH
FANS			HEATERS			CIRCUIT TOTAL	
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS
2	0.07HP	0.6				1.2	120
			DEFROST HTRS			1890	10.3
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY		
SUCTION		7/8 in	WEIGHT	76 lb	REF CHARGE	1 lb	

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP207LE-S2D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : McDonald Green Elem	DATE : 11 Oct 2022
ORDER # : 06338.56873.00469-A00	ITEM # : 5
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Insulated drain line requires heat - 20W/ft

Freezer condensate drain lines must be insulated and heated with a minimum of 20 watts per foot.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV, T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 5

BLP207LE-S2D

LOW PROFILE EVAPORATOR

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **McDonald Green Elem**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

Dimensions shown are for standard unit less options.

DIMENSIONS

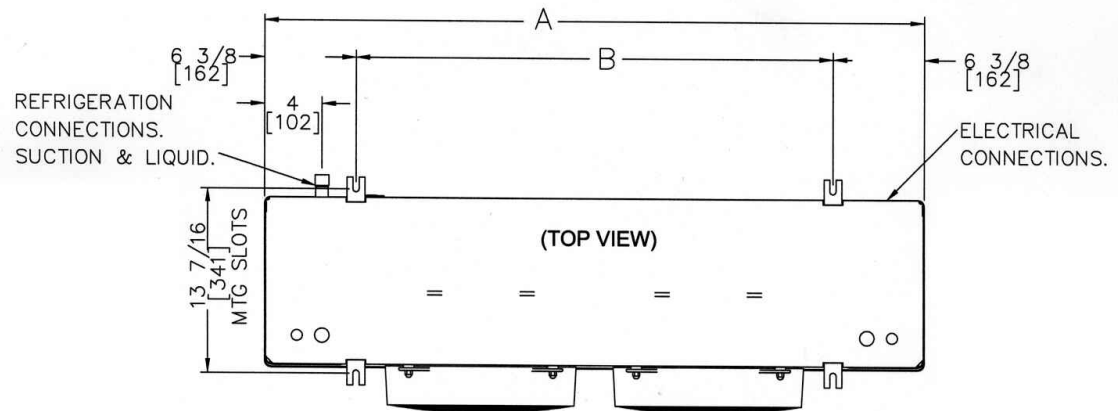
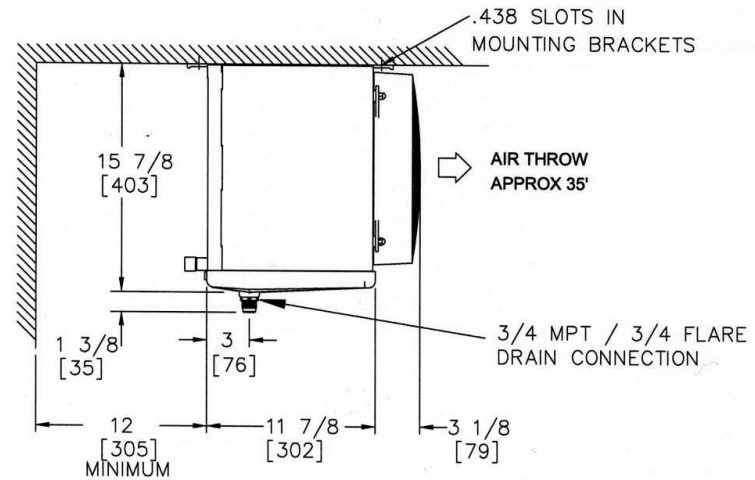
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	76 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

APPROVALS

NOTES:





Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2751-002-R03-LC
Item No:
Job Name: South Middle School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Indoor Structure

NSF APPROVED

Bally Prefabricated Exterior Dimensions:

9'-8"(l) x 6'-9½"(w) x 7'-6"(h)
 1 Compartments 1 Tiers With Floor 4" Floor
 Ceiling: Single Span

Panel Thickness:

4 in. Exterior Vertical Used (6'-10") with 4 in. Floor, 4 in. Ceiling

Details and specifications for Quote No: 2751-002-R03-LC

Comments:

Base Finish

Vertical and Ceiling Panels: Embossed Galvalume (26 GA)

Special Finishes:

Interior Floor - Aluminum Treadplate .125" Thick

Doors/Openings:

Wall 2 Door 1 (1) 36" x 78" Hinged Door In a 46"
 Wall 2 Door 1 (1) Super Door 36" Wide and Under, 30" High

Accessories and Extras:

(1) 48" LED KEIL 48x754-CL-N Light
 - 40° F to 100° F(Range)
 (1) To be installed in 4" Depression Below Finished Floor

Floor Options:

(70) S/F 1/2" Plywood Foamed in Panel

Refrigeration:

(1) BEHA-006-M8-HS2D 208-230/1/60
 R448A & R404A - 6200 BTU/h
 (1) BLP107-MA-S1D 115/1/60
 1 Fan 7000 BTU/h
 (1) Refrigeration is calculated for standard use at a box temperature of
 35° F. with a condensing unit ambient of 105° F.
 (1) The refrigeration is calculated for a line run of less than 50'
 (1) Time Clock 8145 (shipped loose) 115/1/60

Estimated Shipping:

Weight: 2,222.42

Destination: Lancaster, SC, 29720



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2751-002-R03-LC
Item No:
Job Name: South Middle School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Phone: **Fax:** (704)521-8801

Deviations (Alternates, Remarks, Clarifications, Etc.):

Bally Floor Panels are capable of supporting up to 800 lbs. Per Sq/Ft uniformly distributed stationary loading. Bally does not recommend the use rolling loads of heavy carts, pallet jacks or fork lifts on top of the floors. Warranty for floors subjected to this type of use would not be covered by Bally.

Exclusions (Items Not Supplied by Bally):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Shelving, Racks, Interior Accessories | <input checked="" type="checkbox"/> Caulking and Sealants |
| <input type="checkbox"/> Labor on Warranties | <input type="checkbox"/> Refrigeration Systems |
| <input checked="" type="checkbox"/> Alarm Systems | <input checked="" type="checkbox"/> Refrigeration Accessories |
| <input checked="" type="checkbox"/> Supervision | <input checked="" type="checkbox"/> Closure Panel and Trim |
| <input checked="" type="checkbox"/> Tubing, Wiring for Rfg. Equipment | <input checked="" type="checkbox"/> Sleeves, Penetrations, Escutcheon Plates |
| <input checked="" type="checkbox"/> Compressor Rack | <input checked="" type="checkbox"/> Floor Insulation and Vapor Barrier |

Cancelled Orders: Cancelled unshipped standard walk-ins will be charged a 30% restocking fee plus the cost of special panels. Cancelled refrigeration systems will be charged a 30% restocking fee and the cost of any freight accrued. Buy-out items will be charged a 25% restocking fee plus any freight accrued.

Agency Ratings: Bally units comply or surpass applicable Flame Spread-25, UL, UL 723, & NSF standards in a manner conforming to ASTM E-84, and Factory Mutual standards.

Quotation Limitations: This quotation was based upon the specifications given to Bally which may possibly be incomplete. Bally is not responsible for items missing from the quotation due to incomplete or excluded items in the specifications received from the customer. The customer is responsible for reviewing the quotation for omissions or deviations from the specifications given to Bally. All portions of the quotation are subject to revision upon receipt of detailed specifications or if changes are made following the delivery of the original quotation. Quotations expire on the date indicated on Page 1 of the Quote. Approval drawings must be returned within 60 days of receipt of the purchase order. The order must ship within the agreed upon time frames or current lead times, but no later than 7 months. Any deviations to this quotation (dimensions or specification changes) will require updated pricing.

Panel Construction: Bally Panels are manufactured with environmentally friendly HFC 245-FA polyurethane foam. This polyurethane foam offers the highest thermal insulation value and the most energy efficiency per cubic inch in comparison to similar foams. It has a zero Ozone Depletion Potential (ODP) and a low Global Warming Potential (GWP). It is not considered a Volatile Organic Compound (VOC) in the US. Standard 4" Bally panels meet the 2009 Federal Energy Standards.

Refrigerants: Unless otherwise specified, refrigeration systems are quoted with environmentally friendly HFO R448A refrigerant. It has a Low Global Warming Potential (GWP) and the EPA lists it as an acceptable substitute for R404A and other high GWP refrigerants.

Automatic Door Closers: Bally includes automatic door closers and spring loaded hinges on all doors 42" wide and smaller as a standard feature with no additional charge that meet the 2009 Federal Energy Standards.

Motors: Bally units are quoted with EC and PSC motors in compliance with federal energy standards, for increased energy savings.

Lighting: Bally units are quoted with lighting in compliance with federal Energy Standards for increased energy savings.

Optional Features: Bally offers additional optional energy-saving features such as Walk-In Alarm & Light Management systems that comply or surpass the 2009 Federal energy regulations.



Bally Refrigerated Boxes, Inc. Revised Specifications
Morehead City, NC 28557 (800) 242-2559

Last Update: 10/12/2022
Revisor: Laura Craig
To: All Bidders

Quote No: 2751-002-R03-LC
Item No:
Job Name: South Middle School
Date: 10/12/2022 **PVD:** 10/3/2022
From: Laura Craig
 Swanson-Girard & Associates
 10420 Southern Loop Blvd
 Pineville, NC 28134

Attn:

Phone: **Fax:** (704)521-8801

This drawing is for reference purposes only and it not intended to be a formal scale model.

w3: 9'-8"

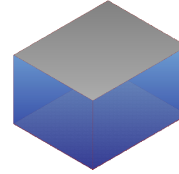
w4: 6'-9½"



w2: 6'-9½"

w1: 9'-8"

DOOR 1: Wall2 36" x 78" Hinged Door In a 46" Centered Hinge:Right Orientaion:Regular



COOLING REQUIREMENTS									
Application	General Walk-in Cooler			Location	Indoor				
Internal Temp	35 °F	Internal RH	84%	External Temp	85 °F	External RH	55%		
Wall Load	958 BTUH	Infiltration	996 BTUH	Products	625 BTUH	Miscellaneous	801 BTUH		
	28%		29%		19%		24%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft ²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.57	35.0	11.70	8.50	99	
Right End	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.80	8.50	64	112
	Door			15.00	85.0	3.00	6.50	20	65
Front	Urethane, Standard panels	4.000	0.14	28.57	85.0	11.70	8.50	99	174
Left End	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.80	8.50	83	146
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		11.70	9.80	115	262
Ceiling	Urethane, Standard panels	4.000	0.14	28.57	85.0	11.70	9.80	115	201
VOLUME (ft ³)		975	TOTAL WALL, FLOOR AND CEILING LOAD					958	
INFILTRATION LOAD : ESTIMATED BY VOLUME AND USAGE									
Box Usage	Internal Temp (°F)	Internal Rh (%)	External Temp (°F)	External Rh (%)	Ventilation (CFM)	Load (BTUH)			
Regular	35	84	85	55		996			
PRODUCT LOADS									
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)				
General, Mixed Products, Approximation	1,949	45.0	35.0	24	625				
TOTAL PRODUCT WEIGHT (lbs)		1,949	TOTAL PRODUCT LOAD			625			
MISCELLANEOUS LOADS									
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)				
	LIGHTING	1	W/ft ²	24	391				
2	EVAPORATOR MOTORS	60	W	24	409				
TOTAL MISCELLANEOUS LOAD					801				
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
3,380	10%	3,718	16	5,577	R404A	60	10.1	0.5	105
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number	Description			Voltage	Rating (BTUH)		
Condensing Unit	1	BEZA007H8-HT3D	EZ-Line Scroll, Condensing Units-Air			208-230/3/60			
Evaporator	1	BLP209MA-S1D	Low Profile, Evaporator			115/1/60			
SYSTEM BALANCE									
Fan Load (BTUH)	Suction Temp (°F)		Evaporator TD (°F)		System Capacity (BTUH)				
	26.4		8.1		6,866				

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA007H8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 1
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|--|---|---|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Anti-short cycle time delay Adjustable pressure fan cycling control on 2 fan models only Copper tubing secured with cushion clamps Crankcase heater Discharge line temperature sensor Fan Guard | <ul style="list-style-type: none"> Fan motors are inherently protected with internal overloads Pre-formed piping Receiver with fusible plug and liquid shut off valve Suction Service valve Adjustable flooded head pressure control (unless otherwise indicated) Units are shipped with Helium holding charge Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> Welded hermetic Scroll compressor Adjustable low pressure control with flex hose / fixed high pressure control ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design Compatible with Low GWP Refrigerants Outdoor weatherproof pre-painted steel cabinet |
|--|---|---|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p><input type="checkbox"/> 115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p><input type="checkbox"/> Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p><input type="checkbox"/> Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p><input type="checkbox"/> Discharge Air Hood</p> <p><input type="checkbox"/> Discharge Line Check Valve</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p><input type="checkbox"/> Export Crating</p> <p><input type="checkbox"/> EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p><input type="checkbox"/> Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p><input type="checkbox"/> Hail Guard for Condenser</p> <p><input type="checkbox"/> Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p><input type="checkbox"/> Insulated Suction Line</p>	<p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> Sealed</p> <p><input type="checkbox"/> Replaceable</p> <p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p><input type="checkbox"/> One Time Pump Down</p> <p><input type="checkbox"/> Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p><input type="checkbox"/> Pump Down Toggle Switch</p> <p><input type="checkbox"/> QuickVac Valves</p> <p><input type="checkbox"/> Receiver Inlet Ball Valve</p> <p><input type="checkbox"/> Single Point Electrical</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input checked="" type="checkbox"/> *115V Paragon 8145 Style</p> <p><input type="checkbox"/> Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
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VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY	
208-230/3/60		R404A			0.7Hp		26.4 °F		105 °F		6866 BTUH	
FANS				COMPRESSOR				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡		
1	100W	1	ZB06KAE-TF5	1	4.8	37.8	5.8		7	15		
LIQUID		3/8 in	SOUND	-		REC CAPACITY	5 lb					
SUCTION		5/8 in	WEIGHT	183 lb		REF CHARGE	3 lb					

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA007H8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 1
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Time Clock - 115V Paragon 8145 Style

115V Defrost timer is time initiated, temperature or pressure terminated with a timed failsafe. Timer is shipped loose in a box for field installation.

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NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 1
BEZA007H8-HT3D
EZ-LINE SCROLL
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

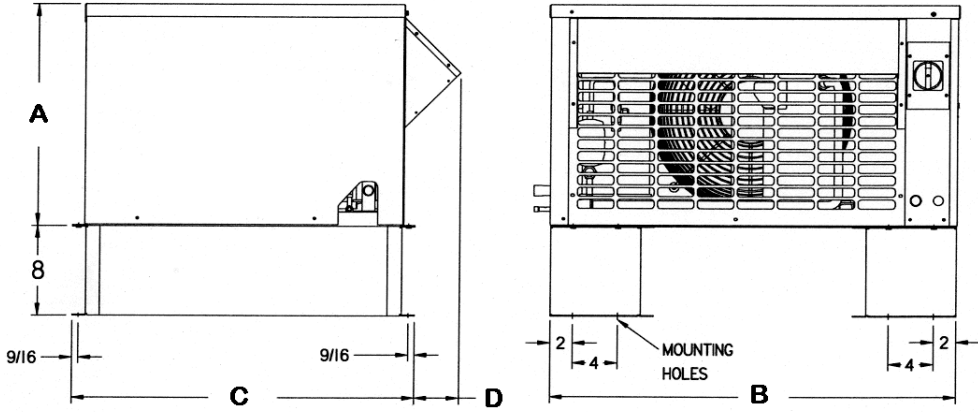
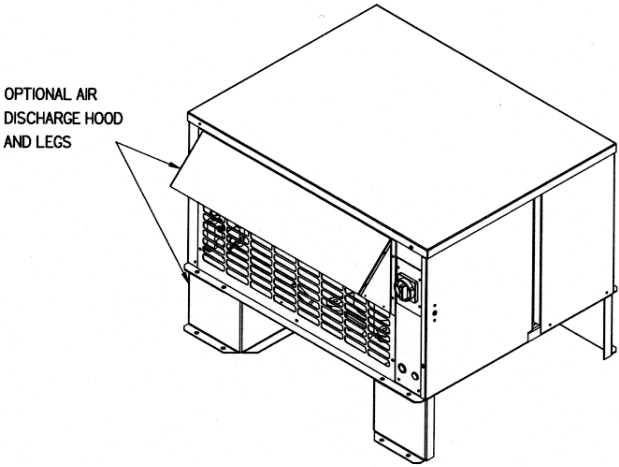
DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **South Middle School Lancaster SC**
SUBMITTED BY : **Laura Craig**

Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	5/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	183 lb
REFRIGERANT CHARGE	3 lb
RECEIVER CAPACITY	5 lb

APPROVALS			



NOTES:
AWEF = 7.6 for R404A/R507/R407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP209MA-S1D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 3
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|---|--|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Factory installed solenoid valve wire harness • Heavy gauge textured aluminum cabinet construction resists scratches/corrosion • Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> • Hinged drain pan with central universal drain connection (3/4" drain) • Front access to spacious electrical and header compartments • Schrader connection on suction header • Attractive and durable high density polyethylene fan guards • Ultra efficient Electronically Commutated Motor (ECM) | <ul style="list-style-type: none"> • ECM with SmartSpeed Technology • High efficiency enhanced copper tube and aluminium fin coil design • 6 FPI • AWEF = 9.0 • Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A/R407C |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV,T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit ELECTRONIC CONTROLLER <input type="checkbox"/> KE2 Temp+Defrost <input type="checkbox"/> SmartVap+ Control Board and Display	<p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <input type="checkbox"/> Evaporator Disconnect Switch <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed <p>ROOM THERMOSTATS</p> <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box

VOLTAGE		SYSTEM REFRIGERANT			AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
115/1/60		R404A			1500 CFM		26.9 °F		35 °F		6866 BTUH	
FANS				HEATERS				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡			
2	0.07HP	1				2	120	2.3	15			
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY					APPROVALS		
SUCTION		7/8 in	WEIGHT	70 lb	REF CHARGE	1 lb						

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP209MA-S1D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 3
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV,T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 3

BLP209MA-S1D

LOW PROFILE EVAPORATOR

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **South Middle School Lancaster SC**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

Dimensions shown are for standard unit less options.

DIMENSIONS

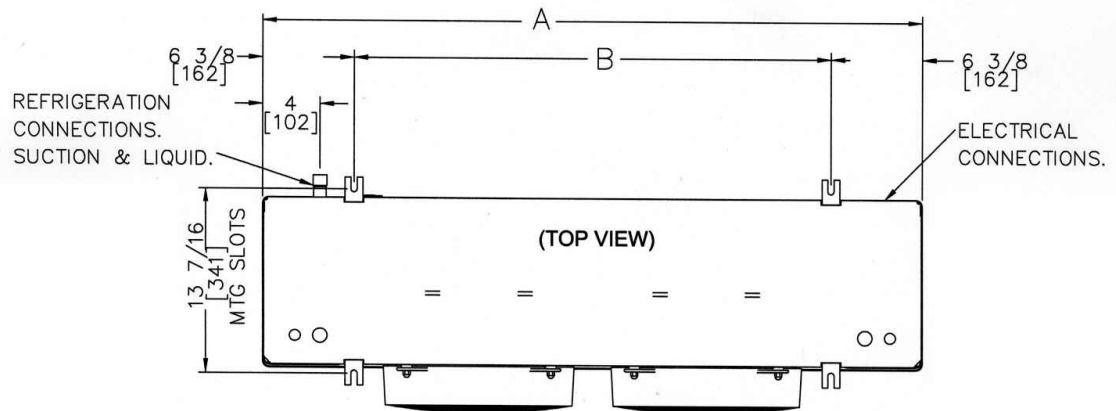
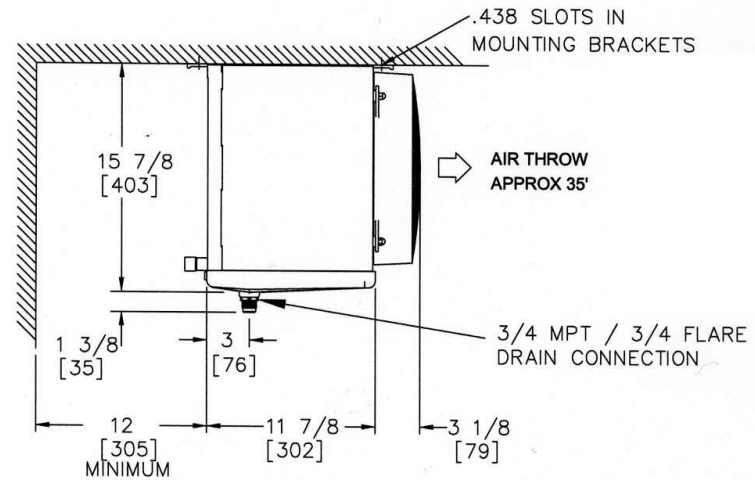
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	70 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

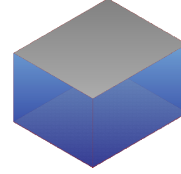
APPROVALS

NOTES:





Revised Specifications
Freezer LOAD CALCULATION



COOLING REQUIREMENTS									
Application	General Walk-in Freezer			Location	Indoor				
Internal Temp	-10 °F	Internal RH	95%	External Temp	85 °F	External RH	55%		
Wall Load	1,963 BTUH	Infiltration	2,063 BTUH	Products	175 BTUH	Miscellaneous	767 BTUH		
	40%		42%		4%		15%		
WALL, FLOOR AND CEILING LOADS									
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)
Rear	Urethane, Standard panels	4.000	0.14	28.57	35.0	11.70	8.50	99	157
Right End	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.80	8.50	64	212
	Door			15.00	85.0	3.00	6.50	20	123
Front	Urethane, Standard panels	4.000	0.14	28.57	85.0	11.70	8.50	99	331
Left End	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.80	8.50	83	277
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		11.70	9.80	115	482
Ceiling	Urethane, Standard panels	4.000	0.14	28.57	85.0	11.70	9.80	115	381
VOLUME (ft³)		975		TOTAL WALL, FLOOR AND CEILING LOAD				1,963	
INFILTRATION LOAD : ESTIMATED BY VOLUME AND USAGE									
Box Usage	Internal Temp (°F)	Internal Rh (%)	External Temp (°F)	External Rh (%)	Ventilation (CFM)	Load (BTUH)			
Regular	-10	95	85	55		2,063			
PRODUCT LOADS									
Type	Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)				
General, Mixed Products, Approximation	975	0.0	-10.0	24	175				
TOTAL PRODUCT WEIGHT (lbs)		975		TOTAL PRODUCT LOAD		175			
MISCELLANEOUS LOADS									
Quantity	Description	Power	Units	Run Time (hrs)	Load (BTUH)				
	LIGHTING	1	W/ft²	24	391				
2	EVAPORATOR MOTORS	60	W	22	375				
TOTAL MISCELLANEOUS LOAD					767				
SYSTEM DESIGN SUMMARY									
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)
4,967	10%	5,464	18	7,285	R448A	60	10	0.5	105
SYSTEM EQUIPMENT SELECTION									
Equipment Type	Quantity	Model Number	Description			Voltage	Rating (BTUH)		
Condensing Unit	1	BEZA025L8-HT3D	EZ-Line Scroll, Condensing Units-Air			208-230/3/60			
Evaporator	1	BLP209LE-S2D	Low Profile, Evaporator			208-230/1/60			
SYSTEM BALANCE									
Fan Load (BTUH)	Suction Temp (°F)		Evaporator TD (°F)		System Capacity (BTUH)				
	-19.4		8.9		8,441				

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEZA025L8-HT3D EZ-LINE SCROLL CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 4
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Anti-short cycle time delay • Adjustable pressure fan cycling control on 2 fan models only • Copper tubing secured with cushion clamps • Crankcase heater • Discharge line temperature sensor • Fan Guard | <ul style="list-style-type: none"> • Fan motors are inherently protected with internal overloads • Pre-formed piping • Receiver with fusible plug and liquid shut off valve • Suction Service valve • Adjustable flooded head pressure control (unless otherwise indicated) • Units are shipped with Helium holding charge | <ul style="list-style-type: none"> • Weatherproof electrical control box with compressor contactor and fused control circuit • Welded hermetic Scroll compressor • Adjustable low pressure control with flex hose / fixed high pressure control • High efficiency enhanced copper tube and aluminium fin coil design • Compatible with Low GWP Refrigerants • Outdoor weatherproof pre-painted steel cabinet |
|--|--|--|

- MODEL OPTIONS (* = Shipped Loose)**
- | | | |
|--|--|---|
| <p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> 1 Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p>ELECTRIC DEFROST KIT</p> <p><input checked="" type="checkbox"/> 1 DFK-02</p> <p>115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p><input type="checkbox"/> Separate High/Low: MAN Reset on HP</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p><input type="checkbox"/> Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p><input type="checkbox"/> Compressor Circuit Breaker</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p><input type="checkbox"/> Crankcase Pressure Regulator</p> <p>CONTACTORS</p> <p><input type="checkbox"/> 30A Contactor</p> <p><input type="checkbox"/> 40A Contactor</p> <p><input type="checkbox"/> 60A Contactor</p> | <p>DEFROST KIT (USE W/KE2 EVAP EFF)</p> <p><input type="checkbox"/> Up to 30A per Evap</p> <p><input type="checkbox"/> 35A to 50A per Evap</p> <p><input type="checkbox"/> Over 50A per Evap</p> <p><input type="checkbox"/> Discharge Air Hood</p> <p><input type="checkbox"/> Discharge Line Check Valve</p> <p><input type="checkbox"/> Discharge Line Temperature Sensor</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> SmartSpeed</p> <p>ELECTRONIC PRESSURE CONTROL</p> <p><input type="checkbox"/> Low Pressure Control</p> <p><input type="checkbox"/> High Pressure Control</p> <p><input type="checkbox"/> Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p><input type="checkbox"/> Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p><input type="checkbox"/> Hail Guard for Condenser</p> <p><input type="checkbox"/> Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p><input type="checkbox"/> Insulated Suction Line</p> | <p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> 1 Sealed</p> <p><input type="checkbox"/> Replaceable</p> <p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p>OIL SEPARATOR</p> <p><input type="checkbox"/> With Oil Filter and Solenoid</p> <p><input type="checkbox"/> One Time Pump Down</p> <p><input type="checkbox"/> Oversized Receiver</p> <p>PHASE / VOLTAGE MONITOR</p> <p><input type="checkbox"/> 3-Lead</p> <p><input type="checkbox"/> 6-Lead (MotorSaver455)</p> <p><input type="checkbox"/> Pump Down Toggle Switch</p> <p><input type="checkbox"/> QuickVac Valves</p> <p><input type="checkbox"/> Receiver Inlet Ball Valve</p> <p><input type="checkbox"/> Single Point Electrical</p> <p><input type="checkbox"/> Sub Cooling Circuit</p> <p>SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p><input type="checkbox"/> Replaceable Core</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input type="checkbox"/> *115V Paragon 8145 Style</p> <p><input type="checkbox"/> Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p> |
|--|--|---|

VOLTAGE		SYSTEM REFRIGERANT				RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY	
208-230/3/60		R448A				2.5Hp		-19.4 °F		105 °F		8441 BTUH	
FANS				COMPRESSOR				CIRCUIT TOTAL					
QTY	POWER	FLA/FAN	TYPE		QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡		
1	240W	1.1	ZF08K4E-TF5		1	9.6	63	10.7		13.1	20		
LIQUID		3/8 in	SOUND		-		REC CAPACITY		14 lb		APPROVALS		
SUCTION		7/8 in	WEIGHT		335 lb		REF CHARGE		6 lb				

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

AWEF = 3.15 for R404A/R507/407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEZA025L8-HT3D

**EZ-LINE SCROLL
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 4
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Electric Defrost Kit - DFK-02

Electric Defrost Kit includes:

Mechanical Time Clock:

Time initiated temperature terminated with a timed failsafe.

Contactors:

Three pole definite purpose, 230V or 115V coil as defined by the control circuit voltage

HtrCont1x 40A

Fuse Blocks:

1x 30A (2P) Class CC

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 4
BEZA025L8-HT3D
EZ-LINE SCROLL
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

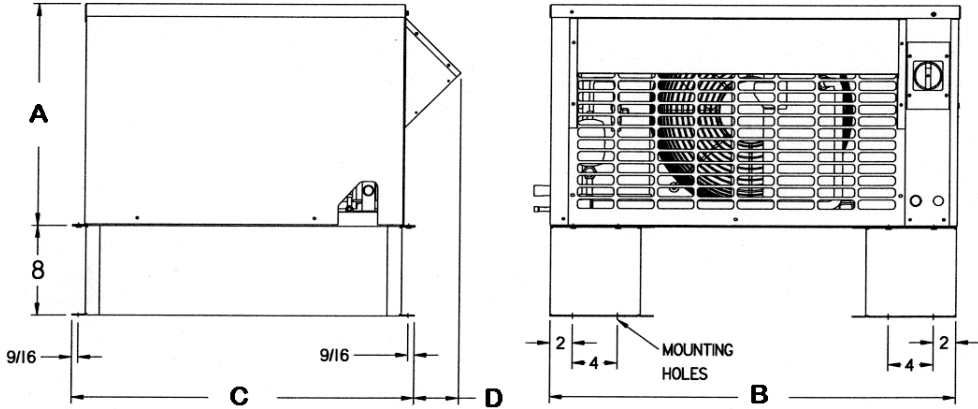
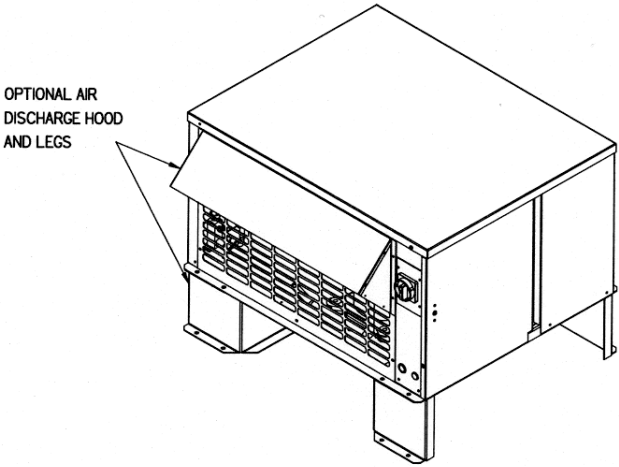
DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **South Middle School Lancaster SC**
SUBMITTED BY : **Laura Craig**

Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	19 7/8 in
DIMENSION B	36 3/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	7/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	335 lb
REFRIGERANT CHARGE	6 lb
RECEIVER CAPACITY	14 lb

APPROVALS			



NOTES:
AWEF = 3.15 for R404A/R507/407A/R448A/R449A. Non-compliant DOE NRCAN model for all other refrigerants

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP209LE-S2D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 5
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|---|--|---|
| <ul style="list-style-type: none"> • 3/8" Tubing coil construction (reduces refrigerant operating charge) • Factory installed solenoid valve wire harness • Heavy gauge textured aluminum cabinet construction resists scratches/corrosion • Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> • Hinged drain pan with central universal drain connection (3/4" drain) • Front access to spacious electrical and header compartments • Schrader connection on suction header • Attractive and durable high density polyethylene fan guards | <ul style="list-style-type: none"> • Ultra efficient Electronically Commutated Motor (ECM) • ECM with SmartSpeed Technology • High efficiency enhanced copper tube and aluminium fin coil design • 6 FPI • Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A |
|---|--|---|

<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> 1 Sporlan TXV, LLSV, T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan TXV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Adaptive Control <input type="checkbox"/> *KE2 Adaptive Control <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>ELECTRONIC CONTROLLER</p> <input type="checkbox"/> SmartVap+ Control Board and Display <p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <p>Export Crating</p> <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <p>Insulated Drain Pan</p> <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> 1 Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed <p>ROOM THERMOSTATS</p> <input checked="" type="checkbox"/> 1 Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <p>Wire Fan Guards</p> <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> 1 Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> 1 P-trap per evap required outside of box <input checked="" type="checkbox"/> 1 Insulated drain line requires heat - 20W/ft
--	--	---

VOLTAGE		SYSTEM REFRIGERANT		AIR FLOW	EVAP. TEMP	BOX TEMP	CAPACITY
208-230/1/60		R448A		1410 CFM	-18.9 °F	-10 °F	8441 BTUH
FANS			HEATERS			CIRCUIT TOTAL	
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS
2	0.07HP	0.6				1.2	120
			DEFROST HTRS				1890
					8.2		10.3
DISTRIBUTOR	3/8 in	SOUND	-	REC CAPACITY			APPROVALS
SUCTION	7/8 in	WEIGHT	80 lb	REF CHARGE	2 lb		

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY : _____ **DATE :** _____

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP209LE-S2D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 5
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

**Installation Requirements - Insulated drain line
requires heat - 20W/ft**

Freezer condensate drain lines must be insulated and heated with a minimum of 20 watts per foot.

**Installation Requirements - Minimum slope of 1" per
foot on all drain lines**

Bally recommends a minimum slope of 1" per foot on all drain lines.

**Installation Requirements - P-trap per evap required
outside of box**

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV, T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 5

BLP209LE-S2D

LOW PROFILE EVAPORATOR

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **South Middle School Lancaster SC**

SUBMITTED BY : **Laura Craig**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

Dimensions shown are for standard unit less options.

DIMENSIONS

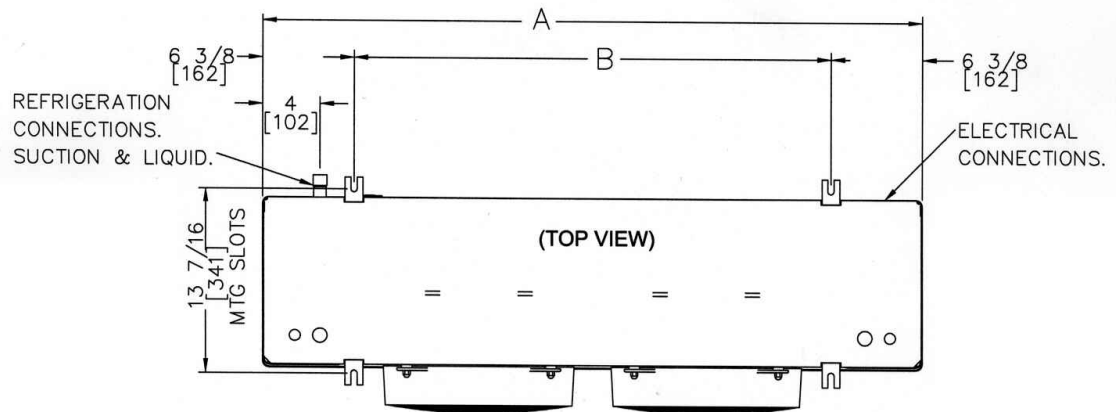
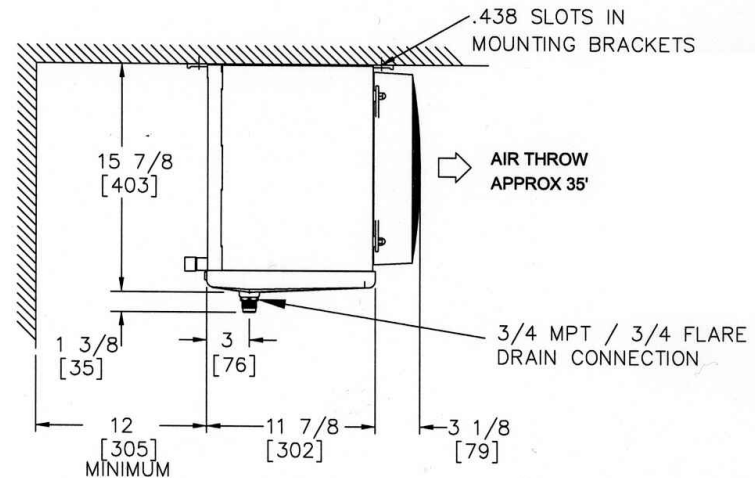
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

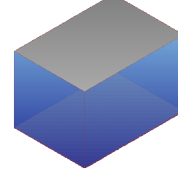
DISTRIBUTOR	3/8 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	80 lb
REFRIGERANT CHARGE	2 lb
RECEIVER CAPACITY	

APPROVALS

NOTES:



Single Cooler LOAD CALCULATION



COOLING REQUIREMENTS										
Application	General Walk-in Cooler			Location		Indoor				
Internal Temp	35 °F	Internal RH	84%	External Temp	85 °F	External RH	55%			
Wall Load	750 BTUH	Infiltration	1,491 BTUH	Products	322 BTUH	Miscellaneous	433 BTUH			
	25%		50%		11%		14%			
WALL, FLOOR AND CEILING LOADS										
Section	Construction	Thickness (in)	K Factor	R Value	Ext Temp (°F)	Dim 1 (ft)	Dim 2 (ft)	Area (ft²)	Load (BTUH)	
Rear	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.70	7.50	73	127	
Right End	Urethane, Standard panels	4.000	0.14	28.57	85.0	6.90	7.50	32	56	
	Door			15.00	85.0	3.00	6.50	20	65	
Front	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.70	7.50	73	127	
Left End	Urethane, Standard panels	4.000	0.14	28.57	85.0	6.90	7.50	52	91	
Floor	Insulated Floor - Panels On Concrete On Grade	10.000	0.31	32.32		9.70	6.90	67	166	
Ceiling	Urethane, Standard panels	4.000	0.14	28.57	85.0	9.70	6.90	67	117	
VOLUME (ft³)		502		TOTAL WALL, FLOOR AND CEILING LOAD					750	
INFILTRATION LOAD : ESTIMATED BY VOLUME AND USAGE										
Box Usage	Internal Temp (°F)	Internal Rh (%)	External Temp (°F)	External Rh (%)	Ventilation (CFM)	Load (BTUH)				
Heavy	35	84	85	55		1,491				
PRODUCT LOADS										
Type			Weight (lb)	Enter Temp (°F)	Final Temp (°F)	Pull Down (hrs)	Load (BTUH)			
General, Mixed Products, Approximation			1,004	45.0	35.0	24	322			
TOTAL PRODUCT WEIGHT (lbs)			1,004		TOTAL PRODUCT LOAD			322		
MISCELLANEOUS LOADS										
Quantity	Description			Power	Units	Run Time (hrs)	Load (BTUH)			
	LIGHTING			1	W/ft²	24	228			
1	EVAPORATOR MOTORS			60	W	24	205			
TOTAL MISCELLANEOUS LOAD						433				
SYSTEM DESIGN SUMMARY										
Design Load (BTUH)	Safety Factor	Safety Load (BTUH)	Run Time (Hours)	Capacity Required (BTUH)	Refrigerant	Line Frequency (Hz)	Design TD (°F)	Line Loss (°F)	Condenser Ambient (°F)	
2,996	10%	3,296	16	4,944	R448A	60	10.1	0.5	105	
SYSTEM EQUIPMENT SELECTION										
Equipment Type	Quantity	Model Number	Description			Voltage	Rating (BTUH)			
Condensing Unit	1	BEHA006M8-HS2D	EH-Line Hermetic, Condensing Units-Air			208-230/1/60				
Evaporator	1	BLP107MA-S1D	Low Profile, Evaporator			115/1/60				
SYSTEM BALANCE										
Fan Load (BTUH)		Suction Temp (°F)		Evaporator TD (°F)		System Capacity (BTUH)				
		26.5		8		5,610				

NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BEHA006M8-HS2D EH-LINE HERMETIC CONDENSING UNITS-AIR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 6
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- MODEL FEATURES**
- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • Copper tubing secured with cushion clamps • Crankcase heater • High efficiency PSC fan motor with internal overload protection • Outdoor weather-resistant housing made from G90 galvanized steel • Pre-formed piping • Receiver with fusible plug and liquid shut off valve | <ul style="list-style-type: none"> • Suction Service valve • Adjustable flooded head pressure control (unless otherwise indicated) • Units are shipped with Helium holding charge • Weatherproof electrical control box with compressor contactor and fused control circuit | <ul style="list-style-type: none"> • Adjustable low pressure control with flex hose / fixed high pressure control • ECM with SmartSpeed Technology • High efficiency enhanced copper tube and aluminium fin coil design • Outdoor weatherproof pre-painted steel cabinet • AWEF = 7.6 FOR R404A/R507/R448A/R449A ONLY |
|---|---|--|

<p>OPTION PACKAGES</p> <p><input checked="" type="checkbox"/> 1 Small B (Good@Warm/Moderate)</p> <p><input type="checkbox"/> Small N (Better@Warm/Moderate)</p> <p><input type="checkbox"/> Small P (Best@Warm/Moderate)</p> <p><input type="checkbox"/> Small D (Good@Moderate/Cold)</p> <p><input type="checkbox"/> Small J (Better@Moderate/Cold)</p> <p><input type="checkbox"/> Small K (Best@Moderate/Cold)</p> <p><input type="checkbox"/> Small Q</p> <p><input type="checkbox"/> Small K</p> <p><input type="checkbox"/> Small H</p> <p><input type="checkbox"/> 115V Control Circuit</p> <p>ADJUSTABLE PRESSURE CONTROLS</p> <p><input type="checkbox"/> Johnson Dual with flex hose</p> <p><input type="checkbox"/> Separate High/Low</p> <p>BALL VALVE</p> <p><input type="checkbox"/> *Liquid Line</p> <p><input type="checkbox"/> *Suction Line</p> <p>CAPACITY CONTROL - HOT GAS BYPASS</p> <p><input type="checkbox"/> To Inlet of Evaporator</p> <p><input type="checkbox"/> To Suction Line</p> <p><input type="checkbox"/> Compressor Circuit Breaker</p> <p><input type="checkbox"/> Compressor Time Delay Relay</p> <p>CONDENSING UNIT PRISON PACKAGE</p> <p><input type="checkbox"/> Tamper Proof Screws</p> <p><input type="checkbox"/> Crankcase Pressure Regulator</p> <p><input type="checkbox"/> Discharge Air Hood</p> <p>DISCONNECT SWITCH</p> <p><input type="checkbox"/> Fused</p>	<p>MODEL OPTIONS (* = Shipped Loose)</p> <p>DISCONNECT SWITCH Continued</p> <p><input type="checkbox"/> Non-Fused</p> <p>EC FAN MOTORS + SPEED CONTROLLER</p> <p><input type="checkbox"/> All Motors Variable Speed - 230V Units</p> <p><input type="checkbox"/> Export Crating</p> <p>EXTENDED 4-YEAR COMPRESSOR WARRANTY</p> <p><input type="checkbox"/> Copeland</p> <p><input type="checkbox"/> Extended Leg Kit</p> <p>COIL COATING</p> <p><input type="checkbox"/> E-Coat</p> <p>FIN MATERIAL</p> <p><input type="checkbox"/> Gold Coat Fins</p> <p><input type="checkbox"/> Copper Fins</p> <p><input type="checkbox"/> Hail Guard for Condenser</p> <p><input type="checkbox"/> Heated and Insulated Receiver</p> <p>HOUSING MATERIAL</p> <p><input type="checkbox"/> Stainless Steel</p> <p><input type="checkbox"/> Insulated Suction Line</p> <p>LIQUID LINE FILTER + SIGHT GLASS</p> <p><input checked="" type="checkbox"/> 1 Sealed</p> <p><input type="checkbox"/> Liquid Line Lock-Out Relay</p> <p>LIQUID LINE SOLENOID VALVE</p> <p><input type="checkbox"/> *Standard 230V Coil</p> <p><input type="checkbox"/> *Standard 115V Coil</p> <p><input type="checkbox"/> Oversized Receiver</p>	<p><input type="checkbox"/> Pump Down Toggle Switch</p> <p><input type="checkbox"/> QuickVac Valves</p> <p><input type="checkbox"/> Receiver Inlet Ball Valve</p> <p><input type="checkbox"/> Single Point Electrical SUCTION ACCUMULATOR</p> <p><input type="checkbox"/> With Heat Exchanger</p> <p><input type="checkbox"/> Without Heat Exchanger</p> <p>SUCTION FILTER</p> <p><input type="checkbox"/> Sealed Type</p> <p>TIME CLOCK</p> <p><input type="checkbox"/> Paragon 8145 Style</p> <p><input type="checkbox"/> *230V Paragon 8145 Style</p> <p><input checked="" type="checkbox"/> 1 *115V Paragon 8145 Style</p> <p><input type="checkbox"/> Wind Guard</p> <p><input type="checkbox"/> Less Flooding Valve(s)</p>
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VOLTAGE		SYSTEM REFRIGERANT			RATING		SUCTION TEMP		AMBIENT TEMP		CAPACITY	
208-230/1/60		R448A			0.6Hp		26.5 °F		105 °F		5610 BTUH	
FANS				COMPRESSOR				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE		QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡	
1	100W	1	RST45C2E-CFV		1	4.4	30	5.4		6.5	15	
LIQUID		3/8 in	SOUND		-		REC CAPACITY		5 lb		APPROVALS	
SUCTION		5/8 in	WEIGHT		149 lb		REF CHARGE		3 lb			

NOTES:

† MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

MCA & MOP are for the condensing unit ONLY. Single point connections WILL show different on dataplate.

APPROVED BY :	DATE :
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Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BEHA006M8-HS2D

**EH-LINE HERMETIC
CONDENSING UNITS-AIR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 6
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Liquid Line Filter + Sight Glass - Sealed

Sporlan C Series with ODF solder connections and Sporlan SA moisture indicator factory installed in liquid line.

Option Packages - Small B (Good@Warm/Moderate)

LLFD+SG

Time Clock - 115V Paragon 8145 Style

115V Defrost timer is time initiated, temperature or pressure terminated with a timed failsafe. Timer is shipped loose in a box for field installation.

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NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 6
BEHA006M8-HS2D
EH-LINE HERMETIC
CONDENSING UNITS-AIR

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **11 Oct 2022**
PURCHASER :
PROJECT : **South Middle School Lancaster SC**
SUBMITTED BY : **Laura Craig**

Dimensions shown are for standard unit less options.

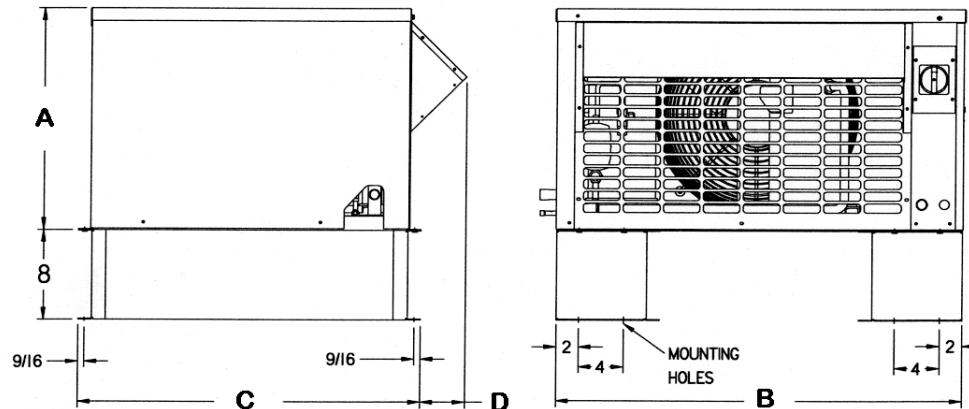
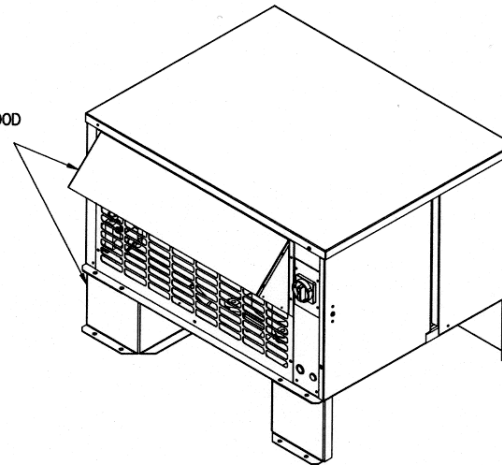
DIMENSIONS	
DIMENSION A	19 3/8 in
DIMENSION B	24 7/8 in
DIMENSION C	30 3/8 in
DIMENSION D	4 in
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	5/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	149 lb
REFRIGERANT CHARGE	3 lb
RECEIVER CAPACITY	5 lb

APPROVALS			

NOTES:

OPTIONAL AIR DISCHARGE HOOD AND LEGS



NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP. 159 ROY BLVD, PO BOX 2020 BRANTFORD, ON CANADA N3T 5Y6	BLP107MA-S1D LOW PROFILE EVAPORATOR
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PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 8
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

- | MODEL FEATURES | | |
|---|---|--|
| <ul style="list-style-type: none"> 3/8" Tubing coil construction (reduces refrigerant operating charge) Factory installed solenoid valve wire harness Heavy gauge textured aluminum cabinet construction resists scratches/corrosion Spacious piping end compartment allows for easy assembly | <ul style="list-style-type: none"> Hinged drain pan with central universal drain connection (3/4" drain) Front access to spacious electrical and header compartments Schrader connection on suction header Attractive and durable high density polyethylene fan guards Ultra efficient Electronically Commutated Motor (ECM) | <ul style="list-style-type: none"> ECM with SmartSpeed Technology High efficiency enhanced copper tube and aluminium fin coil design 6 FPI AWEF = 9.0 Unit Cooler is AWEF/NRCAN compliant with R404A/R507/R448A/R449A/R407A/R407C |

MODEL OPTIONS (* = Shipped Loose)		
<p>PRE-ASSEMBLED EVAP</p> <input type="checkbox"/> SmartVap+ with EEV + Solvlv <input checked="" type="checkbox"/> Sporlan TXV, LLSV,T-stat <input type="checkbox"/> KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> *KE2 Evap Efficiency w/Sporlan EEV <input type="checkbox"/> Aux Sideport Connector <p>CABINET FINISH</p> <input type="checkbox"/> Painted White <input type="checkbox"/> Stainless Steel <p>SENSORS FOR CPC BOARDS</p> <input type="checkbox"/> Coil Temp Sensor <input type="checkbox"/> Return Air Temp Sensor <p>DEMAND DEFROST ELECTRONIC CONTROLLER</p> <input type="checkbox"/> KE2 Therm Evaporator Efficiency <input type="checkbox"/> *KE2 Therm Evaporator Efficiency <input type="checkbox"/> Dual Circuit ELECTRONIC CONTROLLER <input type="checkbox"/> KE2 Temp+Defrost <input type="checkbox"/> SmartVap+ Control Board and Display	<p>EXPANSION VALVE</p> <input checked="" type="checkbox"/> Sporlan TXV <input type="checkbox"/> Sporlan EEV <input type="checkbox"/> EEV for SmartVap+ <input type="checkbox"/> Evaporator Disconnect Switch <p>EVAPORATOR PRISON PACKAGE</p> <input type="checkbox"/> Tamper Proof Screws <input type="checkbox"/> Export Crating <p>COIL COATING</p> <input type="checkbox"/> E-Coat <p>FIN MATERIAL</p> <input type="checkbox"/> Gold Coat Fins <input type="checkbox"/> Copper Fins <input type="checkbox"/> Insulated Drain Pan <p>KE2 THERM</p> <input type="checkbox"/> *CAT5e Shielded Cable - 50ft w/connectors <input type="checkbox"/> 40' Leads on Sensors + Transducers <input type="checkbox"/> Ethernet Adapter Kit <input type="checkbox"/> *Remote Combo Display <input type="checkbox"/> *Liquid / Suction Heat Exchanger	<p>LIQUID LINE SOLENOID VALVE</p> <input checked="" type="checkbox"/> Sporlan <input type="checkbox"/> Dual Voltage Coil 120-230V Field Wired <input type="checkbox"/> Nitrogen Charged and Sealed <p>ROOM THERMOSTATS</p> <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> *Mechanical <input type="checkbox"/> *Johnson A19ABC <input type="checkbox"/> *Johnson A421ABC-02C <input type="checkbox"/> Johnson A421ABC-02 <input type="checkbox"/> Wire Fan Guards <p>REMOTE DEFROST PANEL</p> <input type="checkbox"/> *230V Control <input type="checkbox"/> *115V Control <p>INSTALLATION REQUIREMENTS</p> <input checked="" type="checkbox"/> Minimum slope of 1" per foot on all drain lines <input checked="" type="checkbox"/> P-trap per evap required outside of box

VOLTAGE		SYSTEM REFRIGERANT			AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
115/1/60		R448A			680 CFM		27 °F		35 °F		5610 BTUH	
FANS				HEATERS				CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡			
1	0.07HP	1				1	60	1.3	15			
DISTRIBUTOR		3/8 in	SOUND	-	REC CAPACITY				APPROVALS			
SUCTION		5/8 in	WEIGHT	48 lb	REF CHARGE	1 lb						

NOTES:
 † MCA.. Minimum Circuit Ampacity, ‡ MOP.. Maximum Overcurrent Protection

APPROVED BY : _____ **DATE :** _____

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**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP107MA-S1D

**LOW PROFILE
EVAPORATOR**

PURCHASER :	SUBMITTED BY : Laura Craig
PROJECT : South Middle School Lancaster SC	DATE : 11 Oct 2022
ORDER # : 06338.58290.00469-A00	ITEM # : 8
QUOTE # : Q10EULCB-A	ID # :
PURCHASER'S PO # :	TAGGING :

SELECTED OPTION DESCRIPTIONS

Expansion Valve - Sporlan TXV

May be Type EBQ, S, SBF, O externally equalized thermostatic expansion valve. Valves are selected using the specified capacity and operating conditions of the refrigeration system as specified on the accompanying Certified Prints.

Installation Requirements - Minimum slope of 1" per foot on all drain lines

Bally recommends a minimum slope of 1" per foot on all drain lines.

Installation Requirements - P-trap per evap required outside of box

All evaporators must be trapped individually outside of the box to prevent vapor migration back to coil surface.

Liquid Line Solenoid Valve - Sporlan

Sporlan solenoid coil voltage matches evaporator voltage except when evaporator is 460V, then 230V solenoid coil is used. Exceptions must be clearly explained in the Notes of the option.

Pre-assembled Evap - Sporlan TXV, LLSV,T-stat

Option Package consists of factory installed Sporlan balance port TXV, Sporlan liquid line solenoid valve and Johnson Controls A19 Room thermostat.

Room Thermostats - Mechanical

Single stage temperature control with Single-Pole, Double-Throw (SPDT) mechanical switch. May be Johnson A19 or equal, Operating range of -30°F to +100°F. Adjustable differential of 3°F to 12°F. Factory installed and wired.

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NATIONAL REFRIGERATION AND AIR CONDITIONING CANADA CORP.

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 8

BLP107MA-S1D

**LOW PROFILE
EVAPORATOR**

DATE : **11 Oct 2022**

PURCHASER :

PROJECT : **South Middle School Lancaster SC**

SUBMITTED BY : **Laura Craig**

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Dimensions shown are for standard unit less options.

DIMENSIONS

DIMENSION A	30 1/4 in
DIMENSION B	17 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS

DISTRIBUTOR	3/8 in
SUCTION	5/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	
OTHER	
SHIPPING WEIGHT	48 lb
REFRIGERANT CHARGE	1 lb
RECEIVER CAPACITY	

APPROVALS

NOTES:

