DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING PERMIT

This is to certify that GREATER PORTLAND LANDMARKS INC

Located At 93 HIGH ST

CBL: 039- E-008-001

Job ID: 2011-12-2977-HVAC

has permission to Install a HTP Elite 150 Boiler, LG VRF heat Pumps, condensor, AHU's and associated ductwork provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

2/2/12

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No:	Date Applied:	CBL:	
2011-12-2977-HVAC	**12/21/2011**	**039- E-008-001**	
Location of Construction: **93 HIGH ST**	Owner Name: **GREATER PORTLAND LANDMARKS INC**	Owner Address: **93 HIGH ST** **PORTLAND, ME 04101**	Phone:
Business Name:	Contractor Name: **Titan Mechanical**	Contractor Address: **PO BOX 3927 PORTLAND MAINE 04104**	Phone: **(207) 878-5223**
Lessee/Buyer's Name:	Phone:	Permit Type: **HVAC - HVAC**	Zone: **B-3, R-6**
Past Use: Offices – Greater Portland Landmarks	Proposed Use: Same – offices – install boiler	Cost of Work: **105000.00**	CEO District:
		Fire Dept: ___ Approved w/conditions ___ Denied ___ N/A Signature: Capt Tilton 1/31/12	Inspection: Use Group: B Type: HVAC IBC/ASHRAE Signature: JMB 2/22/12
Proposed Project Description: **HTP Elite 150 Boiler LG VRF heat Pumps**		Pedestrian Activities District (P.A.D.)	
Permit Taken By:		**Zoning Approval**	

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building Permits do not include plumbing, septic or electrial work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.

Special Zone or Reviews	Zoning Appeal	Historic Preservation
___ Shoreland	___ Variance	___ Not in Dist or Landmark
___ Wetlands	___ Miscellaneous	___ Does not Require Review
___ Flood Zone	___ Conditional Use	___ Required Review
___ Subdivision	___ Interpretation	___ Approved
___ Site Plan	___ Approved	___ Approved w/Conditions
___ Maj ___ Min ___ MM	___ Denied	___ Denied
Date: Ok w/conditions 1/27/12	Date:	Date: 1/27/12 D. Andrews

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Close In Electric/Plumbing/Framing prior to insulation or drywall

Final Inspection at completion of work

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.

PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • *www.portlandmaine.gov*

Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-12-2977-HVAC **Located At:** 93 HIGH ST **CBL:** 039- E-008-001

Conditions of Approval:

Zoning

1. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
2. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
3. This zone has maximum noise allowances. The City of Portland strictly enforces the level of sound generated on the property. Any verified noise violations shall require the owner to take mitigating measures to bring the property and the noise it generates into compliance.

Historic

1. Following installation, applicant shall contact Historic Preservation staff to evaluate need for fencing to screen mechanical from view.

Fire

2. Installation shall comply with City Code Chapter 10.
3. Fuel-fired boilers shall be protected in accordance with NFPA 101, *Life Safety Code.*
4. Installation shall comply with NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel–Burning Appliances*;
5. NFPA 54, *National Fuel Gas Code*;
6. NFPA 91, *Standard for Exhaust Systems for Air Conveying Vapors, Gases, Mists, and Noncombustible Particulate Solids*;
7. NFPA 70, *National Electrical Code*; and the manufacturer's published instructions.

Building

1. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
2. Equipment shall be installed in compliance with the manufacturer's specifications and the UL listing.
3. All penetrations through rated assemblies must be protected by an approved firestop system installed in accordance with ASTM E 814 or UL 1479, per IBC 2009 Section 713.

B-3|R6

2011-12-2977

FILL IN AND SIGN WITH INK

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL 93 High Street 39E008 Use of Building Office Date 12/21/2011

Name and address of owner of appliance Greater Portland Landmarks 93 High Street Portland, ME 04101

Installer's name and address Titan Mechanical, Inc. 232 Riverside Industrial Pkwy Portland, ME 04103

Telephone (207) 878-5223

Location of appliance:

- ☒ Basement
- ☐ Floor
- ☐ Attic
- ☐ Roof

Type of Fuel:

- ☒ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: Boiler - HTP Elite 150 Boiler, LG VRF Water source heat pumps

U.L. Approved ☒ Yes ☐ No

Will appliance be installed in accordance with the manufacture's installation instructions? ☒ Yes ☐ No

IF NO Explain:

The Type of License of Installer:

- ☐ Master Plumber #
- ☐ Solid Fuel #
- ☐ Oil #
- ☒ Gas # PNT1063
- ☐ Other

RECEIVED
DEC 21 2011
Dept. of Building Inspections
City of Portland Maine

Type of Chimney:

- ☐ Masonry Lined
  Factory built
- ☐ Metal
  Factory Built U.L. Listing #
- ☒ Direct Vent
  Type PVC UL#

Type of Fuel Tank

- ☐ Oil
- ☐ Gas
- X None (Natural Gas)

Size of Tank N/A

Number of Tanks N/A

Distance from Tank to Center of Flame N/A **feet.**

Cost of Work: $ 105,000

Permit Fee: $ $1070

Approved

Fire:

Ele.:

Bldg.:

Approved with Conditions

☐ See attached letter or requirement

Inspector's Signature

Date Approved

Signature of Installer 12-21-11

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

Advanced Heating and Hot Water Systems

P.O. Box 429 · 120 Braley Road · East Freetown, MA 02717 · 508-763-8071 · Fax: 508-763-3769

Elite Heating Boiler
Submittal Sheet

Elite Heating Boiler

JOB NAME: Greater Portland Landmarks

LOCATION: 93 High Street

ARCH. / ENGR.: Titan Mechanical, Inc.

WHOLESALER:

MECH. CONTRACTOR: Titan Mechanical, Inc.

MODEL NUMBER: EL-150

TYPE OF GAS: Natural

BTU/HR INPUT LOW - HIGH FIRE: 30,000 - 150,000

NOTES:

Heat Exchanger

- All Stainless Steel Construction 160 PSI ASME Stamped Construction - National Board listed
- Gasketless Heat Exchanger Design
- 30 PSI Relief Valve
- Front service access to combustion chamber and burner
- Inlet and outlet temperature sensor

Combustion System

- Modulating burner with 5 to 1 turndown
- Up to 98% Thermal Efficiency
- High Grade Inconel Burner Design
- Spark Ignition
- Models Available for Natural or LP Gas
- Dual Flame monitoring (Spark and Flame probe)

Integrated Control System

- Digital operating control with LED display with LED indicators for System Pump - Boiler Pump – DHW Pump - System Fault – System operation
- Password Protected
- Outdoor reset with Indirect Priority
- Multiple 120 volt pump outputs – Boiler Pump – System Pump – DHW Pump
- 24 Volt monitoring
- 0-10 VDC input for Building Management System
- Boiler Output regulation (Adjustment of boiler output down to 50 percent of rated capacity)
- Cascade up to 8 boilers

Additional Features

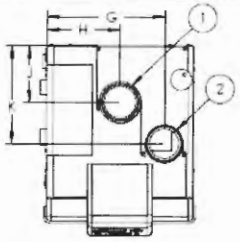
- Combination Outlet Fitting to simplify connections
- Superior condensate collection system with float switch
- Vents in Plastic PVC - CPVC - Stainless Steel – ULC S636 flexible polypropylene vent liner (chimney lining only)
- Vents up to 200 combined equivalent feet
- 12 Year Limited Warranty
- Manual reset High temperature limit
- Adjustable leveling legs
- Field wiring board / Cascade wiring CAT 5 / CAT 3
- Dry contact for alarm output

Optional

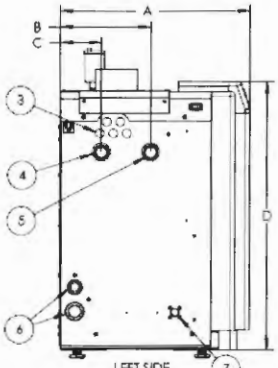
- ☐ System Sensor (Part # 7250P-324)
- ☐ Indirect Sensor (7250P-325)
- ☐ 3" Polypro Flex Vent Kit (8400P-001)
- ☐ 3" PVC Concentric Vent Kit (KGAVT0601CVT)
- ☐ 3" Stainless Steel Termination Vent Kit (V1000)
- ☐ 4" Stainless Steel Termination Vent Kit (V2000)
- ☐ 6" Stainless Steel Termination Vent Kit (V3000)
- ☐ Flow Switch (7450P-213)
- ■ Condensate Neutralizer (7450P-212 for EL-80/110/150/220/299, 7350P-611 for EL-399)
- ■ U.L. 353 Compliant Low Water Cut-Off Interface Kit w/ Manual Reset (7450P-225)
- ☐ Alarm System (7350P-602) to monitor any failure
- ☐ PC Connection Cable w / Software (7350P-320)

ELITE BOILER SERIES

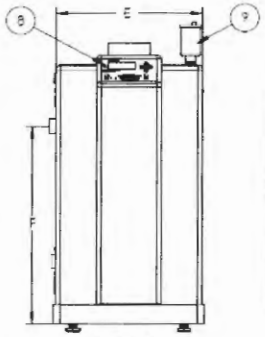
1. EXHAUST VENT CONNECTION
2. COMBUSTION AIR INLET CONNECTION
3. ELECTRICAL CONNECTIONS
4. SYSTEM RETURN
5. SYSTEM SUPPLY WITH INTEGRATED RELIEF VALVE
6. CONDENSATE CONNECTION
7. GAS LINE CONNECTION
8. DISPLAY/CONTROL PANEL
9. AIR RELEASE VENT



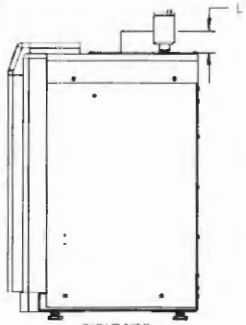
TOP VIEW



LEFT SIDE VIEW



FRONT VIEW

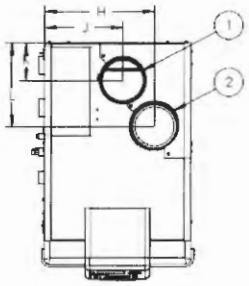


RIGHT SIDE VIEW

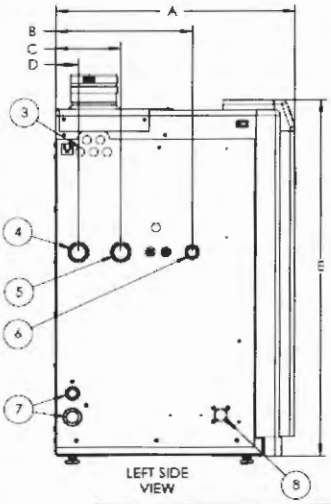
MODEL*	A	B	C	D	E	F	G	H	J	K	L	SHIPPING WEIGHT
EL-80	18.50	9.00	2.50	27.25	14.50	20.00	11.75	7.38	5.75	10.00	2.18	108
EL-110	18.50	9.00	2.50	27.25	14.50	20.00	11.75	7.38	5.75	10.00	2.18	113
EL-150	19.50	10.50	2.50	27.25	14.50	20.00	11.75	7.38	4.25	8.50	2.18	126
EL-220	26.50	17.50	6.00	27.25	14.50	20.00	11.75	7.38	4.25	8.50	2.18	164

MODEL	BTU/INPUT LOW FIRE	DOE HEATING	IBR	SUPPLY/RETURN	EXHAUST/AIR INLET	GAS CONNECTION
EL-80	16,000-80,000	14,600-73,000	63,000	1"	3"	3/4"
EL-110	22,000-110,000	20,200-101,000	88,000	1"	3"	3/4"
EL-150	30,000-150,000	27,400-137,000	119,000	1"	3"	3/4"
EL-220	44,000-220,000	40,600-203,000	177,000	1"	3"	1"

1. EXHAUST VENT CONNECTION
2. COMBUSTION AIR INLET CONNECTION
3. ELECTRICAL CONNECTIONS
4. SYSTEM RETURN
5. SYSTEM SUPPLY
6. RELIEF VALVE
7. CONDENSATE CONNECTION
8. GAS LINE CONNECTION
9. DISPLAY/CONTROL PANEL

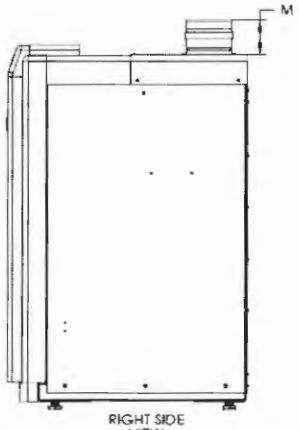


TOP VIEW



LEFT SIDE VIEW

FRONT VIEW



RIGHT SIDE VIEW

MODEL*	A	B	C	D	E	F	G	H	J	K	L	M	SHIPPING WEIGHT
EL-299	23.75	13.50	6.38	2.25	36.50	14.50	21.00	11.00	7.88	3.63	8.50	3.00	211
EL-399	30.75	20.50	9.75	2.75	36.50	14.50	21.00	11.00	7.88	3.63	8.50	3.00	256

MODEL *	BTU/INPUT LOW FIRE	DOE HEATING	IBR	SUPPLY/RETURN	EXHAUST/AIR INLET	GAS CONNECTION
EL-299	60,000 - 299,000	55,000 - 275,000	239,000	1-1/4"	4"	1"
EL-399	80,000 - 399,000	76,200 - 381,000	331,000	1-1/2"	4"	1"

* "N" DENOTES HATURAL GAS "LP" DENOTES PROPANE

ALL DIMENSIONS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE

LP-285-B
10/05/10

Closed Circuit Cooler Data Sheet

Ben McLaughlin
A. R. JENSEN ASSOCIATES, INC.
P.O. Box 2534
Framingham, MA 01703, USA
Phone: 781.941.0030 Fax: 603.580.2009

Project : Trane VRF Closed Circuit Cooler
Equipment Reference:
Product Type : LRWB Closed Circuit Cooler

Date: 11/30/2011 Page: 1

	Selection Criteria
Capacity (Tons):	24
Capacity (MBH):	363.38
Fluid Type:	30% Propylene Glycol
Flow (GPM):	85.0
Entering Fluid Temp (°F):	95.0
Leaving Fluid Temp (°F):	86.0
Wet Bulb (°F):	74.0

IBC Design Criteria	
Seismic Design Force (g)	1g
Velocity Pressure (psf)	up to 145
Selection Factors	

Unit is CTI certified for water as the process fluid and is ASHRAE 90.1 compliant

Qty	Model	Capacity (Tons)	Percent Capacity
1	LRWB 3-4G6-Z	24.38	100.6

All Weights, Dimensions and Technical Data are Shown per Unit

Fans:	1	Overall Length:	10' 1.875"
# Fan Motors @ HP:	(1) @ 5.00 (460/3/60)	Overall Width:	3' 4.500"
# Pump Motors @ HP:	(1) @ .50	Overall Height:	7' 3.250"
Air Flow (CFM)	10,900		
Spray Water Flow (gpm)	100.0	Operating Weight (lbs):	4,480
Pressure Drop Through Coil (psi):	4.1	Shipping Weight (lbs):	3,020
Evaporated Water Rate (gpm):	0.6	Ships as single piece:	
Recommended Bleed Rate (gpm):	0.6		
Riser Pipe Diameter (inch):	3		

Options Selected

Fan Motor: Inverter Capable, Premium Efficient
Series Flow Operation
IBC Compliant up to 1g
Galvanized Steel Basin

Sound Data (Sound Pressure Levels in dB(A))

	End	Mtr Side	Opp End	Opp Mtr Side	Top
S.P.L. dB(A) at 5'	66	66	60	66	66
S.P.L. dB(A) at 50'	50	55	47	55	57

Note 1: Sound Data shown is for 1 Cell operating at full speed
Note 2: The use of frequency inverters (Variable Frequency Drives) can increase sound levels.
Note 3: Sound option(s) selected: None

Layout Criteria
Recommended Clearances Around Units (Feet)

Elevation: 0

Distance from Wall to Unit With Air Inlet Facing Wall: 4.00

Distance Between Units with Air Inlets Facing Each Other: 8.00

Refer to the Equipment Layout Manual or contact your Sales Representative for more details on layout criteria.

Shipping Data

Description		Domestic Skidded Dimensions (in)			Cubic Feet	Total Cubic Feet	Gross Wt (lbs)	Total Gross Wt (lbs)
Section		**Length**	**Width**	**Height**				
Basin	1	142	42	92	317	317	1,015	1,015
Casing	1	0	0	0	0	0	2,007	2,007
	2				317	317	3,022	3,022

Note:

EVAPCO LRWB CLOSED CIRCUIT COOLER

(1) EVAPCO Model LRWB 3-4G6-Z Counterflow, Blow-Through Closed Circuit Cooler with single side air entry to cool 85 gpm of 30% Propylene Glycol from 95°F to 86°F with a 74°F entering wet bulb temperature. Unit is CTI certified for water as the process fluid and is ASHRAE 90.1 compliant.

Unit Type
Hot-dip galvanized steel, factory-assembled, counterflow blow-through.

Basin-fan Section
Basin-Fan section is constructed of heavy gauge mill hot-dip galvanized steel. All galvanized steel is coated with a minimum of 2.35 ounces of zinc per square foot of area (G-235 designation). Fan section includes centrifugal fans and drives mounted and aligned at the factory. During fabrication, all panel edges are coated with a 95% pure zinc-rich compound.

IBC Compliance
The unit structure has been designed, analyzed, and constructed in accordance with the latest edition of International Building Code (IBC) Regulations for seismic loads up to 1g and wind loads up to 145psf.

IBC Compliance
The unit structure has been designed, analyzed, and constructed in accordance with the latest edition of International Building Code (IBC) Regulations for seismic calculation of 1g and wind load calculation of 145psf.

Make Up Float Valve Assembly*
Brass float valve with adjustable, unsinkable, foam-filled plastic float.

Pan Strainer*
All type 304 stainless steel with large area removable perforated screens.

Access
G-235 hot-dip galvanized steel circular access doors held in place by wingnuts.

Fan Discharge Cowls
G-235 hot-dip galvanized steel cowls provided on each fan discharge extending within the basin to increase fan efficiency and prevent water from entering fans.

Bleed-off*
Waste water bleed line with adjustable valve provided.

Pump*
Horizontally installed close-coupled centrifugal pump with mechanical seal. Totally enclosed motor suitable for outdoor operation.

Fan Wheels
Fans are forwardly curved centrifugal type of hot-dip galvanized steel factory installed into the fan section. They are statically and dynamically balanced for vibration free operation. Fan housings have compound curve inlet rings for efficient air entry.

Fan Shaft Bearings
Solid shaft of ground and polished steel. Fan shaft is supported by heavy-duty, self-aligning bearings with cast iron housings and lubrication fittings for maintenance.

Fan Motor
Totally enclosed, ball bearing type with 1.15 service factor suitable for outdoor service. Mounted on an adjustable motor base.

Fan Drive
V-belt type with taper lock sheaves. Selected for 150% motor nameplate horsepower. Mounted and aligned at the factory.

Fan End Inlet Screen
Hot-dip galvanized steel screens, 1" wire mesh.

Coil
Thermal-Pak coil design of all prime surface steel, encased in steel framework with the entire assembly hot-dip galvanized after fabrication. Designed with sloping tubes for liquid drainage and tested to 400 psig air under water. (Patent No. 4755331)

Water Distribution System

Heavy-duty molded nylon ZM spray nozzles with large 1-5/16" diameter opening and internal sludge ring to eliminate clogging. ZM nozzles are threaded into Schedule-40 Polyvinyl Chloride headers equipped with removable end plugs for ease of cleaning.

Fan Side Inlet Screen
PVC coated radial screens

Heat Transfer Casing Construction
G-235 hot-dip galvanized steel panel construction, separable from basin section.

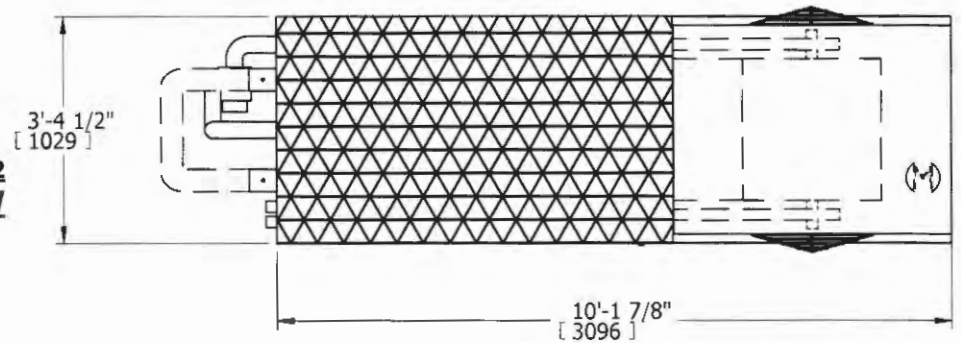
Eliminators
Constructed entirely of inert Polyvinyl Chloride (PVC) in light, easily handled sections. The eliminators shall incorporate three changes in air direction to assure removal of entrained moisture from the discharge air stream.

EVAPCO, INC.

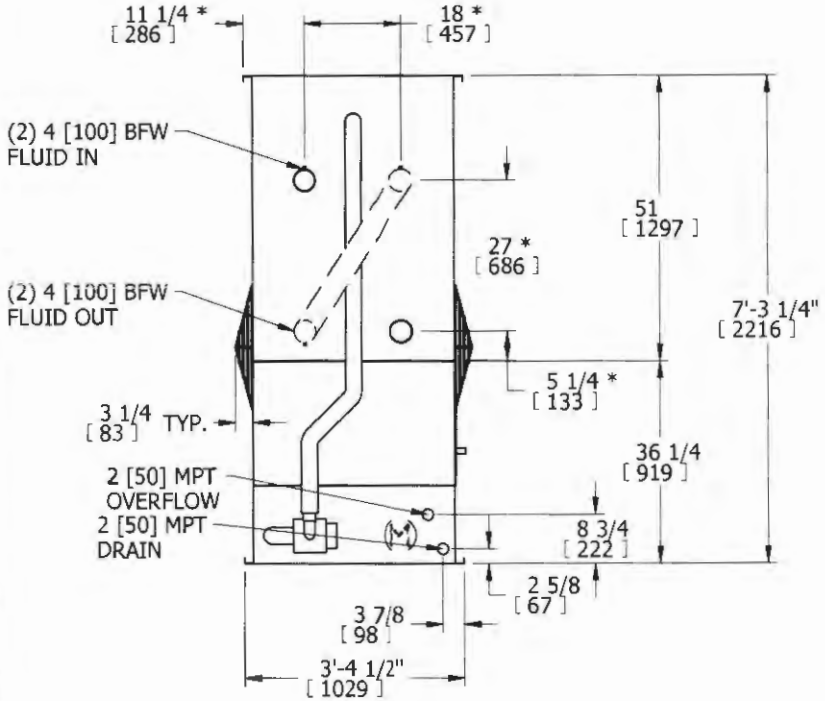
UNIT	MODEL #	SCALE	DWG. #	REV.	DATE	SERIAL #
CLOSED CIRCUIT COOLER	LRWB 3-4G6-Z	NTS	WV030608-DRB-SF	-	11/30/2011	

NOTES:
1. (M)- FAN MOTOR LOCATION
2. * -APPROXIMATE DIMENSIONS DO NOT USE FOR PRE-FABRICATION OF CONNECTION PIPING
3. MPT DENOTES MALE PIPE THREAD
   FPT DENOTES FEMALE PIPE THREAD
   BFW DENOTES BEVELED FOR WELDING
4. + UNIT WEIGHT DOES NOT INCLUDE ACCESSORIES (SEE SEPARATE DRAWINGS FOR ACCESSORIES)
5. 3/4" DIA. MOUNTING HOLES. REFER TO RECOMMENDED STEEL SUPPORT DRAWING
6. MAKE-UP WATER PRESSURE-20 psi MIN, 50 psi MAX
7. SERIES FLOW PIPING AUX. CROSSOVER DRAIN ARE BY OTHERS

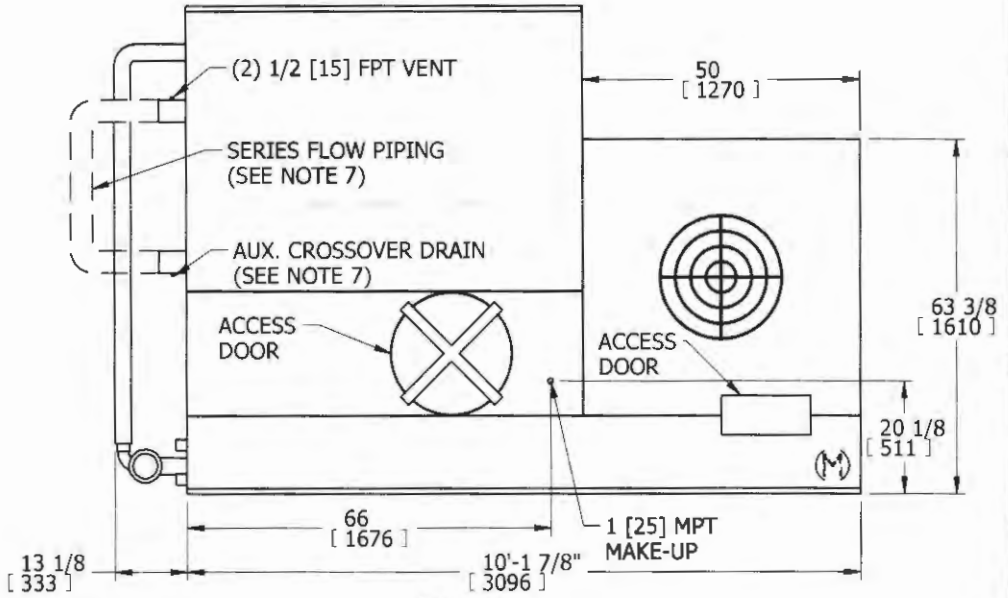
FACE 2
PLAN VIEW



FACE 1



FACE 2

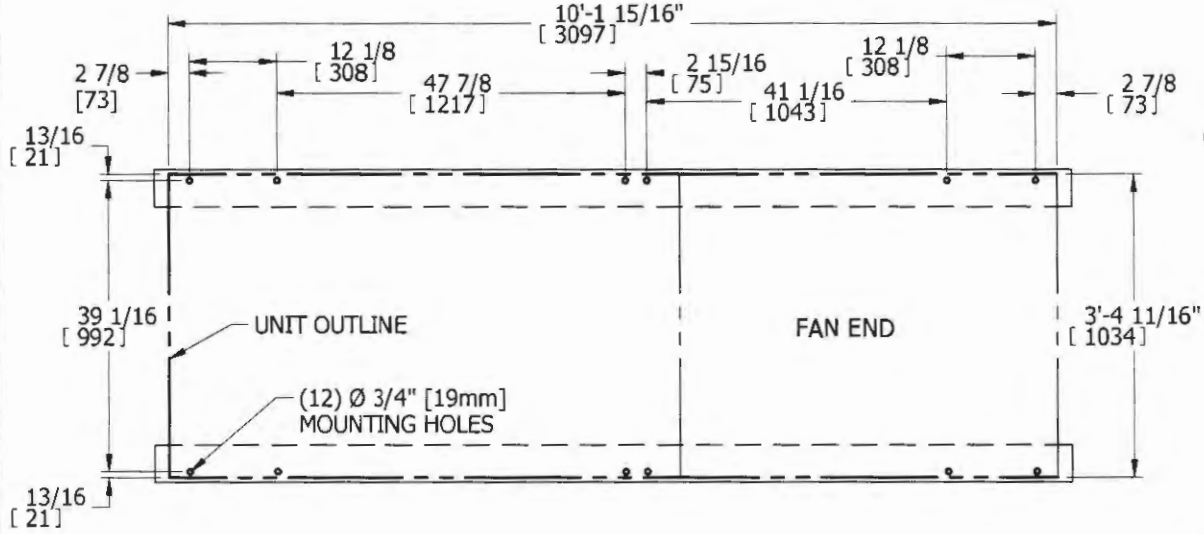


FACE 1

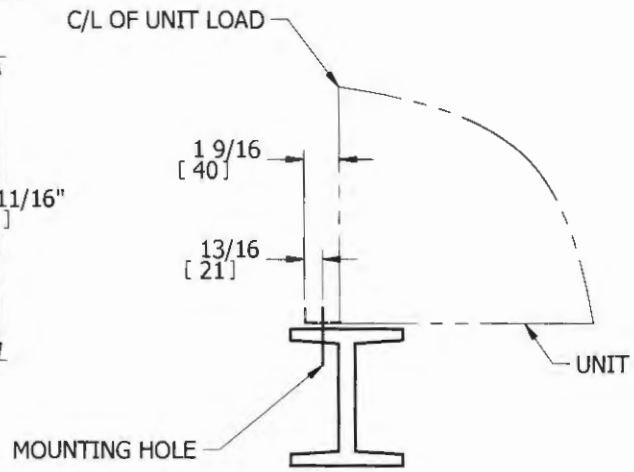
SHIPPING WEIGHT	3020 lbs+ [1370] kg+	OPERATING WEIGHT	4480 lbs+ [2032] kg+	HEAVIEST SECTION WEIGHT	3020 lbs+ [1370] kg+	NO. OF SHIPPING SECTIONS	1

LRWB 3-4G6-Z **EVAPCO, INC.** 11/30/2011

TITLE	UNIT:	DWG. #
STEEL SUPPORT CONFIGURATION	3X6 FORCED DRAFT LR/LP UNITS	SLAL0306-DA



PLAN VIEW



TYPICAL END VIEW

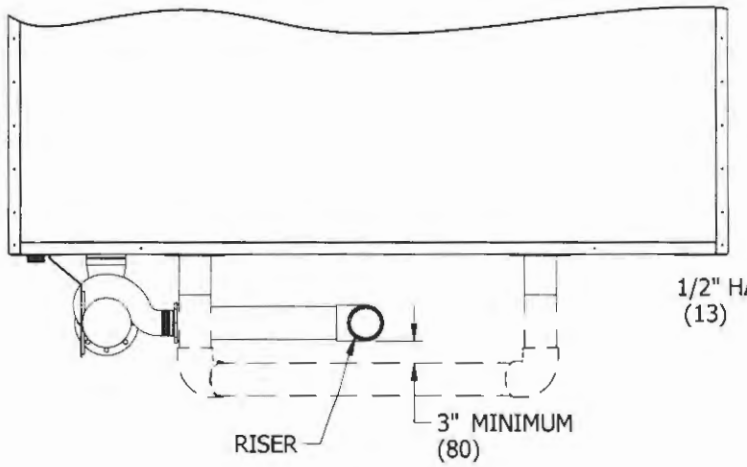
NOTES:

1. BEAMS SHOULD BE SIZED IN ACCORDANCE WITH ACCEPTED STRUCTURAL PRACTICES. MAXIMUM DEFLECTION OF BEAM UNDER UNIT TO BE 1/360 OF UNIT LENGTH NOT TO EXCEED 1/2" [13mm].
2. DEFLECTION MAY BE CALCULATED BY USING 55% OF THE OPERATING WEIGHT AS A UNIFORM LOAD ON EACH BEAM. SEE CERTIFIED PRINT FOR OPERATING WEIGHT.
3. SUPPORT BEAMS AND ANCHOR HARDWARE ARE TO BE FURNISHED BY OTHERS. ANCHOR HARDWARE TO BE ASTM - A325 5/8" [16mm] BOLT OR EQUIVALENT.
4. BEAMS MUST BE LOCATED UNDER THE FULL LENGTH OF THE PAN SECTION.
5. SUPPORTING BEAM SURFACE MUST BE LEVEL. DO NOT LEVEL THE UNIT BY PLACING SHIMS BETWEEN THE UNIT MOUNTING FLANGE AND THE SUPPORTING BEAM.
6. ANCHORING ARRANGEMENT SHOWN HAS A MAXIMUM WIND RATING OF 145 PSF [6.96 KPa] ON CASED VERTICAL SURFACES.
7. THE FACTORY RECOMMENDED STEEL SUPPORT CONFIGURATION IS SHOWN. CONSULT THE FACTORY FOR ALTERNATE SUPPORT CONFIGURATIONS.
8. UNIT SHOULD BE POSITIONED ON STEEL SUCH THAT THE ANCHORING HARDWARE FULLY PENETRATES THE BEAM'S FLANGE AND CLEARS THE BEAM'S WEB.

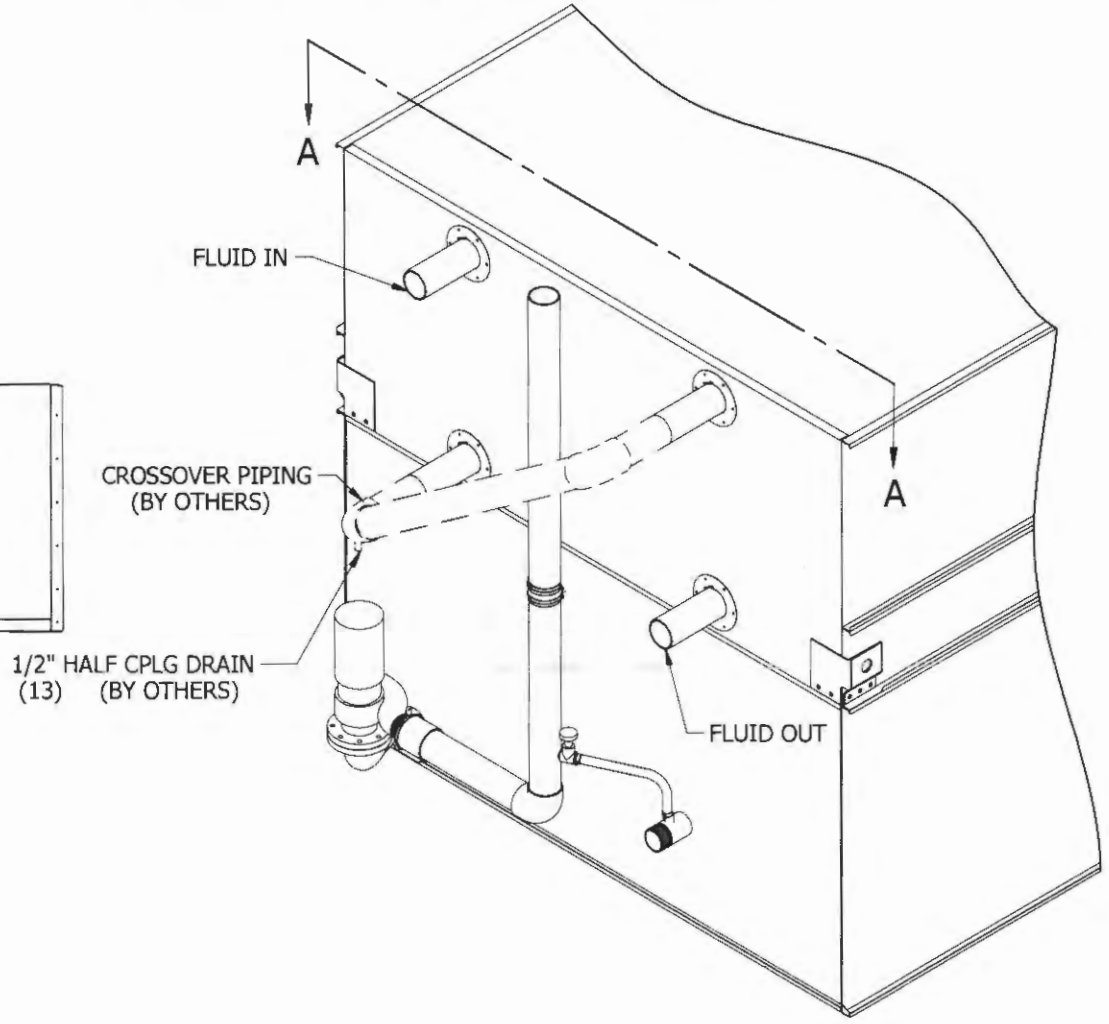
EVAPCO, INC.

TITLE	UNIT:	DWG. #
RECOMMENDED SERIES FLOW CROSSOVER PIPING ARR	LRW, LSW, ATW, UBW, PMW	XPAC0000-DRA-ST 11/30/2011

NOTES:
1. THIS DRAWING IS INTENDED TO PROVIDE CROSSOVER GUIDELINES ONLY.
2. FOR PIPE MATERIAL, REFERENCE BID SPECIFICATIONS.
3. REFERENCE CERTIFIED PRINT FOR COIL CONNECTION DIAMETER AND TYPE.



VIEW A-A



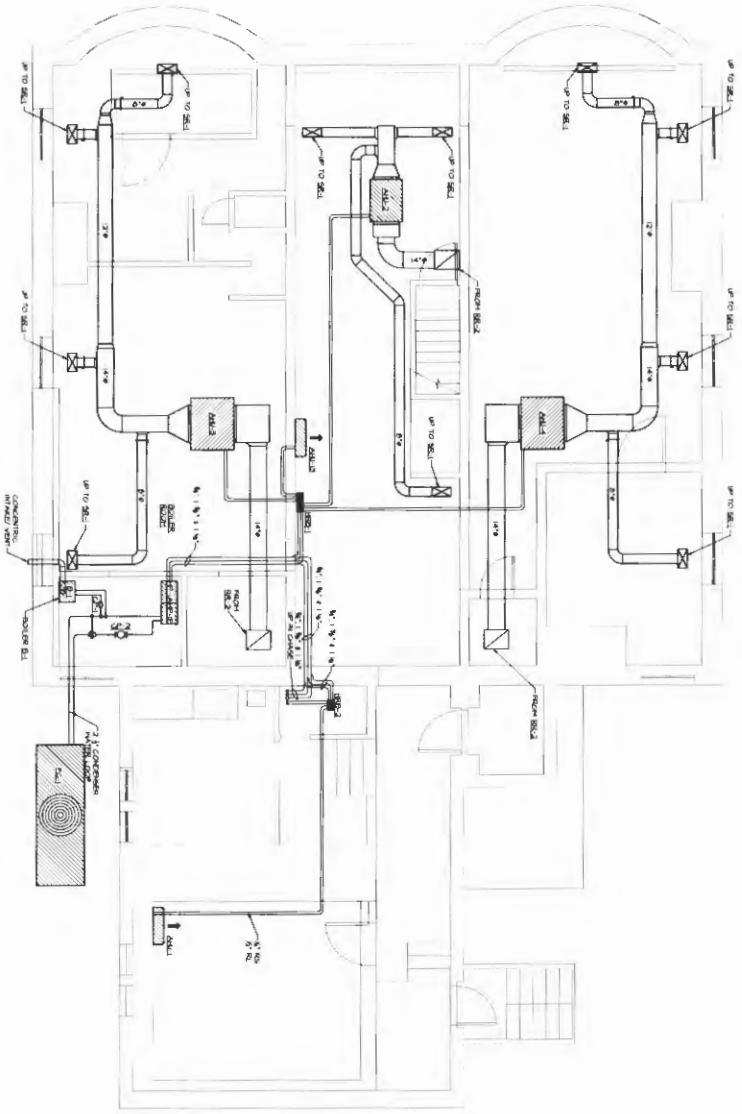
Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar
Sound Power Levels (PWL) in dB RE 10-12 Watt

MODEL LRWB 3-4G6-Z
MOTOR 5.00 HP
MOTORS 1
SPEED: Full Speed

1 **CELL DATA**

	SOUND PRESSURE LEVEL (dB)										
	End		Motor Side		Opp End		Opp Mtr. Side		Top		SOUND
	5 ft	50 ft	5 ft	50 ft	5 ft	50 ft	5 ft	50 ft	5 ft	50 ft	POWER
BAND	(1.5m)	(15m)	(1.5m)	(15m)	(1.5m)	(15m)	(1.5m)	(15m)	(1.5m)	(15m)	LEVEL (dB)
63 HZ	66	53	67	57	66	55	67	57	61	54	87
125 HZ	62	53	65	55	63	53	65	55	63	53	86
250 HZ	60	49	63	52	60	51	63	52	62	51	83
500 HZ	62	47	62	50	58	44	62	50	64	53	82
1 KHZ	61	45	60	50	53	39	60	50	60	51	80
2 KHZ	59	42	59	48	50	35	59	48	58	50	79
4 KHZ	57	40	57	47	45	33	57	47	53	49	77
8 KHZ	54	37	54	44	44	33	54	44	52	47	76
CALC dBA	66	50	66	55	60	47	66	55	66	57	86

Sound option(s) selected: None

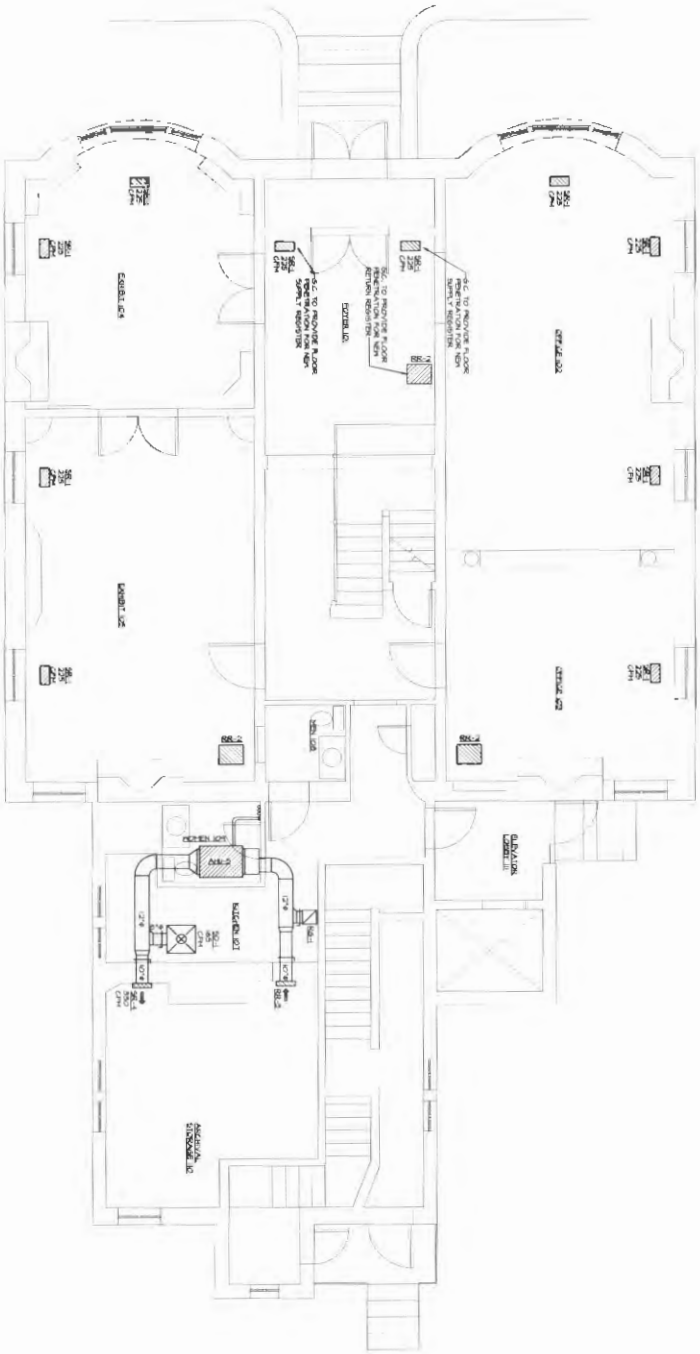


BASEMENT HVAC PLAN
SCALE: 1/4" = 1'-0"

CLIENT	GREATER PORTLAND LANDMARKS
PROJECT	93 HIGH STREET - PORTLAND, ME
DRAWING TITLE	BASEMENT HVAC PLAN
DATE	12/20/2021
SCALE	1/4" = 1'-0"
DRAWN BY	CJH
CHECKED BY	JPN
JOB NUMBER	XXXX
CAD FILE	XXXX
SHEET NUMBER	M1.0
SHEET	1 OF 5

Titan Mechanical , Inc.
Design Build Engineering - Mechanical Contracting
P.O. Box 3927 / 232 Riverside Industrial Parkway
Portland, Maine 04104
Ph. (207) 878-5223 Fax. (207) 878-5235

REVISIONS	DATE



FIRST FLOOR HVAC PLAN
SCALE: 1/4" = 1'-0"

SHEET NUMBER	M1.1
CAD FILE: XXXX	
JOB NUMBER: XXXX	
CHECKED BY: JPL	
DRAWN BY: CJH	
SCALE: 1/4" = 1'-0"	
DATE: 2/20/09	
CLIENT	GREATER PORTLAND LANDMARKS
PROJECT	93 HIGH STREET - PORTLAND, ME
DRAWING TITLE	FIRST FLOOR HVAC PLAN

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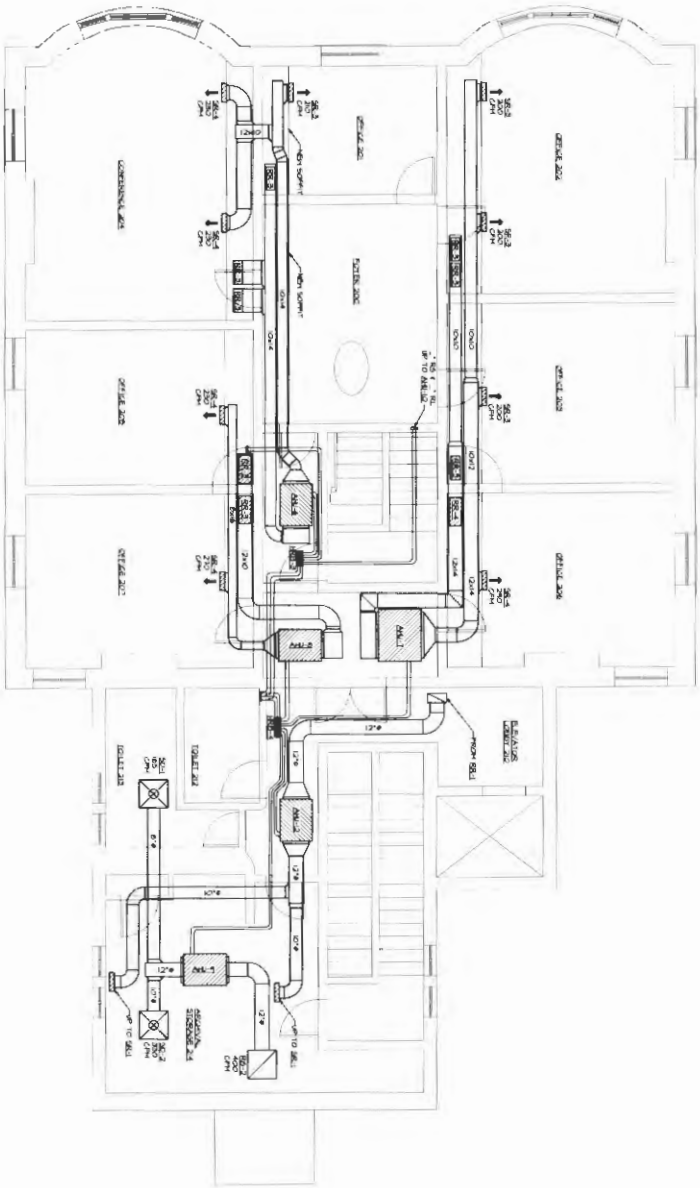
REVISIONS	DATE



SECOND FLOOR HVAC PLAN
SCALE: 1/4" = 1'-0"

GREATER PORTLAND LANDMARKS	
CLIENT	
93 HIGH STREET - PORTLAND, ME	
PROJECT	
SECOND FLOOR HVAC PLAN	
DRAWING TITLE	
DATE: 12/20/2011	
SCALE: 1/4" = 1'-0"	
DRAWN BY: CJH	
CHECKED BY: JPN	
JOB NUMBER: XXXX	
CAD FILE: XXXX	
SHEET NUMBER	M1.2
SHEET 5 OF 5	

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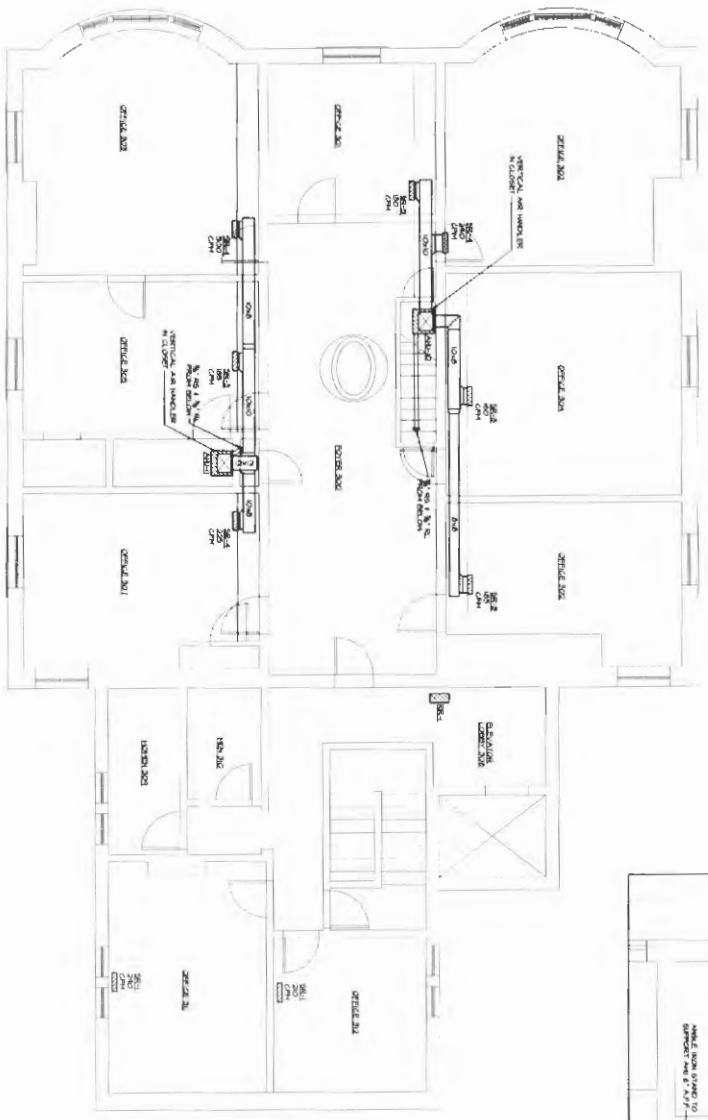
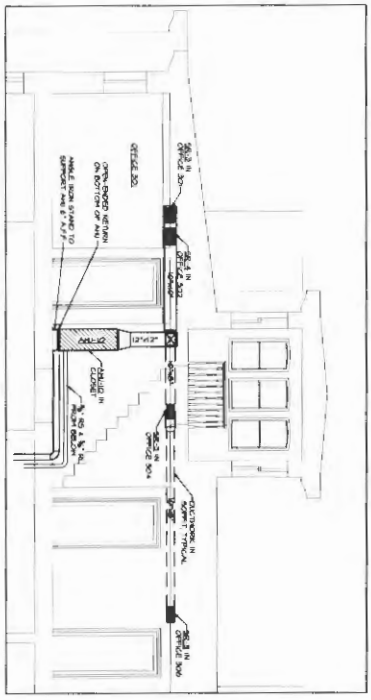
REVISIONS	DATE



THIRD FLOOR HVAC PLAN
SCALE: 1/4" = 1'-0"



AHU-10 DUCTWORK DETAIL
SCALE: 1/4" = 1'-0"

SHEET NUMBER	M1.3
	SHEET 4 OF 5
CAD FILE: XXXX	
JOB NUMBER: XXXX	
CHECKED BY: JPN	
DRAWN BY: GJH	
SCALE: 1/4" = 1'-0"	
DATE: 12/20/2011	
CLIENT: GREATER PORTLAND LANDMARKS	
PROJECT: 93 HIGH STREET - PORTLAND, ME	
DRAWING TITLE: THIRD FLOOR HVAC PLAN	

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REVISIONS	DATE

VRF AIR CONDITIONER SCHEDULE (INDOOR UNITS)

TAG	AREA SERVED	V/PH/HZ	WATTS	STYLE	NOM. COOLING (TONS)	COOLING CAPACITY (BTU/HR)	HEATING CAPACITY (BTU/HR)	AIRFLOW (CFM)	PIPE CONNECTIONS RL	PIPE CONNECTIONS RS	PIPE CONNECTIONS C	DIMENSIONS W	DIMENSIONS H	DIMENSIONS D	ASSOCIATED OUTDOOR UNITS	MODEL	REMARKS
AHU-1	STORAGE B09	208/1/60	40	WALL MOUNTED	1/2	7,500	8,500	200	1/4"	1/2"	-	-	-	-	-	LG ARNU073SEL2	-
AHU-2	FOYER 101	208/1/60	150	CEILING CONCEALED	2	24,200	27,300	610	3/8"	5/8"	-	-	-	-	-	LG ARNU243BHA2	-
AHU-3	EXHIBIT 104, EXHIBIT 105	208/1/60	450	CEILING CONCEALED	2 1/2	28,000	31,500	900	3/8"	5/8"	-	-	-	-	-	LG ARNU283BGA2	-
AHU-4	OFFICE 102, OFFICE 103	208/1/60	450	CEILING CONCEALED	2 1/2	28,000	31,500	900	3/8"	5/8"	-	-	-	-	-	LG ARNU283BGA2	-
AHU-5	STORAGE 110	208/1/60	150	CEILING CONCEALED	1 1/2	19,100	21,500	500	1/4"	1/2"	-	-	-	-	-	LG ARNU183BGA2	-
AHU-6	OFFICE 201, CONF. 204	208/1/60	450	CEILING CONCEALED	2	24,200	27,300	610	3/8"	5/8"	-	-	-	-	-	LG ARNU243NJA2	-
AHU-7	OFFICES 202, 203, 206	208/1/60	450	CEILING CONCEALED	2 1/2	28,000	31,500	900	1/4"	1/2"	-	-	-	-	-	LG ARNU283BGA2	-
AHU-8	OFFICES 207, 208	208/1/60	150	CEILING CONCEALED	1 1/2	19,100	21,500	500	1/4"	1/2"	-	-	-	-	-	LG ARNU183BGA2	-
AHU-9	STORAGE 214	208/1/60	150	CEILING CONCEALED	1 1/2	19,100	21,500	500	1/4"	1/2"	-	-	-	-	-	LG ARNU183BGA2	-
AHU-10	OFFICES 302, 304, 306	208/1/60	120	VERTICAL CONCEALED	2	24,000	27,000	710	3/8"	5/8"	-	-	-	-	-	LG ARNU243NJA2	-
AHU-11	OFFICES 305, 307	208/1/60	120	VERTICAL CONCEALED	2	24,000	27,000	710	3/8"	5/8"	-	-	-	-	-	LG ARNU243NJA2	-
AHU-12	OFFICES 311, 312	208/1/60	150	CEILING CONCEALED	1 1/2	19,100	21,500	500	1/4"	1/2"	-	-	-	-	-	LG ARNU183BGA2	-
AHU-13	BASEMENT	208/1/60	-	WALL MOUNTED	2	24,200	27,300	500	-	-	-	-	-	-	-	LG ARNU243SSL2	-

GRILLES, REGISTERS, & DIFFUSER SCHEDULE

TAG	NECK (INCHES)	FACE SIZE (INCHES)	CFM	SP (W.G.)	THROW (FEET)	REMARKS
SR-1	-	16"x8"	0-225	0.05	-	FLOOR SUPPLY REGISTER REGGIO REGISTER MODEL 816
SR-2	-	24"x8"	226-350	0.05	-	FLOOR SUPPLY REGISTER REGGIO REGISTER MODEL 824
SR-3	-	12"x6"	0-250	0.05	-	WALL SUPPLY REGISTER W/ OBD DOUBLE DEFLECTION, ¾" SPACING
SR-4	-	14"x8"	251-400	0.05	-	WALL SUPPLY REGISTER W/ OBD DOUBLE DEFLECTION, ¾" SPACING
SD-1	8"ø	24x24	0-250	0.05	-	ANEMOSTAT EPL, LAY-IN STYLE
SD-2	10"ø	24x24	251-400	0.05	-	ANEMOSTAT EPL, LAY-IN STYLE
RR-1	-	22"x11"	0-500	0.05	-	REGGIO REGISTER MODEL 1122
RR-2	-	20.5"x16.5"	501-900	0.05	-	REGGIO REGISTER MODEL 1620
RR-3	-	20"x8"	0-275	0.05	-	CEILING RETURN REGISTER W/ OBD 3/4" SPACING, 45° DEFLECTION
RR-4	-	24"x10"	276-400	0.05	-	CEILING RETURN REGISTER W/ OBD 3/4" SPACING, 45° DEFLECTION
RG-1	-	12"x12"	0-300	0.05	-	3/4" SPACING, 45° DEFLECTION
RG-2	-	24"x24"	301-1000	0.05	-	3/4" SPACING, 45° DEFLECTION

WATER SOURCE VRF AIR CONDITIONER SCHEDULE

TAG	SERVES	V/PH/HZ	MCA	MOCP	COOLING CAPACITY (BTU/HR)	HEATING CAPACITY (BTU/HR)	REFRIGERANT	PIPE CONNECTIONS RL	PIPE CONNECTIONS RS	DIMENSIONS W	DIMENSIONS H	DIMENSIONS D	MODEL	REMARKS
HP-1A	BUILDING	208/3/60	45	60	144,000	137,000	R-410A	-	-	-	-	-	LG ARWB144BA2	TWINNED W/ HP-1B
HP-1B	BUILDING	208/3/60	45	60	144,000	137,000	R-410A	-	-	-	-	-	LG ARWB144BA2	TWINNED W/ HP-1A

FLUID COOLER SCHEDULE

TAG	SERVES	ELECTRICAL	HP	FLOW (GPM)	PRESSURE DROP (FT H_2O)	MANUFACTURER	MODEL	REMARKS
FC-1	WSHP-1	208/3/60	5.0	85	9.5	EVAPCO	LRWB	-

GAS BOILER SCHEDULE

TAG	SERVES	INPUT (MBH)	OUTPUT (MBH)	EFF. (%)	FUEL	BURNER (FT3/MIN)	SIZE (LXWXH)	VENT SIZE (IN ø)	WEIGHT (POUNDS)	ELECTRIC	MOD. NO.	REMARKS
B-1	BUILDING HW/R	150	-	90+	NG	-	-	3" INTAKE 3" VENT	-	115/1/60	HTP ELITE 150	-

EXPANSION TANK SCHEDULE

TAG	SERVES	REQ'D ACCEP. VOL. (GAL)	ACCEPT. VOL. (GAL)	MAX TEMP (°F)	MAX PRESSURE (PSIG)	DIA. (IN)	HEIGHT (IN)	MODEL	REMARKS
ET-1	CONDENSER WATER LOOP	-	-	-	-	-	-	AMTROL -	-

PUMP SCHEDULE

TAG	SERVES	TYPE	GPM	HEAD	HP	RPM	ELECTRIC	WEIGHT (POUNDS)	MOD. NO.	REMARKS
CP-1	BOILER B-1	INLINE	20	15'	1/6	3250	115/1/60	12.0	TACO 0013 IFC	-
CP-2	CONDENSER WATER	INLINE	85	40'	2.0	1750	208/3/60	-	TACO KV2009	-

REVISIONS	DATE

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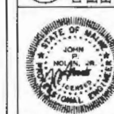


GREATER PORTLAND LANDMARKS
CLIENT

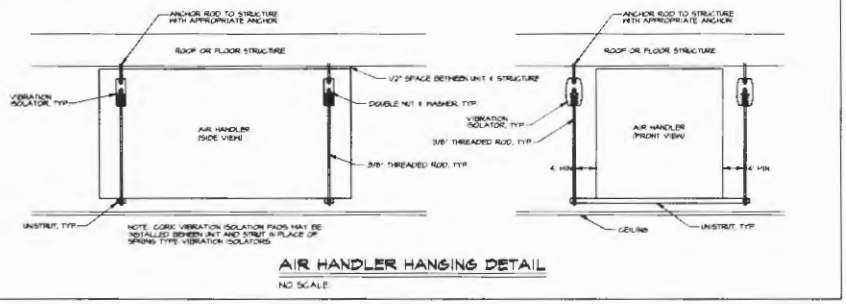
93 HIGH STREET - PORTLAND, ME
PROJECT

MECHANICAL SCHEDULES
DRAWING TITLE

DATE: 12/20/2011
SCALE: 1/4" = 1'-0"
DRAWN BY: CJM
CHECKED BY: JPN
JOB NUMBER: XXXX
CAD FILE: XXXX
SHEET NUMBER

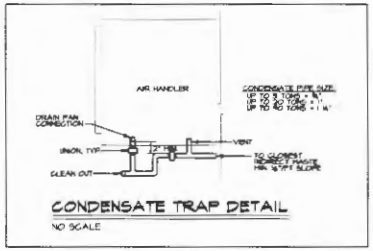
M2.0

SHEET 4 OF 5



AIR HANDLER HANGING DETAIL

NO SCALE



CONDENSATE TRAP DETAIL

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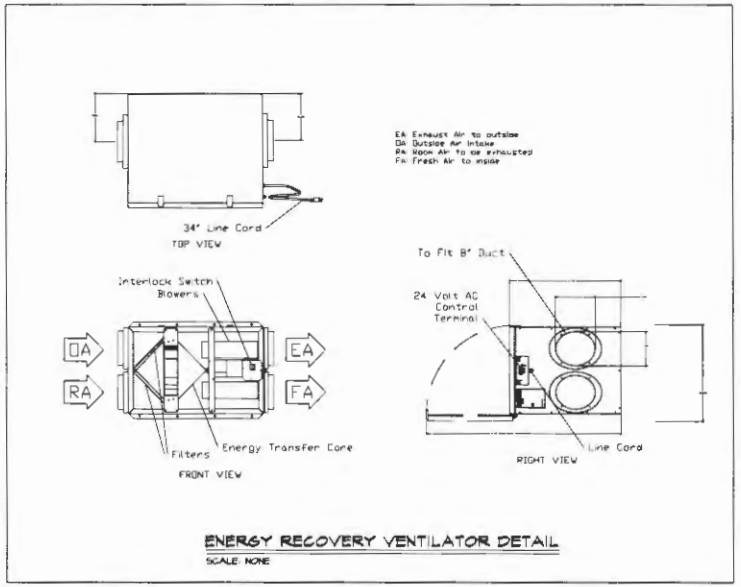
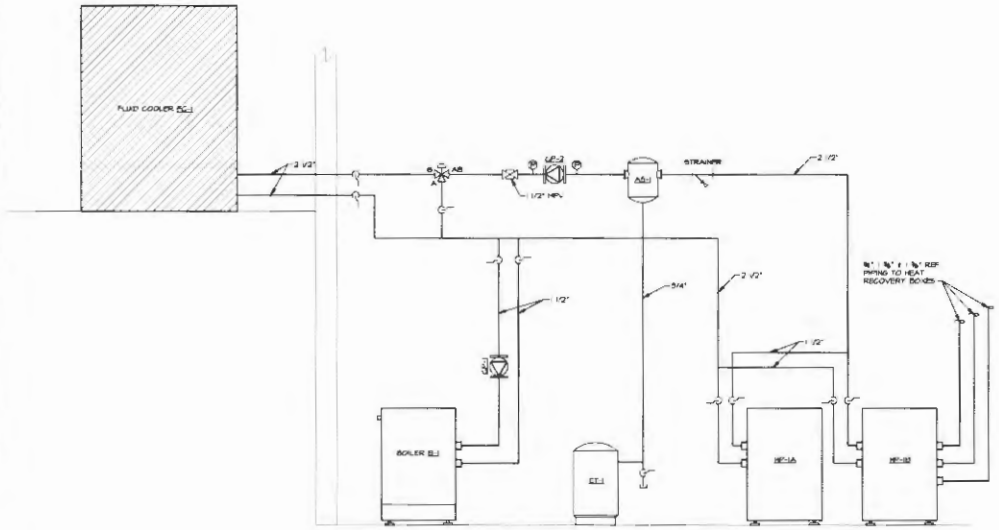


ENERGY RECOVERY VENTILATOR DETAIL

SCALE: NONE



CONDENSER WATER LOOP PIPING DIAGRAM

NO SCALE

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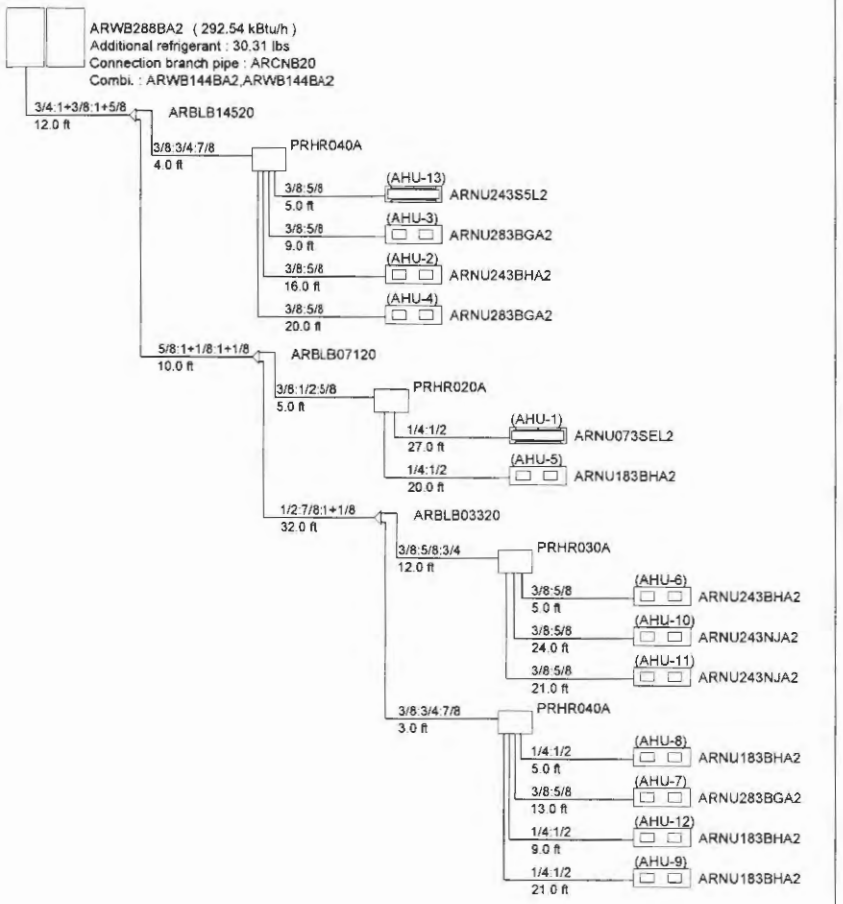
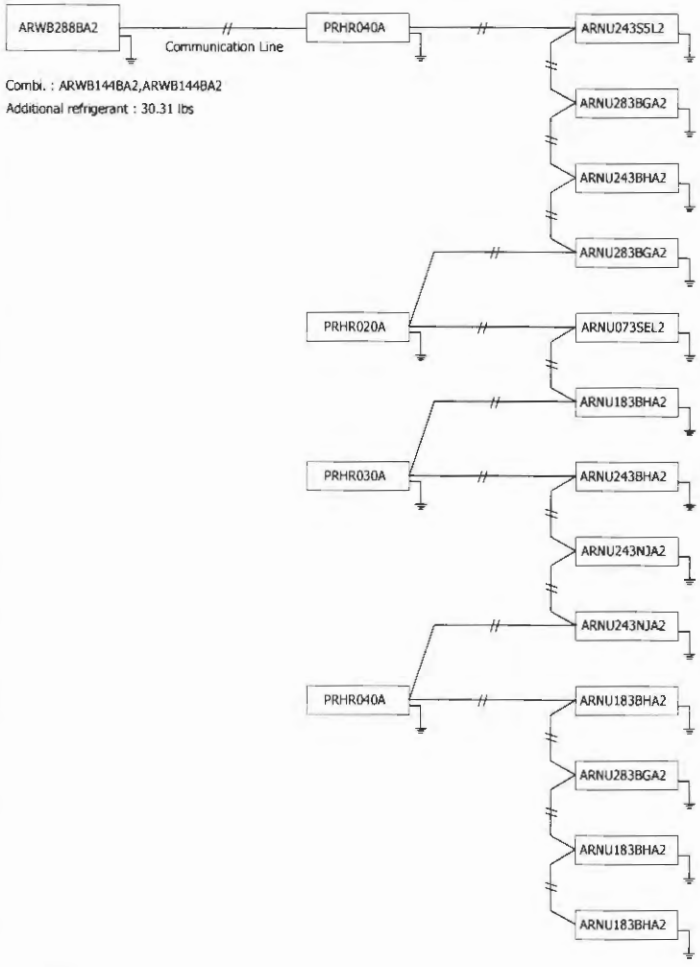
REVISIONS: DATE

CLIENT: GREATER PORTLAND LANDMARKS
PROJECT: 93 HIGH STREET - PORTLAND, ME
DRAWING TITLE: MECHANICAL DETAILS

DATE: 12/20/2011
SCALE: 1/4" = 1'-0"
DRAWN BY: CJH
CHECKED BY: JPN
JOB NUMBER: XXXX
CAD FILE: XXXX
SHEET NUMBER: M2.1





Note :
Power wiring, breaker size, and disconnects shall follow local code or NEC
Multi-frame outdoor unit models require a separate power connection for each frame.
Refer to the most current submittal sheets for applicable electrical data.

REVISIONS | DATE

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CLIENT: GREATER PORTLAND LANDMARKS
PROJECT: 93 HIGH STREET - PORTLAND, ME
DRAWING TITLE: MECHANICAL DETAILS

DATE: 12/20/2011
SCALE: 1/4" = 1'-0"
DRAWN BY: CJM
CHECKED BY: JPN
JOB NUMBER: XXXX
CAD FILE: XXXX

SHEET NUMBER
M2.2
SHEET 4 OF 5

Greater Portland Landmarks LG Water Source VRF Submittal

11/30/2011

Prepared by:

Jeff Charette - Trane

Prepared for :

Titan Mechanical

- *Table of contents*

ver 2.11.10.25

Building - Load Output

1. Project Name :Greater Portland Landmarks

2. Date :11/30/2011

3. Location :Nation(Portland, United States), Long(-), Lat(43.7), Elev(137ft)

4. Design conditions

		Cooling	Heating
Outdoor	DB Temp[F]	87.1	-6.0
	WB Temp[F]	72.0	-6.6
	RH[%]	48	86
Indoor	DB Temp[F]	80.6	68.0
	WB Temp[F]	67.1	56.8
	RH[%]	50	50

ver 2.11.10.25

Model Selection - Summary

Project Name :Greater Portland Landmarks

1. Outdoor Units

Model Name	Quantity	Description
ARWB288BA2	1	288Mbh/60Hz/R410A/Heat Pump/Water II/Heat Recovery/N.America
Total	1	

2. Indoor Units

Model Name	Quantity	Description
ARNU243S5L2	1	Wall Mounted(24MBh)
ARNU283BGA2	3	Ceiling Concealed Duct - High Static(28MBh)
ARNU243BHA2	2	Ceiling Concealed Duct - High Static(24MBh)
ARNU073SEL2	1	Wall Mounted(7MBh)
ARNU183BHA2	4	Ceiling Concealed Duct - High Static(18MBh)
ARNU243NJA2	2	Vertical AHU
Total	13	

3. Pipes

Index	Dia(Liq:Gas,in)	Length(ft)
P31	3/4 : 1+3/8:1+5/8	12
P22	3/8 : 3/4:7/8	7
P1	3/8 : 5/8	113
P24	5/8 : 1+1/8:1+1/8	10
P21	3/8 : 1/2:5/8	5
P0	1/4 : 1/2	82
P23	1/2 : 7/8:1+1/8	32
P27	3/8 : 5/8:3/4	12

4. Branch/Header/Common pipe

Model Name	Quantity
ARBLB14521	1
ARBLB07121	1
ARBLB03321	1
ARCNB20	1
PRHR040A	2
PRHR020A	1
PRHR030A	1

5. Accessories

Index	Model Name	Quantity	Description

ver 2.11.10.25

Model Selection - Summary

ODU	PQCSW320A0E	1	AC Smart(Control all indoor units)
IDU	PQRCVCL0Q	13	Simple Wired Remote with mode (black)

ver 2.11.10.25

Model Selection - System 1

Project Name :Greater Portland Landmarks **12/01/2011**

System No :1/1

1. Design conditions

Summer					Winter				
Indoor			Inlet Water Info.		Indoor			Inlet Water Info.	
DB(F)	WB(F)	RH(%)	Temp(F)	GPM	DB(F)	WB(F)	RH(%)	Temp(F)	GPM
80.6	67.1	50	86.0	84.5	68.0	56.8	50	68.0	84.5

2. Outdoor

Model Name	Outlet Water Temp (Cooling/Heating	Max total over load(kBtu/h/%)	Indoors/Outdoor Ratio	Product charge(lbs)	Add. Ref. Amount(lbs)
ARWB288BA2	94.2/61.8	375.8(130%)	1.00:1	38.80	30.31

Rated Capa/Corrected Capa(kBtu/h)		Rated Power Input/Corrected Power Input(kW)	
Cooling	Heating	Cooling	Heating
288.0/276.0	324.0/313.7	17.6/17.7	18.3/18.3

3. Pipes

Index	Dia(Liq:Gas,in)	Length(ft)
P31	3/4 : 1+3/8:1+5/8	12.0
P22	3/8 : 3/4:7/8	7.0
P1	3/8 : 5/8	113.0
P24	5/8 : 1+1/8:1+1/8	10.0
P21	3/8 : 1/2:5/8	5.0
P0	1/4 : 1/2	82.0
P23	1/2 : 7/8:1+1/8	32.0
P27	3/8 : 5/8:3/4	12.0

4. Branch/Header/Common pipe

Model Name	Quantity
ARBLB14521	1
ARBLB07121	1
ARBLB03321	1
ARCNB20	1
PRHR040A	2
PRHR020A	1
PRHR030A	1

#Notes : Correction factor conpensates Indoor unit Combination, Temperature, Pipe Length Effect etc.

The result can be slightly different from product data book due to simulation.

Model Selection - System 1

Project Name :Greater Portland Landmarks **12/01/2011**

System No :1/1

5. Indoors

Room	Model Name	Type	Rated TC/Corrected TC(kBtu/h)		
			Cooling Total	Cooling Sensible	Heating
Basement/UH-1	ARNU243S5L2	WALL_MOUNTED	24.2/23.6	16.9/16.7	27.3/27.3
Basement/AHU-3	ARNU283BGA2	DUCT_HIGH_STATIC	28.0/27.3	19.6/19.9	31.5/31.5
Basement/AHU-2	ARNU243BHA2	DUCT_HIGH_STATIC	24.2/23.5	16.9/16.8	27.3/27.3
Basement/AHU-4	ARNU283BGA2	DUCT_HIGH_STATIC	28.0/27.1	19.6/19.7	31.5/31.4
Basement/AHU-1	ARNU073SEL2	WALL_MOUNTED	7.5/7.2	5.3/5.1	8.5/8.3
1st Floor/AHU-5	ARNU183BHA2	DUCT_HIGH_STATIC	19.1/18.4	13.4/13.2	21.5/21.2
2nd Floor/AHU-6	ARNU243BHA2	DUCT_HIGH_STATIC	24.2/23.0	16.9/16.4	27.3/25.9
3rd Floor/AHU-10	ARNU243NJA2	Vertical AHU	24.0/22.5	16.8/18.2	27.0/24.8
3rd Floor/AHU-11	ARNU243NJA2	Vertical AHU	24.0/22.5	16.8/18.2	27.0/24.9
2nd Floor/AHU-8	ARNU183BHA2	DUCT_HIGH_STATIC	19.1/18.2	13.4/13.0	21.5/20.7
2nd Floor/AHU-7	ARNU283BGA2	DUCT_HIGH_STATIC	28.0/26.6	19.6/19.3	31.5/29.9
2nd Floor/AHU-12	ARNU183BHA2	DUCT_HIGH_STATIC	19.1/18.2	13.4/13.0	21.5/20.6
2nd Floor/AHU-9	ARNU183BHA2	DUCT_HIGH_STATIC	19.1/18.1	13.4/12.9	21.5/20.2

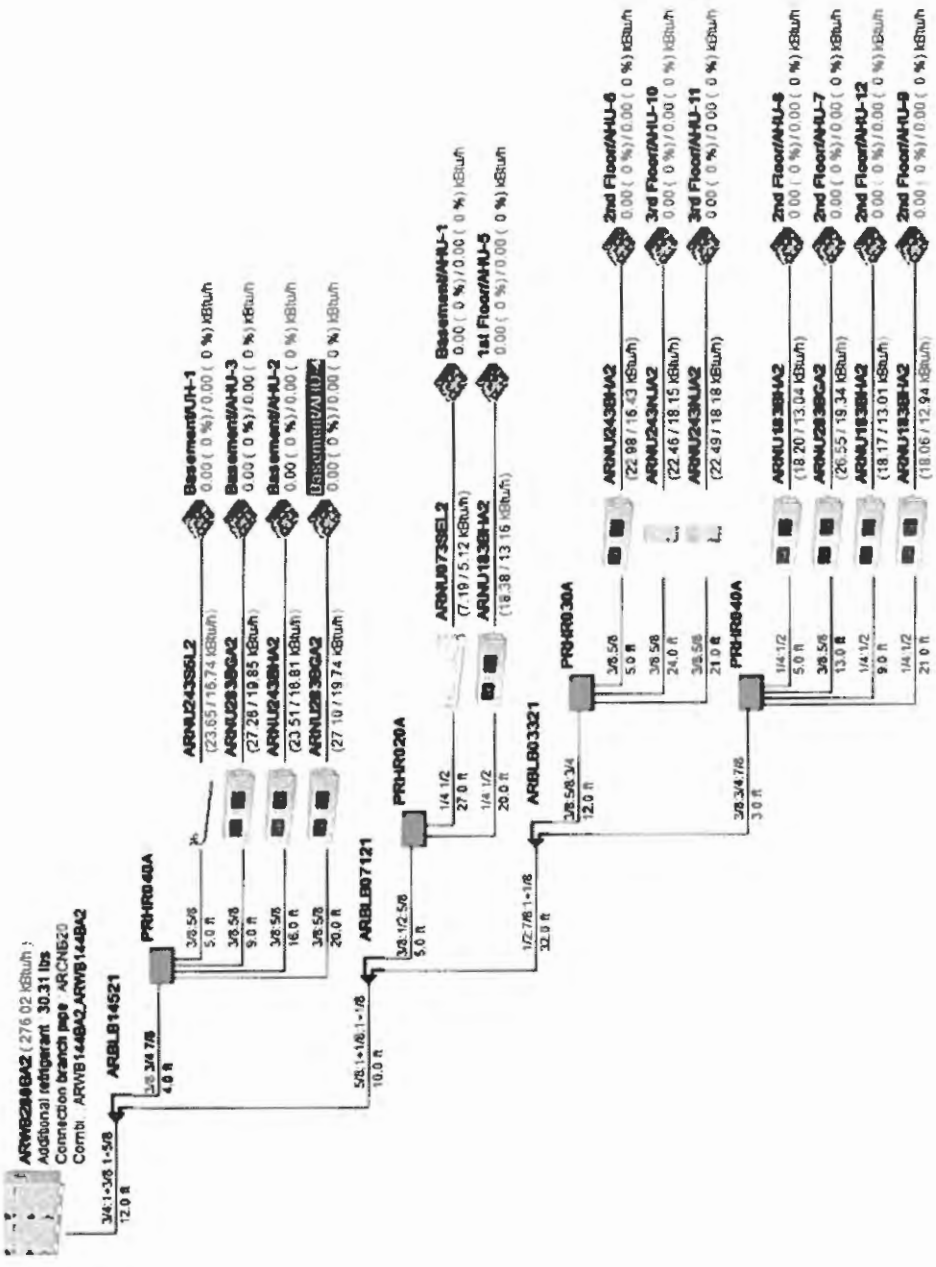
#Notes : Correction factor compensates Indoor unit Combination, Temperature, Pipe Length Effect etc.

The result can be slightly different from product data book due to simulation.

Model Selection - System 1

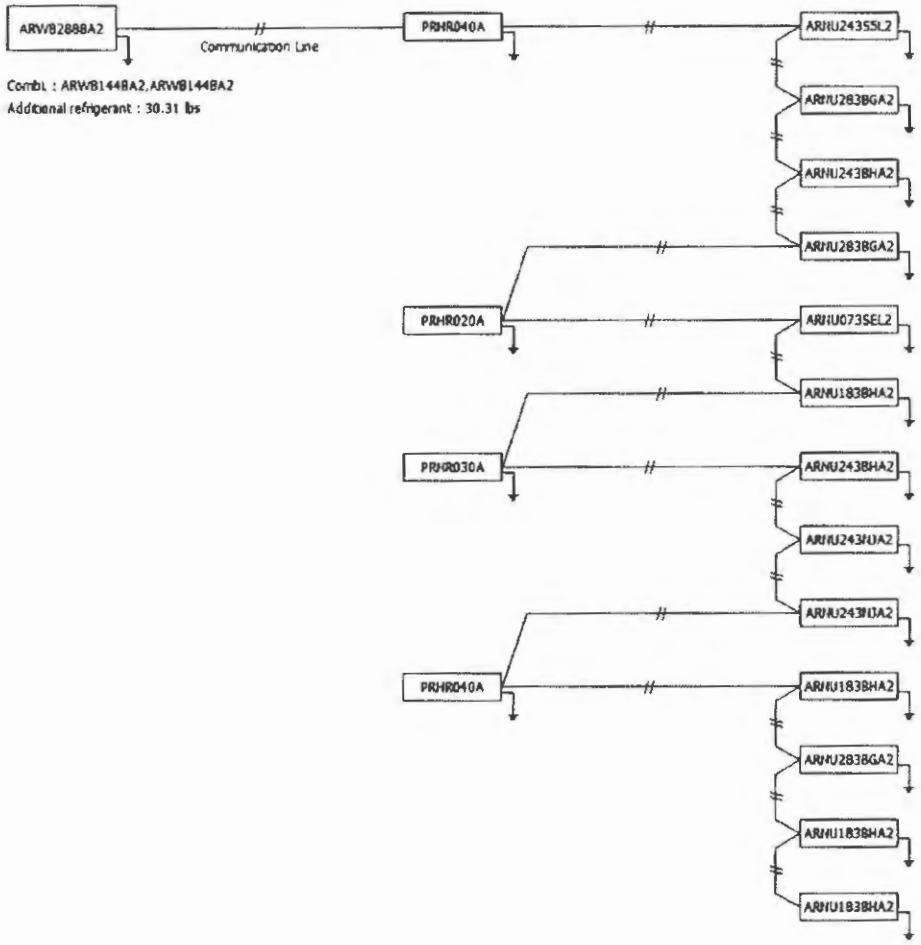
System No :1/1

12/01/2011



Model Selection - System 1

System No :1/1 **12/01/2011**



Note
Power wiring, breaker size, and disconnects shall follow local code or NEC
Multi-frame outdoor unit models require a separate power connection for each frame
Refer to the most current submittal sheets for applicable electrical data

ver 2.11.10.25

Model Selection - Analysis

Project Name :Greater Portland Landmarks

1. Outdoor Units

Model Name	Quantity
ARWB288BA2	1
Total	1

2. Indoor Units

Model Name	Quantity
ARNU243S5L2	1
ARNU283BGA2	3
ARNU243BHA2	2
ARNU073SEL2	1
ARNU183BHA2	4
ARNU243NJA2	2
Total	13

3. Pipes

Dia(Liq:Gas,in)	Length(ft)
1+3/8	12
1+5/8	12
1+1/8	52
1/2	119
1/4	82
3/4	31
3/8	137
5/8	140
7/8	39
Total	624

4. Branch/Header/Common pipe

Model Name	Quantity
ARBLB14521	1
ARBLB07121	1
ARBLB03321	1
ARCNB20	1
PRHR040A	2
PRHR020A	1
PRHR030A	1
Total	8

5. Accessories

Model Name	Quantity
PQCSW320A0E (ODU)	1

Model Selection - Analysis

PQRCVCL0Q (IDU)	13
Total	14

Job Name/Location:

Tag #:

Date: For: File Resubmit

PO No.: Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

ARWB288BA2
Multi V™ Water II Heat Recovery
24.0 Ton Water Source Unit

(a) ARWB144BA2
(b) ARWB144BA2

LG

Performance:

Cooling Mode:

Nominal Capacity (Btu/h)	288,000
Rated Capacity (Btu/h)	274,000
EER (Btu/W·h)	11.30
IEER (Btu/W·h)	18.00

Heating Mode:

Nominal Capacity (Btu/h)	324,000
Rated Capacity (Btu/h)	308,000
COP (W/W)	4.26

Nominal capacities are outside the scope of AHRI Standard 1230.
Rated capacities are in accordance with AHRI Standard 1230-2010.

Electrical:	(a) ARWB144BA2	(b) ARWB144BA2
Power Supply (V/Hz/Ø)	208-230/60/3	208-230/60/3
MOP (A)	65	65
MCA (A)	45	45
Rated Amps (A)	39.4	39.4
Compressor A (A)	17.7	21.7
Compressor B (A)	21.7	21.7
Max Starting Current (A)	103.9	103.9

Piping: Refrigerant:	(a) ARWB144BA2	(b) ARWB144BA2
Refrigerant Charge (lbs)	19.4	19.4
Liquid Line (in, OD)	1/2 Flare	1/2 Flare
Vapor Line High (in, OD)	7/8 Braze	7/8 Braze
Vapor Line Low (in, OD)	1-1/8 Braze	1-1/8 Braze

Water:	(a) ARWB144BA2	(b) ARWB144BA2
Water Inlet/Outlet (in)	1-1/2 FPT	1-1/2 FPT

Condensate:	(a) ARWB144BA2	(b) ARWB144BA2
Condensate Line (in)	3/4	3/4

Standard Features:

- Limited Warranty with LG Certified Installation
  - Two Year Functional Parts Warranty
  - Additional Four Year Compressor Warranty
- Fault Detection and Diagnosis

Required Accessories:

ARCNB21 (frame connector Y-branch)

Water Operating Range:

CLG Mode Entering Water Range (°F)	50-113
HTG Mode Entering Water Range (°F)	23-113
Synchronous (°F)	23-113

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Max Number of Indoor Units	64
Sound Pressure[1] dB(A)	52
Net Unit Weight (a) + (b) (lbs)	525 + 525
Shipping Weight (a) + (b) (lbs)	570 + 570
Communication Cable[2] (No. x AWG)	2 x 18
Heat Exchanger Type	Stainless Steel Plate
Heat Rejected to Equipment Room (Btu/h)	3,414
Total Heat of Rejection (Btu/h)	348,126

Compressor:

Inverter Scroll Quantity	2
Constant Scroll Quantity	2
Oil/Type	PVE/FVC68D

Condenser Water:

Flow Rate (a) + (b) (GPM)	42.2 + 42.2
Pressure Drop (a) + (b) (ft wg)	14.4 + 14.4

Notes:

1. Sound pressure levels are tested in an anechoic chamber under ISO Standard 1996 and for the combination of water cooled units.
2. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
3. The rated data mentioned in the above tables is applied with non-ducted indoor units.
4. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 ~ 105%.
5. The voltage tolerance is ± 10%.
6. Power wiring cable size must comply with the applicable local and national code.

Inverter

AHRI CERTIFIED
www.ahridirectory.org
Variable Refrigerant Flow (VRF) Multi-Split AC and HP
AHRI Standard 1230

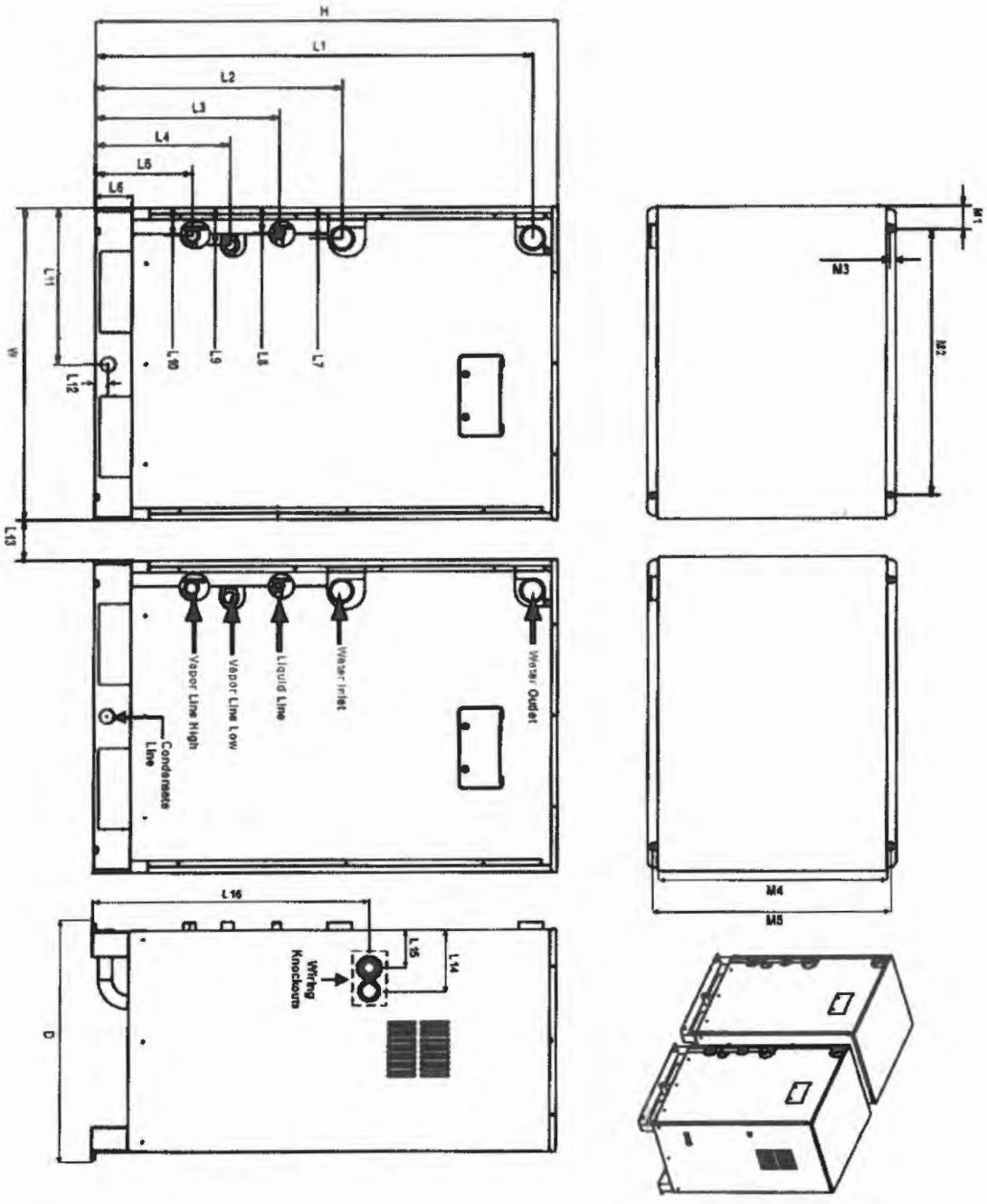
Intertek

Job Name/Location:

ARWB288BA2
Multi V™ Water II Heat Recovery
24.0 Ton Water Source Unit

(a) ARWB144BA2
(b) ARWB144BA2

Tag #:
Date:
PO No.:



W	30-13/32
H	44-3/32
D	23-19/32
L1	41-5/8
L2	23-1/2
L3	17-17/32
L4	12-13/16
L5	9-1/4
L6	3-21/32
L7	3-1/2
L8	2-15/32
L9	3-5/8
L10	2-3/4
L11	15-3/16
L12	1-1/4
L13	6
L14	5-5/8
L15	3-9/16
L16	26-27/32
M1	2-1/4
M2	25-29/32
M3	19/32
M4	21-17/32
M5	22-13/32

Note - All dimensions have a tolerance of ± 0.25 in.

Job Name/Location: **Tag #:**

Date: For: File Resubmit

PO No.: Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

Outdoor Y-Branch Kits
Multi V™ Heat Recovery

Insulation[1] Properties:

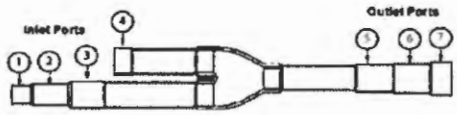
Material	Polyolefin Foam
UL94 Flame Classification	HF-1

Fitting Properties:

Material	Copper
Design Pressure	551 PSIG

Y-Branch Connection Diameters (in, ID)

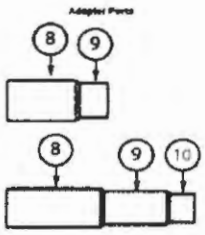
Model	Y-Branch Type	Port Identifier						
		1	2	3	4	5	6	7
ARCNB20	Liquid	-	3/8	1/2	1/2	3/4	5/8	1/2
	Vapor Line Low	3/4	7/8	1-1/8	1-1/8	1-1/8	1-1/4	1-3/8
	Vapor Line High	5/8	3/4	7/8	7/8	1-1/8	7/8	-
ARCNB30	Liquid	1/2	5/8	3/4	1/2	7/8	3/4	-
	Vapor Line Low	-	1-1/8	1-3/8	1-1/8	1-3/8	1-1/2	1-5/8
	Vapor Line High	3/4	7/8	1-1/8	7/8	1-1/8	1-1/4	1-3/8



Not to scale

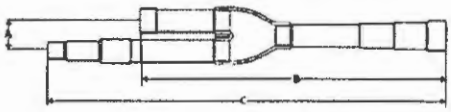
Reducer Diameters (in)

Y-Branch	Qty/Kit	Reducer Type	8	9	10	Length
ARCNB20	6	Liquid	1/2 OD	3/8 ID	-	2-7/8
			7/8 ID	3/4 OD	-	3-5/32
		Vapor Line Low	3/4 OD	5/8 ID	-	2-15/16
			1-1/8 OD	7/8 ID	3/4 ID	4-17/32
			1-1/2 ID	1-3/8 OD	-	3-9/32
		Vapor Line High	7/8 OD	3/4 ID	5/8 ID	4-17/32
ARCNB30	3	Liquid	1/2 ID	3/8 ID	-	2-7/8
		Vapor Line Low	1-1/8 OD	7/8 ID	3/4 ID	4-17/32
		Vapor Line High	7/8 OD	3/4 ID	5/8 ID	4-17/32



Y-Branch Dimensions[2] (in)

Model	Y-Branch Type	A	B	C
ARCNB20	Liquid	31/32	13-1/32	15-25/32
	Vapor Line Low	1-1/2	14-9/32	18-5/8
	Vapor Line High	1-1/2	12-5/8	16-25/32
ARCNB30	Liquid	31/32	11-3/8	15-5/8
	Vapor Line Low	1-25/32	14-9/16	17-15/16
	Vapor Line High	1-1/2	11-11/32	18-5/8



Notes:

1. Each Y-Branch kit comes with insulation for the following piping components - liquid, vapor line low and vapor line high.
2. LG branch fittings must be used. Field supplied branch fittings are not permitted.
3. Kit components must be kept dry and free of debris before installation.
4. Must follow installation instructions in the applicable LG installation manual.

ARWB288BA2

Cooling Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air Temperature(°F WB)													
			57		61		64		67		70		73		76	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
130	50	31.8	267.6	5.95	289.8	6.91	315.7	8.03	343.1	9.1	353.3	9.27	367.3	9.50	377.5	9.67
		42.4	267.6	5.83	289.8	6.79	315.7	7.90	343.1	8.9	353.3	9.12	367.3	9.36	377.5	9.52
		84.4	267.6	5.34	289.8	6.35	315.7	7.40	343.1	8.3	353.3	8.53	367.3	8.77	377.5	8.94
		105.6	267.6	5.21	289.8	6.21	315.7	7.26	343.1	8.2	353.3	8.39	367.3	8.60	377.5	8.75
	59	31.8	263.3	7.81	285.2	9.07	310.6	10.56	337.6	11.9	347.7	12.17	361.3	12.47	371.4	12.69
		42.4	263.3	7.65	285.2	8.92	310.6	10.39	337.6	11.7	347.7	11.98	361.3	12.28	371.4	12.50
		84.4	263.3	7.03	285.2	8.34	310.6	9.72	337.6	10.9	347.7	11.21	361.3	11.51	371.4	11.74
		105.6	263.3	6.84	285.2	8.16	310.6	9.52	337.6	10.7	347.7	11.01	361.3	11.29	371.4	11.48
	67	31.8	259.5	9.46	281.1	10.99	306.1	12.81	332.7	14.4	342.7	14.75	356.0	15.11	366.0	15.38
		42.4	259.5	9.27	281.1	10.81	306.1	12.60	332.7	14.2	342.7	14.52	356.0	14.88	366.0	15.15
		84.4	259.5	8.53	281.1	10.11	306.1	11.78	332.7	13.3	342.7	13.59	356.0	13.95	366.0	14.23
		105.6	259.5	8.29	281.1	9.89	306.1	11.53	332.7	13.0	342.7	13.34	356.0	13.68	366.0	13.91
	75	31.8	259.5	11.66	281.1	13.56	306.1	15.79	332.7	17.8	342.7	18.20	356.0	18.64	366.0	18.97
		42.4	259.5	11.43	281.1	13.34	306.1	15.53	332.7	17.5	342.7	17.91	356.0	18.35	366.0	18.68
		84.4	259.5	10.51	281.1	12.47	306.1	14.52	332.7	16.4	342.7	16.76	356.0	17.21	366.0	17.55
		105.6	259.5	10.22	281.1	12.20	306.1	14.23	332.7	16.0	342.7	16.45	356.0	16.87	366.0	17.16
	85	31.8	259.5	14.00	281.1	16.28	306.1	18.95	332.7	21.3	342.7	21.84	356.0	22.37	366.0	22.76
		42.4	259.5	13.72	281.1	16.00	306.1	18.64	332.7	21.0	342.7	21.49	356.0	22.02	366.0	22.42
		84.4	259.5	12.62	281.1	14.96	306.1	17.43	332.7	19.6	342.7	20.11	356.0	20.65	366.0	21.06
		105.6	259.5	12.27	281.1	14.64	306.1	17.07	332.7	19.2	342.7	19.74	356.0	20.24	366.0	20.59
	95	31.8	233.6	14.15	252.9	16.45	275.5	19.16	299.5	21.6	308.4	22.08	320.4	22.62	329.4	23.02
		42.4	233.6	13.87	252.9	16.18	275.5	18.85	299.5	21.2	308.4	21.73	320.4	22.27	329.4	22.67
		84.4	233.6	12.76	252.9	15.13	275.5	17.62	299.5	19.9	308.4	20.34	320.4	20.86	329.4	21.30
		105.6	233.6	12.41	252.9	14.81	275.5	17.26	299.5	19.5	308.4	19.96	320.4	20.47	329.4	20.82
	104	31.8	207.6	14.93	224.8	17.35	244.9	20.21	266.2	22.8	274.2	23.29	284.8	23.86	292.8	24.27
		42.4	207.6	14.63	224.8	17.07	244.9	19.88	266.2	22.4	274.2	22.92	284.8	23.49	292.8	23.91
		84.4	207.6	13.46	224.8	15.96	244.9	18.59	266.2	20.9	274.2	21.46	284.8	22.03	292.8	22.47
		105.6	207.6	13.09	224.8	15.62	244.9	18.21	266.2	20.5	274.2	21.06	284.8	21.59	292.8	21.96
	113	31.8	181.6	15.70	196.7	18.26	214.3	21.25	232.9	23.9	240.0	24.50	249.2	25.10	256.2	25.53
		42.4	181.6	15.39	196.7	17.96	214.3	20.91	232.9	23.6	240.0	24.11	249.2	24.71	256.2	25.15
		84.4	181.6	14.16	196.7	16.79	214.3	19.56	232.9	22.0	240.0	22.58	249.2	23.18	256.2	23.64
		105.6	181.6	13.77	196.7	16.43	214.3	19.16	232.9	21.6	240.0	22.16	249.2	22.71	256.2	23.10
120	50	31.8	253.2	5.65	274.2	6.53	298.8	7.62	324.8	8.6	334.4	8.79	347.5	8.98	357.3	9.14
		42.4	253.2	5.53	274.2	6.43	298.8	7.50	324.8	8.4	334.4	8.65	347.5	8.85	357.3	9.00
		84.4	253.2	5.08	274.2	6.02	298.8	7.01	324.8	7.9	334.4	8.08	347.5	8.31	357.3	8.46
		105.6	253.2	4.93	274.2	5.90	298.8	6.86	324.8	7.7	334.4	7.93	347.5	8.14	357.3	8.25
	59	31.8	250.4	7.47	271.2	8.67	295.4	10.10	321.1	11.4	330.7	11.65	343.6	11.92	353.2	12.13
		42.4	250.4	7.32	271.2	8.53	295.4	9.94	321.1	11.2	330.7	11.46	343.6	11.74	353.2	11.95
		84.4	250.4	6.73	271.2	7.98	295.4	9.29	321.1	10.5	330.7	10.72	343.6	11.01	353.2	11.22
		105.6	250.4	6.54	271.2	7.81	295.4	9.10	321.1	10.3	330.7	10.52	343.6	10.79	353.2	10.95
	67	31.8	247.9	9.09	268.5	10.57	292.4	12.31	317.8	13.9	327.4	14.18	340.1	14.54	349.6	14.80
		42.4	247.9	8.91	268.5	10.40	292.4	12.11	317.8	13.6	327.4	13.96	340.1	14.31	349.6	14.57
		84.4	247.9	8.20	268.5	9.72	292.4	11.32	317.8	12.8	327.4	13.07	340.1	13.41	349.6	13.67
		105.6	247.9	7.97	268.5	9.51	292.4	11.09	317.8	12.5	327.4	12.82	340.1	13.15	349.6	13.35
	75	31.8	247.9	11.18	268.5	12.99	292.4	15.14	317.8	17.0	327.4	17.44	340.1	17.86	349.6	18.18
		42.4	247.9	10.96	268.5	12.78	292.4	14.89	317.8	16.8	327.4	17.18	340.1	17.58	349.6	17.90
		84.4	247.9	10.08	268.5	11.95	292.4	13.92	317.8	15.7	327.4	16.06	340.1	16.48	349.6	16.80
		105.6	247.9	9.80	268.5	11.69	292.4	13.63	317.8	15.4	327.4	15.76	340.1	16.16	349.6	16.40
	85	31.8	247.9	13.52	268.5	15.70	292.4	18.30	317.8	20.6	327.4	21.09	340.1	21.60	349.6	21.99
		42.4	247.9	13.25	268.5	15.45	292.4	18.00	317.8	20.3	327.4	20.75	340.1	21.26	349.6	21.65
		84.4	247.9	12.18	268.5	14.45	292.4	16.83	317.8	19.0	327.4	19.42	340.1	19.93	349.6	20.31
		105.6	247.9	11.85	268.5	14.14	292.4	16.48	317.8	18.6	327.4	19.05	340.1	19.54	349.6	19.83
	95	31.8	226.9	13.86	245.7	16.10	267.6	18.75	290.8	21.1	299.6	21.62	311.2	22.14	319.9	22.54
		42.4	226.9	13.58	245.7	15.84	267.6	18.45	290.8	20.8	299.6	21.27	311.2	21.79	319.9	22.19
		84.4	226.9	12.49	245.7	14.81	267.6	17.25	290.8	19.4	299.6	19.90	311.2	20.42	319.9	20.82
		105.6	226.9	12.14	245.7	14.49	267.6	16.89	290.8	19.0	299.6	19.53	311.2	20.03	319.9	20.33
	104	31.8	205.8	14.91	222.9	17.32	242.7	20.18	263.9	22.7	271.8	23.26	282.3	23.82	290.2	24.25
		42.4	205.8	14.61	222.9	17.04	242.7	19.85	263.9	22.4	271.8	22.89	282.3	23.45	290.2	23.88
		84.4	205.8	13.44	222.9	15.94	242.7	18.56	263.9	20.9	271.8	21.42	282.3	21.96	290.2	22.40
		105.6	205.8	13.07	222.9	15.60	242.7	18.18	263.9	20.5	271.8	21.02	282.3	21.56	290.2	21.97
	113	31.8	184.7	15.96	200.1	18.54	217.8	21.60	237.0	24.3	244.0	24.91	253.4	25.51	260.5	25.97
		42.4	184.7	15.64	200.1	18.24	217.8	21.25	237.0	24.0	244.0	24.51	253.4	25.11	260.5	25.57
		84.4	184.7	14.39	200.1	17.07	217.8	19.87	237.0	22.4	244.0	22.94	253.4	23.54	260.5	23.98
		105.6	184.7	14.00	200.1	16.71	217.8	19.47	237.0	21.9	244.0	22.51	253.4	23.09	260.5	23.41

TC:Total Capacity(MBh)
PI :Power Input(kW)(Comp. + Outdoor fan motor)

Cooling Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air Temperature(°F WB)													
			57		61		64		67		70		73		76	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
110	50	31.8	238.9	5.31	258.7	6.19	281.9	7.20	306.3	8.1	315.6	8.30	327.9	8.49	337.0	8.66
		42.4	238.9	5.20	258.7	6.09	281.9	7.08	306.3	8.0	315.6	8.16	327.9	8.36	337.0	8.52
		84.4	238.9	4.79	258.7	5.70	281.9	6.62	306.3	7.5	315.6	7.63	327.9	7.85	337.0	7.97
		105.6	238.9	4.65	258.7	5.56	281.9	6.49	306.3	7.3	315.6	7.49	327.9	7.69	337.0	7.79
	59	31.8	237.5	7.12	257.2	8.28	280.2	9.65	304.5	10.9	313.7	11.12	325.9	11.39	335.0	11.59
		42.4	237.5	6.96	257.2	8.15	280.2	9.49	304.5	10.7	313.7	10.94	325.9	11.21	335.0	11.41
		84.4	237.5	6.42	257.2	7.62	280.2	8.87	304.5	10.0	313.7	10.23	325.9	10.50	335.0	10.69
		105.6	237.5	6.24	257.2	7.45	280.2	8.69	304.5	9.8	313.7	10.04	325.9	10.30	335.0	10.43
	67	31.8	236.3	8.73	255.9	10.14	278.7	11.82	302.9	13.3	312.0	13.63	324.1	13.96	333.2	14.20
		42.4	236.3	8.56	255.9	9.96	278.7	11.63	302.9	13.1	312.0	13.41	324.1	13.74	333.2	13.98
		84.4	236.3	7.87	255.9	9.33	278.7	10.87	302.9	12.2	312.0	12.54	324.1	12.86	333.2	13.11
		105.6	236.3	7.65	255.9	9.13	278.7	10.65	302.9	12.0	312.0	12.31	324.1	12.62	333.2	12.78
	75	31.8	236.3	10.69	255.9	12.42	278.7	14.47	302.9	16.3	312.0	16.69	324.1	17.09	333.2	17.39
		42.4	236.3	10.48	255.9	12.22	278.7	14.24	302.9	16.0	312.0	16.42	324.1	16.82	333.2	17.12
		84.4	236.3	9.64	255.9	11.43	278.7	13.31	302.9	15.0	312.0	15.35	324.1	15.75	333.2	16.05
		105.6	236.3	9.37	255.9	11.16	278.7	13.04	302.9	14.7	312.0	15.07	324.1	15.45	333.2	15.65
	85	31.8	236.3	13.03	255.9	15.15	278.7	17.65	302.9	19.9	312.0	20.34	324.1	20.83	333.2	21.20
		42.4	236.3	12.77	255.9	14.90	278.7	17.36	302.9	19.6	312.0	20.01	324.1	20.50	333.2	20.87
		84.4	236.3	11.75	255.9	13.93	278.7	16.23	302.9	18.3	312.0	18.72	324.1	19.20	333.2	19.56
		105.6	236.3	11.42	255.9	13.63	278.7	15.90	302.9	17.9	312.0	18.37	324.1	18.84	333.2	19.08
	95	31.8	220.1	13.55	238.4	15.74	259.6	18.35	282.2	20.7	290.7	21.15	302.0	21.66	310.4	22.04
		42.4	220.1	13.28	238.4	15.49	259.6	18.05	282.2	20.3	290.7	20.81	302.0	21.32	310.4	21.70
		84.4	220.1	12.21	238.4	14.49	259.6	16.87	282.2	19.0	290.7	19.46	302.0	19.97	310.4	20.34
		105.6	220.1	11.88	238.4	14.18	259.6	16.53	282.2	18.6	290.7	19.10	302.0	19.59	310.4	19.83
	104	31.8	204.0	14.89	220.9	17.30	240.6	20.14	261.5	22.7	269.4	23.23	279.8	23.80	287.7	24.22
		42.4	204.0	14.59	220.9	17.02	240.6	19.82	261.5	22.3	269.4	22.86	279.8	23.42	287.7	23.84
		84.4	204.0	13.42	220.9	15.91	240.6	18.54	261.5	20.9	269.4	21.38	279.8	21.93	287.7	22.34
		105.6	204.0	13.05	220.9	15.57	240.6	18.16	261.5	20.5	269.4	20.98	279.8	21.52	287.7	21.78
	113	31.8	187.9	16.22	203.4	18.86	221.6	21.94	240.8	24.7	248.1	25.32	257.6	25.93	265.0	26.39
		42.4	187.9	15.90	203.4	18.55	221.6	21.59	240.8	24.3	248.1	24.91	257.6	25.52	265.0	25.98
		84.4	187.9	14.63	203.4	17.33	221.6	20.21	240.8	22.7	248.1	23.30	257.6	23.89	265.0	24.34
		105.6	187.9	14.22	203.4	16.96	221.6	19.79	240.8	22.3	248.1	22.86	257.6	23.45	265.0	23.73
100	50	31.8	224.6	5.00	243.3	5.82	265.0	6.79	288.0	7.6	296.6	7.81	308.2	8.00	316.8	8.16
		42.4	224.6	4.91	243.3	5.72	265.0	6.68	288.0	7.5	296.6	7.69	308.2	7.87	316.8	8.02
		84.4	224.6	4.52	243.3	5.34	265.0	6.23	288.0	7.0	296.6	7.19	308.2	7.37	316.8	7.50
		105.6	224.6	4.40	243.3	5.24	265.0	6.09	288.0	6.9	296.6	7.05	308.2	7.22	316.8	7.30
	59	31.8	224.6	6.78	243.3	7.89	265.0	9.19	288.0	10.3	296.6	10.59	308.2	10.84	316.8	11.05
		42.4	224.6	6.65	243.3	7.76	265.0	9.04	288.0	10.2	296.6	10.42	308.2	10.67	316.8	10.87
		84.4	224.6	6.12	243.3	7.25	265.0	8.45	288.0	9.5	296.6	9.74	308.2	9.99	316.8	10.17
		105.6	224.6	5.95	243.3	7.10	265.0	8.27	288.0	9.3	296.6	9.56	308.2	9.80	316.8	9.90
	67	31.8	224.6	8.37	243.3	9.73	265.0	11.32	288.0	12.8	296.6	13.06	308.2	13.37	316.8	13.62
		42.4	224.6	8.20	243.3	9.57	265.0	11.14	288.0	12.6	296.6	12.85	308.2	13.16	316.8	13.40
		84.4	224.6	7.54	243.3	8.95	265.0	10.42	288.0	11.7	296.6	12.01	308.2	12.32	316.8	12.54
		105.6	224.6	7.33	243.3	8.75	265.0	10.21	288.0	11.5	296.6	11.79	308.2	12.09	316.8	12.21
	75	31.8	224.6	10.20	243.3	11.86	265.0	13.81	288.0	15.6	296.6	15.93	308.2	16.31	316.8	16.60
		42.4	224.6	10.00	243.3	11.67	265.0	13.59	288.0	15.3	296.6	15.67	308.2	16.05	316.8	16.34
		84.4	224.6	9.20	243.3	10.91	265.0	12.71	288.0	14.3	296.6	14.65	308.2	15.03	316.8	15.30
		105.6	224.6	8.94	243.3	10.68	265.0	12.45	288.0	14.0	296.6	14.38	308.2	14.74	316.8	14.99
	85	31.8	224.6	12.55	243.3	14.58	265.0	17.00	288.0	19.1	296.6	19.59	308.2	20.07	316.8	20.43
		42.4	224.6	12.30	243.3	14.35	265.0	16.72	288.0	18.8	296.6	19.27	308.2	19.75	316.8	20.10
		84.4	224.6	11.31	243.3	13.42	265.0	15.63	288.0	17.6	296.6	18.02	308.2	18.48	316.8	18.81
		105.6	224.6	11.00	243.3	13.13	265.0	15.31	288.0	17.3	296.6	17.68	308.2	18.14	316.8	18.32
	95	31.8	213.4	13.26	231.1	15.40	251.7	17.93	273.6	20.2	281.8	20.67	292.8	21.18	301.0	21.56
		42.4	213.4	12.99	231.1	15.15	251.7	17.64	273.6	19.9	281.8	20.34	292.8	20.84	301.0	21.22
		84.4	213.4	11.94	231.1	14.16	251.7	16.50	273.6	18.6	281.8	19.02	292.8	19.51	301.0	19.86
		105.6	213.4	11.61	231.1	13.86	251.7	16.16	273.6	18.2	281.8	18.67	292.8	19.14	301.0	19.34
	104	31.8	202.2	14.87	218.9	17.27	238.5	20.13	259.2	22.7	267.0	23.19	277.3	23.76	285.1	24.20
		42.4	202.2	14.57	218.9	16.99	238.5	19.80	259.2	22.3	267.0	22.82	277.3	23.38	285.1	23.81
		84.4	202.2	13.40	218.9	15.89	238.5	18.51	259.2	20.8	267.0	21.34	277.3	21.89	285.1	22.28
		105.6	202.2	13.03	218.9	15.55	238.5	18.13	259.2	20.4	267.0	20.94	277.3	21.48	285.1	21.69
	113	31.8	191.0	16.48	206.7	19.14	225.3	22.32	244.8	25.1	252.2	25.71	261.8	26.34	269.2	26.83
		42.4	191.0	16.15	206.7	18.83	225.3	21.96	244.8	24.7	252.2	25.30	261.8	25.92	269.2	26.40
		84.4	191.0	14.86	206.7	17.62	225.3	20.52	244.8	23.1	252.2	23.66	261.8	24.27	269.2	24.70
		105.6	191.0	14.45	206.7	17.24	225.3	20.10	244.8	22.7	252.2	23.21	261.8	23.82	269.2	24.04

TC:Total Capacity(MBh)
PI :Power Input(kW)(Comp. + Outdoor fan motor)

Cooling Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air Temperature(°F WB)													
			57		61		64		67		70		73		76	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
90	50	31.8	202.2	4.30	218.9	5.01	238.5	5.84	259.2	6.8	267.0	6.73	277.3	6.89	285.1	7.00
		42.4	202.2	4.21	218.9	4.93	238.5	5.74	259.2	6.5	267.0	6.62	277.3	6.78	285.1	6.89
		84.4	202.2	3.88	218.9	4.60	238.5	5.36	259.2	6.0	267.0	6.18	277.3	6.34	285.1	6.44
		105.6	202.2	3.78	218.9	4.50	238.5	5.25	259.2	5.9	267.0	6.07	277.3	6.22	285.1	6.28
	59	31.8	202.2	5.84	218.9	6.79	238.5	7.91	259.2	8.9	267.0	9.12	277.3	9.34	285.1	9.50
		42.4	202.2	5.72	218.9	6.68	238.5	7.78	259.2	8.8	267.0	8.97	277.3	9.19	285.1	9.35
		84.4	202.2	5.26	218.9	6.24	238.5	7.27	259.2	8.2	267.0	8.38	277.3	8.60	285.1	8.75
		105.6	202.2	5.12	218.9	6.11	238.5	7.12	259.2	8.0	267.0	8.23	277.3	8.44	285.1	8.52
	67	31.8	202.2	7.20	218.9	8.38	238.5	9.75	259.2	11.0	267.0	11.24	277.3	11.51	285.1	11.73
		42.4	202.2	7.06	218.9	8.24	238.5	9.59	259.2	10.8	267.0	11.06	277.3	11.33	285.1	11.54
		84.4	202.2	6.49	218.9	7.70	238.5	8.97	259.2	10.1	267.0	10.34	277.3	10.61	285.1	10.80
		105.6	202.2	6.31	218.9	7.54	238.5	8.78	259.2	9.9	267.0	10.15	277.3	10.41	285.1	10.51
	75	31.8	202.2	8.78	218.9	10.20	238.5	11.89	259.2	13.4	267.0	13.71	277.3	14.04	285.1	14.30
		42.4	202.2	8.61	218.9	10.04	238.5	11.70	259.2	13.2	267.0	13.49	277.3	13.82	285.1	14.07
		84.4	202.2	7.92	218.9	9.39	238.5	10.94	259.2	12.3	267.0	12.61	277.3	12.93	285.1	13.17
		105.6	202.2	7.70	218.9	9.19	238.5	10.71	259.2	12.1	267.0	12.38	277.3	12.69	285.1	12.82
	85	31.8	202.2	10.80	218.9	12.55	238.5	14.63	259.2	16.5	267.0	16.86	277.3	17.28	285.1	17.56
		42.4	202.2	10.59	218.9	12.35	238.5	14.39	259.2	16.2	267.0	16.59	277.3	17.00	285.1	17.30
		84.4	202.2	9.74	218.9	11.55	238.5	13.45	259.2	15.2	267.0	15.51	277.3	15.91	285.1	16.20
		105.6	202.2	9.47	218.9	11.30	238.5	13.18	259.2	14.9	267.0	15.22	277.3	15.61	285.1	15.77
	95	31.8	196.6	11.65	212.9	13.55	231.8	15.78	252.0	17.8	259.6	18.20	269.6	18.64	277.2	18.97
		42.4	196.6	11.42	212.9	13.33	231.8	15.52	252.0	17.5	259.6	17.90	269.6	18.34	277.2	18.67
		84.4	196.6	10.51	212.9	12.46	231.8	14.51	252.0	16.3	259.6	16.73	269.6	17.16	277.2	17.47
		105.6	196.6	10.22	212.9	12.19	231.8	14.22	252.0	16.0	259.6	16.42	269.6	16.84	277.2	17.01
	104	31.8	190.9	13.39	206.8	15.56	225.2	18.12	244.8	20.4	252.1	20.90	261.9	21.41	269.3	21.80
		42.4	190.9	13.12	206.8	15.31	225.2	17.83	244.8	20.1	252.1	20.56	261.9	21.07	269.3	21.45
		84.4	190.9	12.07	206.8	14.31	225.2	16.67	244.8	18.8	252.1	19.22	261.9	19.72	269.3	20.07
		105.6	190.9	11.74	206.8	14.01	225.2	16.33	244.8	18.4	252.1	18.87	261.9	19.35	269.3	19.54
	113	31.8	185.2	15.12	200.7	17.58	218.6	20.47	237.6	23.0	244.6	23.60	254.2	24.18	261.4	24.62
		42.4	185.2	14.82	200.7	17.29	218.6	20.14	237.6	22.7	244.6	23.22	254.2	23.80	261.4	24.23
		84.4	185.2	13.63	200.7	16.16	218.6	18.83	237.6	21.2	244.6	21.71	254.2	22.28	261.4	22.67
		105.6	185.2	13.26	200.7	15.83	218.6	18.44	237.6	20.8	244.6	21.32	254.2	21.86	261.4	22.07
80	50	31.8	179.7	3.61	194.6	4.21	212.0	4.89	230.4	5.5	237.3	5.64	246.5	5.76	253.4	5.87
		42.4	179.7	3.54	194.6	4.14	212.0	4.81	230.4	5.4	237.3	5.55	246.5	5.68	253.4	5.78
		84.4	179.7	3.25	194.6	3.86	212.0	4.50	230.4	5.0	237.3	5.19	246.5	5.32	253.4	5.42
		105.6	179.7	3.17	194.6	3.77	212.0	4.41	230.4	5.0	237.3	5.09	246.5	5.21	253.4	5.28
	59	31.8	179.7	4.90	194.6	5.69	212.0	6.63	230.4	7.5	237.3	7.64	246.5	7.82	253.4	7.97
		42.4	179.7	4.80	194.6	5.60	212.0	6.52	230.4	7.3	237.3	7.52	246.5	7.70	253.4	7.84
		84.4	179.7	4.41	194.6	5.23	212.0	6.10	230.4	6.9	237.3	7.03	246.5	7.21	253.4	7.34
		105.6	179.7	4.29	194.6	5.12	212.0	5.97	230.4	6.7	237.3	6.90	246.5	7.07	253.4	7.15
	67	31.8	179.7	6.04	194.6	7.01	212.0	8.17	230.4	9.2	237.3	9.42	246.5	9.65	253.4	9.83
		42.4	179.7	5.92	194.6	6.90	212.0	8.04	230.4	9.1	237.3	9.27	246.5	9.50	253.4	9.67
		84.4	179.7	5.44	194.6	6.45	212.0	7.52	230.4	8.5	237.3	8.67	246.5	8.89	253.4	9.05
		105.6	179.7	5.29	194.6	6.32	212.0	7.36	230.4	8.3	237.3	8.51	246.5	8.72	253.4	8.81
	75	31.8	179.7	7.37	194.6	8.56	212.0	9.97	230.4	11.2	237.3	11.50	246.5	11.77	253.4	11.96
		42.4	179.7	7.22	194.6	8.42	212.0	9.81	230.4	11.0	237.3	11.31	246.5	11.58	253.4	11.79
		84.4	179.7	6.64	194.6	7.87	212.0	9.17	230.4	10.3	237.3	10.57	246.5	10.84	253.4	11.04
		105.6	179.7	6.45	194.6	7.70	212.0	8.96	230.4	10.1	237.3	10.37	246.5	10.64	253.4	10.75
	85	31.8	179.7	9.06	194.6	10.52	212.0	12.26	230.4	13.8	237.3	14.14	246.5	14.48	253.4	14.74
		42.4	179.7	8.88	194.6	10.35	212.0	12.06	230.4	13.6	237.3	13.91	246.5	14.25	253.4	14.51
		84.4	179.7	8.16	194.6	9.68	212.0	11.28	230.4	12.7	237.3	13.00	246.5	13.34	253.4	13.58
		105.6	179.7	7.94	194.6	9.47	212.0	11.05	230.4	12.5	237.3	12.76	246.5	13.09	253.4	13.22
	95	31.8	179.7	10.06	194.6	11.70	212.0	13.62	230.4	15.3	237.3	15.70	246.5	16.09	253.4	16.38
		42.4	179.7	9.86	194.6	11.51	212.0	13.40	230.4	15.1	237.3	15.45	246.5	15.83	253.4	16.12
		84.4	179.7	9.07	194.6	10.76	212.0	12.53	230.4	14.1	237.3	14.45	246.5	14.82	253.4	15.08
		105.6	179.7	8.82	194.6	10.53	212.0	12.27	230.4	13.8	237.3	14.18	246.5	14.54	253.4	14.69
	104	31.8	179.7	11.92	194.6	13.84	212.0	16.13	230.4	18.2	237.3	18.60	246.5	19.05	253.4	19.40
		42.4	179.7	11.68	194.6	13.62	212.0	15.87	230.4	17.9	237.3	18.30	246.5	18.75	253.4	19.09
		84.4	179.7	10.74	194.6	12.74	212.0	14.84	230.4	16.7	237.3	17.11	246.5	17.55	253.4	17.86
		105.6	179.7	10.45	194.6	12.47	212.0	14.53	230.4	16.4	237.3	16.79	246.5	17.22	253.4	17.39
	113	31.8	179.7	13.78	194.6	15.99	212.0	18.64	230.4	21.0	237.3	21.50	246.5	22.02	253.4	22.42
		42.4	179.7	13.50	194.6	15.73	212.0	18.34	230.4	20.7	237.3	21.15	246.5	21.67	253.4	22.06
		84.4	179.7	12.41	194.6	14.72	212.0	17.15	230.4	19.3	237.3	19.77	246.5	20.28	253.4	20.64
		105.6	179.7	12.08	194.6	14.41	212.0	16.79	230.4	18.9	237.3	19.40	246.5	19.90	253.4	20.09

TC:Total Capacity(MBh)
PI :Power Input(kW)(Comp. + Outdoor fan motor)

Cooling Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air Temperature(°F WB)													
			57		61		64		67		70		73		76	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
70	50	31.8	157.2	3.00	170.3	3.48	185.5	4.05	201.6	4.6	207.6	4.69	215.7	4.79	221.8	4.89
		42.4	157.2	2.94	170.3	3.42	185.5	3.99	201.6	4.5	207.6	4.61	215.7	4.71	221.8	4.81
		84.4	157.2	2.70	170.3	3.20	185.5	3.74	201.6	4.2	207.6	4.30	215.7	4.42	221.8	4.50
		105.6	157.2	2.64	170.3	3.15	185.5	3.66	201.6	4.1	207.6	4.22	215.7	4.34	221.8	4.38
	59	31.8	157.2	4.07	170.3	4.73	185.5	5.51	201.6	6.2	207.6	6.35	215.7	6.50	221.8	6.63
		42.4	157.2	3.99	170.3	4.65	185.5	5.42	201.6	6.1	207.6	6.25	215.7	6.40	221.8	6.52
		84.4	157.2	3.67	170.3	4.35	185.5	5.07	201.6	5.7	207.6	5.84	215.7	5.99	221.8	6.10
		105.6	157.2	3.57	170.3	4.26	185.5	4.96	201.6	5.6	207.6	5.73	215.7	5.88	221.8	5.94
	67	31.8	157.2	5.02	170.3	5.83	185.5	6.80	201.6	7.7	207.6	7.84	215.7	8.03	221.8	8.17
		42.4	157.2	4.92	170.3	5.74	185.5	6.69	201.6	7.5	207.6	7.71	215.7	7.90	221.8	8.04
		84.4	157.2	4.53	170.3	5.37	185.5	6.25	201.6	7.0	207.6	7.21	215.7	7.39	221.8	7.52
		105.6	157.2	4.40	170.3	5.25	185.5	6.12	201.6	6.9	207.6	7.07	215.7	7.25	221.8	7.33
	75	31.8	157.2	6.12	170.3	7.12	185.5	8.26	201.6	9.3	207.6	9.55	215.7	9.79	221.8	9.96
		42.4	157.2	6.00	170.3	7.00	185.5	8.15	201.6	9.2	207.6	9.40	215.7	9.63	221.8	9.80
		84.4	157.2	5.52	170.3	6.54	185.5	7.62	201.6	8.6	207.6	8.79	215.7	9.01	221.8	9.18
		105.6	157.2	5.37	170.3	6.40	185.5	7.47	201.6	8.4	207.6	8.63	215.7	8.85	221.8	8.94
	85	31.8	157.2	7.53	170.3	8.75	185.5	10.19	201.6	11.5	207.6	11.76	215.7	12.04	221.8	12.25
		42.4	157.2	7.38	170.3	8.61	185.5	10.03	201.6	11.3	207.6	11.56	215.7	11.85	221.8	12.06
		84.4	157.2	6.79	170.3	8.05	185.5	9.38	201.6	10.6	207.6	10.81	215.7	11.09	221.8	11.29
		105.6	157.2	6.60	170.3	7.88	185.5	9.18	201.6	10.4	207.6	10.61	215.7	10.88	221.8	10.99
	95	31.8	157.2	8.37	170.3	9.73	185.5	11.32	201.6	12.8	207.6	13.06	215.7	13.37	221.8	13.62
		42.4	157.2	8.20	170.3	9.57	185.5	11.14	201.6	12.6	207.6	12.85	215.7	13.16	221.8	13.40
		84.4	157.2	7.54	170.3	8.94	185.5	10.42	201.6	11.7	207.6	12.01	215.7	12.32	221.8	12.54
		105.6	157.2	7.33	170.3	8.75	185.5	10.20	201.6	11.5	207.6	11.79	215.7	12.09	221.8	12.21
	104	31.8	157.2	9.91	170.3	11.52	185.5	13.40	201.6	15.1	207.6	15.46	215.7	15.84	221.8	16.13
		42.4	157.2	9.71	170.3	11.33	185.5	13.19	201.6	14.9	207.6	15.21	215.7	15.59	221.8	15.87
		84.4	157.2	8.93	170.3	10.59	185.5	12.34	201.6	13.9	207.6	14.22	215.7	14.59	221.8	14.85
		105.6	157.2	8.68	170.3	10.36	185.5	12.06	201.6	13.6	207.6	13.96	215.7	14.32	221.8	14.46
	113	31.8	157.2	11.45	170.3	13.30	185.5	15.49	201.6	17.5	207.6	17.86	215.7	18.31	221.8	18.64
		42.4	157.2	11.22	170.3	13.09	185.5	15.24	201.6	17.2	207.6	17.57	215.7	18.02	221.8	18.34
		84.4	157.2	10.32	170.3	12.24	185.5	14.26	201.6	16.1	207.6	16.43	215.7	16.86	221.8	17.16
		105.6	157.2	10.03	170.3	11.97	185.5	13.96	201.6	15.7	207.6	16.13	215.7	16.55	221.8	16.71
60	50	31.8	134.8	2.40	146.0	2.77	159.0	3.23	172.8	3.7	178.0	3.74	184.9	3.81	190.1	3.90
		42.4	134.8	2.35	146.0	2.73	159.0	3.18	172.8	3.6	178.0	3.68	184.9	3.75	190.1	3.84
		84.4	134.8	2.14	146.0	2.56	159.0	2.98	172.8	3.4	178.0	3.43	184.9	3.53	190.1	3.58
		105.6	134.8	2.09	146.0	2.49	159.0	2.93	172.8	3.3	178.0	3.37	184.9	3.46	190.1	3.50
	59	31.8	134.8	3.25	146.0	3.77	159.0	4.39	172.8	5.0	178.0	5.06	184.9	5.18	190.1	5.29
		42.4	134.8	3.18	146.0	3.71	159.0	4.32	172.8	4.9	178.0	4.98	184.9	5.10	190.1	5.20
		84.4	134.8	2.92	146.0	3.47	159.0	4.04	172.8	4.6	178.0	4.66	184.9	4.78	190.1	4.86
		105.6	134.8	2.84	146.0	3.39	159.0	3.96	172.8	4.5	178.0	4.57	184.9	4.69	190.1	4.74
	67	31.8	134.8	4.00	146.0	4.66	159.0	5.42	172.8	6.1	178.0	6.24	184.9	6.40	190.1	6.51
		42.4	134.8	3.92	146.0	4.58	159.0	5.33	172.8	6.0	178.0	6.14	184.9	6.30	190.1	6.41
		84.4	134.8	3.61	146.0	4.28	159.0	4.98	172.8	5.6	178.0	5.75	184.9	5.89	190.1	6.00
		105.6	134.8	3.51	146.0	4.19	159.0	4.88	172.8	5.5	178.0	5.64	184.9	5.78	190.1	5.84
	75	31.8	134.8	4.88	146.0	5.67	159.0	6.61	172.8	7.4	178.0	7.61	184.9	7.80	190.1	7.95
		42.4	134.8	4.78	146.0	5.56	159.0	6.50	172.8	7.3	178.0	7.49	184.9	7.68	190.1	7.82
		84.4	134.8	4.40	146.0	5.22	159.0	6.08	172.8	6.8	178.0	7.01	184.9	7.19	190.1	7.32
		105.6	134.8	4.28	146.0	5.11	159.0	5.95	172.8	6.7	178.0	6.88	184.9	7.05	190.1	7.12
	85	31.8	134.8	6.00	146.0	6.97	159.0	8.12	172.8	9.1	178.0	9.37	184.9	9.59	190.1	9.76
		42.4	134.8	5.88	146.0	6.86	159.0	7.99	172.8	9.0	178.0	9.22	184.9	9.44	190.1	9.61
		84.4	134.8	5.41	146.0	6.42	159.0	7.47	172.8	8.4	178.0	8.62	184.9	8.84	190.1	9.00
		105.6	134.8	5.26	146.0	6.28	159.0	7.32	172.8	8.3	178.0	8.46	184.9	8.67	190.1	8.76
	95	31.8	134.8	6.67	146.0	7.76	159.0	9.02	172.8	10.2	178.0	10.41	184.9	10.66	190.1	10.85
		42.4	134.8	6.54	146.0	7.63	159.0	8.88	172.8	10.0	178.0	10.24	184.9	10.49	190.1	10.68
		84.4	134.8	6.01	146.0	7.13	159.0	8.31	172.8	9.4	178.0	9.58	184.9	9.82	190.1	10.00
		105.6	134.8	5.85	146.0	6.96	159.0	8.13	172.8	9.2	178.0	9.40	184.9	9.64	190.1	9.73
	104	31.8	134.8	7.90	146.0	9.18	159.0	10.69	172.8	12.0	178.0	12.33	184.9	12.63	190.1	12.85
		42.4	134.8	7.74	146.0	9.03	159.0	10.52	172.8	11.9	178.0	12.13	184.9	12.43	190.1	12.65
		84.4	134.8	7.12	146.0	8.44	159.0	9.84	172.8	11.1	178.0	11.34	184.9	11.63	190.1	11.84
		105.6	134.8	6.92	146.0	8.26	159.0	9.63	172.8	10.9	178.0	11.13	184.9	11.41	190.1	11.53
	113	31.8	134.8	9.12	146.0	10.60	159.0	12.36	172.8	13.9	178.0	14.25	184.9	14.60	190.1	14.86
		42.4	134.8	8.94	146.0	10.43	159.0	12.16	172.8	13.7	178.0	14.02	184.9	14.37	190.1	14.62
		84.4	134.8	8.23	146.0	9.75	159.0	11.37	172.8	12.8	178.0	13.10	184.9	13.44	190.1	13.68
		105.6	134.8	7.99	146.0	9.54	159.0	11.13	172.8	12.6	178.0	12.86	184.9	13.18	190.1	13.33

TC:Total Capacity(MBh)
PI :Power Input(kW)(Comp. + Outdoor fan motor)

Cooling Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air Temperature(°F WB)													
			57		61		64		67		70		73		76	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
50	50	31.8	112.3	1.79	121.6	2.08	132.5	2.42	144.0	2.7	148.3	2.77	154.1	2.87	158.4	2.89
		42.4	112.3	1.75	121.6	2.05	132.5	2.38	144.0	2.7	148.3	2.73	154.1	2.82	158.4	2.85
		84.4	112.3	1.61	121.6	1.92	132.5	2.21	144.0	2.5	148.3	2.56	154.1	2.63	158.4	2.69
		105.6	112.3	1.56	121.6	1.87	132.5	2.17	144.0	2.5	148.3	2.52	154.1	2.59	158.4	2.60
	59	31.8	112.3	2.42	121.6	2.82	132.5	3.27	144.0	3.7	148.3	3.77	154.1	3.87	158.4	3.93
		42.4	112.3	2.37	121.6	2.77	132.5	3.22	144.0	3.6	148.3	3.71	154.1	3.81	158.4	3.87
		84.4	112.3	2.18	121.6	2.59	132.5	3.01	144.0	3.4	148.3	3.47	154.1	3.56	158.4	3.63
		105.6	112.3	2.12	121.6	2.53	132.5	2.95	144.0	3.3	148.3	3.41	154.1	3.50	158.4	3.53
	67	31.8	112.3	2.98	121.6	3.47	132.5	4.03	144.0	4.5	148.3	4.66	154.1	4.77	158.4	4.86
		42.4	112.3	2.92	121.6	3.41	132.5	3.97	144.0	4.5	148.3	4.58	154.1	4.69	158.4	4.78
		84.4	112.3	2.69	121.6	3.19	132.5	3.72	144.0	4.2	148.3	4.28	154.1	4.39	158.4	4.47
		105.6	112.3	2.62	121.6	3.12	132.5	3.64	144.0	4.1	148.3	4.20	154.1	4.31	158.4	4.36
	75	31.8	112.3	3.64	121.6	4.23	132.5	4.93	144.0	5.6	148.3	5.68	154.1	5.81	158.4	5.93
		42.4	112.3	3.57	121.6	4.16	132.5	4.85	144.0	5.5	148.3	5.59	154.1	5.72	158.4	5.83
		84.4	112.3	3.28	121.6	3.89	132.5	4.53	144.0	5.1	148.3	5.22	154.1	5.36	158.4	5.45
		105.6	112.3	3.19	121.6	3.81	132.5	4.44	144.0	5.0	148.3	5.13	154.1	5.26	158.4	5.31
	85	31.8	112.3	4.48	121.6	5.21	132.5	6.06	144.0	6.8	148.3	6.98	154.1	7.15	158.4	7.29
		42.4	112.3	4.39	121.6	5.12	132.5	5.96	144.0	6.7	148.3	6.87	154.1	7.04	158.4	7.17
		84.4	112.3	4.03	121.6	4.76	132.5	5.57	144.0	6.3	148.3	6.43	154.1	6.59	158.4	6.71
		105.6	112.3	3.92	121.6	4.68	132.5	5.46	144.0	6.2	148.3	6.31	154.1	6.47	158.4	6.53
	95	31.8	112.3	4.97	121.6	5.78	132.5	6.73	144.0	7.6	148.3	7.77	154.1	7.95	158.4	8.09
		42.4	112.3	4.87	121.6	5.69	132.5	6.62	144.0	7.5	148.3	7.64	154.1	7.82	158.4	7.96
		84.4	112.3	4.48	121.6	5.32	132.5	6.19	144.0	7.0	148.3	7.14	154.1	7.32	158.4	7.45
		105.6	112.3	4.36	121.6	5.20	132.5	6.07	144.0	6.8	148.3	7.01	154.1	7.19	158.4	7.26
	104	31.8	112.3	5.89	121.6	6.84	132.5	7.97	144.0	9.0	148.3	9.19	154.1	9.41	158.4	9.58
		42.4	112.3	5.77	121.6	6.73	132.5	7.84	144.0	8.8	148.3	9.04	154.1	9.26	158.4	9.43
		84.4	112.3	5.31	121.6	6.30	132.5	7.33	144.0	8.3	148.3	8.45	154.1	8.67	158.4	8.83
		105.6	112.3	5.16	121.6	6.16	132.5	7.18	144.0	8.1	148.3	8.30	154.1	8.51	158.4	8.60
	113	31.8	112.3	6.80	121.6	7.89	132.5	9.21	144.0	10.4	148.3	10.61	154.1	10.87	158.4	11.07
		42.4	112.3	6.67	121.6	7.77	132.5	9.06	144.0	10.2	148.3	10.44	154.1	10.70	158.4	10.90
		84.4	112.3	6.14	121.6	7.28	132.5	8.47	144.0	9.6	148.3	9.76	154.1	10.02	158.4	10.21
		105.6	112.3	5.96	121.6	7.12	132.5	8.29	144.0	9.4	148.3	9.59	154.1	9.83	158.4	9.94

TC:Total Capacity(MBh)
PI :Power Input(kW)(Comp. + Outdoor fan motor)

ARWB288BA2

Heating Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air temperature (°F DB)											
			61		65		68		70		72		75	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
130	23	31.8	153.2	19.16	152.0	18.02	151.1	16.76	149.2	16.30	151.0	15.84	146.9	14.21
		42.4	158.5	19.49	157.2	18.37	156.3	17.13	154.3	16.66	156.2	16.19	152.0	14.52
		84.4	179.4	20.61	177.9	19.75	176.9	18.59	174.6	18.08	176.7	17.57	172.0	16.75
		105.6	196.2	22.13	194.5	21.13	193.4	20.05	192.9	19.49	195.2	18.95	190.0	16.99
	32	31.8	273.9	26.20	267.4	25.39	261.7	24.57	258.1	23.86	257.0	23.21	245.4	20.81
		42.4	275.5	26.27	269.0	25.46	263.3	24.64	257.6	23.95	258.5	23.28	246.9	20.87
		84.4	282.0	26.53	275.3	25.73	269.5	24.92	263.8	24.23	264.5	23.55	252.7	21.11
		105.6	286.3	26.53	279.5	25.73	273.6	24.92	267.7	24.23	268.6	23.55	256.6	21.11
	41	31.8	394.2	28.17	384.4	27.44	380.4	26.73	370.7	26.00	380.8	25.26	340.9	22.85
		42.4	395.6	28.29	385.1	27.57	380.5	26.87	370.7	26.13	380.8	25.39	340.9	22.77
		84.4	401.2	28.76	391.9	28.09	380.7	27.42	370.7	26.66	380.8	25.91	340.9	23.23
		105.6	403.5	28.98	393.1	28.28	380.7	27.62	370.7	26.85	380.8	25.10	340.9	23.40
	50	31.8	394.9	25.62	388.3	24.76	379.1	24.29	369.2	23.74	359.4	22.91	339.5	20.70
		42.4	397.2	25.57	390.2	24.78	380.6	24.34	370.7	23.73	360.8	22.90	340.9	20.68
		84.4	406.5	25.36	397.6	24.86	388.6	24.53	376.7	23.69	366.2	22.86	346.4	20.60
		105.6	408.6	25.72	400.2	25.20	389.1	24.62	378.7	23.78	368.7	23.22	348.4	21.60
	59	31.8	395.5	23.08	388.4	22.09	377.7	21.86	367.7	21.46	358.0	20.56	338.1	18.73
		42.4	398.8	22.85	391.4	22.00	380.7	21.81	370.7	21.33	360.8	20.41	340.9	18.58
		84.4	411.8	21.94	403.3	21.63	392.6	21.63	382.6	20.72	371.7	19.80	351.8	17.98
		105.6	413.7	22.48	407.3	22.12	397.5	21.63	386.6	20.72	376.7	20.35	355.8	19.80
	68	31.8	410.4	21.17	403.0	20.19	392.6	19.76	381.6	19.11	370.4	18.71	348.5	18.13
		42.4	413.7	21.02	406.3	20.17	395.6	19.74	384.6	19.19	373.7	18.83	351.8	17.98
		84.4	426.7	20.41	419.2	20.11	407.5	19.66	396.6	19.50	385.6	19.32	364.7	17.37
		105.6	428.7	20.41	422.2	20.11	412.5	19.80	400.5	19.50	389.6	19.32	367.7	18.46
	77	31.8	433.3	20.19	422.4	19.59	412.5	19.27	404.5	18.97	395.6	18.66	372.7	17.45
		42.4	433.3	20.11	422.4	19.56	412.5	19.19	404.5	18.89	395.6	18.58	372.7	17.37
		84.4	433.3	19.80	422.4	19.44	412.5	18.89	404.5	18.58	395.6	18.28	372.7	17.06
		105.6	433.3	19.50	422.4	18.95	412.5	18.58	404.5	18.28	395.6	17.98	372.7	16.76
	88	31.8	433.3	19.65	422.4	18.68	412.5	18.51	404.5	18.06	395.6	17.82	372.7	16.60
		42.4	433.3	19.50	422.4	18.65	412.5	18.40	404.5	17.96	395.6	17.67	372.7	16.45
		84.4	433.3	18.89	422.4	18.52	412.5	17.98	404.5	17.67	395.6	17.06	372.7	15.84
		105.6	433.3	18.58	422.4	18.04	412.5	17.67	404.5	17.37	395.6	17.06	372.7	15.84
	95	31.8	433.3	18.73	422.4	18.15	412.5	17.75	404.5	17.14	395.6	16.53	372.7	15.38
		42.4	433.3	18.58	422.4	18.04	412.5	17.67	404.5	17.06	395.6	16.45	372.7	15.23
		84.4	433.3	17.98	422.4	17.61	412.5	17.37	404.5	16.76	395.6	16.15	372.7	14.62
		105.6	433.3	17.98	422.4	17.43	412.5	17.06	404.5	16.45	395.6	15.84	372.7	14.62
	104	31.8	433.3	18.13	422.4	17.54	412.5	17.21	404.5	16.60	395.6	15.99	372.7	14.47
		42.4	433.3	17.98	422.4	17.43	412.5	17.06	404.5	16.45	395.6	15.84	372.7	14.32
		84.4	433.3	17.37	422.4	17.00	412.5	16.45	404.5	15.84	395.6	15.23	372.7	13.71
		105.6	433.3	17.06	422.4	16.70	412.5	16.45	404.5	15.84	395.6	15.23	372.7	13.71
	113	31.8	433.3	17.52	422.4	16.93	412.5	16.68	404.5	16.07	395.6	15.46	372.7	13.56
		42.4	433.3	17.37	422.4	16.82	412.5	16.45	404.5	15.84	395.6	15.23	372.7	13.41
		84.4	433.3	16.76	422.4	16.39	412.5	15.54	404.5	14.93	395.6	14.32	372.7	12.80
		105.6	433.3	16.15	422.4	15.96	412.5	15.84	404.5	15.23	395.6	14.62	372.7	12.80
120	23	31.8	145.7	19.16	144.4	18.02	143.7	16.76	141.9	16.07	143.1	15.81	139.2	13.97
		42.4	150.7	19.49	149.4	18.37	148.6	17.13	146.8	16.42	148.0	15.95	144.0	14.26
		84.4	170.6	20.61	169.1	19.75	168.1	18.59	166.2	17.82	167.5	17.30	163.0	15.49
		105.6	186.4	22.13	184.9	21.13	183.7	20.05	183.5	19.22	185.0	18.66	180.1	16.71
	32	31.8	260.6	26.20	254.2	25.39	248.8	24.57	243.8	23.54	243.4	22.66	232.6	20.47
		42.4	262.0	26.27	255.7	25.46	250.3	24.64	245.2	23.81	244.9	22.93	234.0	20.53
		84.4	268.1	26.53	261.7	25.73	256.1	24.92	250.9	23.86	250.7	23.20	239.5	20.77
		105.6	272.2	26.53	265.7	25.73	260.0	24.92	254.7	23.86	254.5	23.20	243.1	20.77
	41	31.8	375.6	28.17	369.6	27.44	361.5	26.73	352.8	25.82	341.9	24.88	323.0	22.27
		42.4	376.9	28.29	370.3	27.57	361.6	26.87	352.8	25.75	341.9	25.01	323.0	22.39
		84.4	382.2	28.76	373.0	28.09	361.8	27.42	352.8	26.28	341.9	25.52	323.0	22.85
		105.6	384.4	28.96	376.9	28.28	361.8	27.62	352.8	26.47	341.9	25.71	323.0	23.02
	50	31.8	376.6	25.31	369.9	24.60	360.7	24.07	351.8	23.36	341.0	22.57	322.1	20.32
		42.4	378.4	25.39	371.4	24.69	361.7	24.16	352.8	23.39	341.9	22.56	323.0	20.34
		84.4	385.5	25.72	377.2	25.04	365.7	24.53	356.8	23.50	345.4	22.51	326.5	20.41
		105.6	387.6	25.63	376.0	25.05	367.2	24.62	358.3	23.59	346.9	22.60	328.0	21.10
	59	31.8	377.8	22.43	370.3	21.76	359.8	21.40	350.8	21.10	340.2	20.26	321.2	18.36
		42.4	380.0	22.48	372.5	21.81	361.8	21.45	352.8	21.02	341.9	20.11	323.0	18.28
		84.4	388.9	22.67	381.4	22.00	369.7	21.63	360.8	20.72	348.8	19.50	330.0	17.98
		105.6	390.9	22.30	381.2	21.81	372.7	21.63	363.8	20.72	351.8	19.50	332.9	19.19
	68	31.8	386.4	20.17	381.1	19.30	369.7	18.81	359.6	18.50	347.5	18.30	329.0	17.37
		42.4	390.9	20.17	383.4	19.38	371.7	18.89	361.8	18.58	349.8	18.28	331.0	17.31
		84.4	400.8	20.17	392.4	19.68	379.7	19.19	370.7	18.89	358.8	18.22	338.9	17.06
		105.6	402.8	19.99	392.1	19.50	382.6	19.19	372.7	18.89	360.8	18.28	340.9	17.67

TC : Total Capacity (MBh), PI : Power Input (kW)

* [redacted] is used an anti freeze

Heating Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°C)	Water Flow Rate (gpm)	Indoor Air temperature (°F DB)											
			61		65		68		70		72		75	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
120	77	31.8	407.2	19.09	395.6	18.19	382.6	17.82	374.7	17.45	364.7	17.14	344.9	15.92
		42.4	407.5	19.01	395.6	18.16	382.6	17.79	374.7	17.37	364.7	17.06	344.9	15.84
		84.4	408.5	18.71	395.6	18.04	382.6	17.67	374.7	17.06	364.7	16.76	344.9	15.54
		105.6	409.5	18.04	395.6	17.55	382.6	17.37	374.7	17.06	364.7	16.45	344.9	15.54
	86	31.8	409.5	18.25	395.6	17.35	382.6	16.84	374.7	16.23	364.7	15.99	344.9	14.70
		42.4	409.5	18.10	395.6	17.24	382.6	16.76	374.7	16.15	364.7	15.84	344.9	14.62
		84.4	409.5	17.49	395.6	16.82	382.6	16.45	374.7	15.84	364.7	15.23	344.9	14.32
		105.6	409.5	16.94	395.6	16.45	382.6	16.15	374.7	15.84	364.7	15.23	344.9	14.01
	95	31.8	409.5	17.43	395.6	16.48	382.6	15.99	374.7	15.38	364.7	14.77	344.9	13.49
		42.4	409.5	17.18	395.6	16.33	382.6	15.84	374.7	15.23	364.7	14.62	344.9	13.41
		84.4	409.5	16.21	395.6	15.72	382.6	15.23	374.7	14.62	364.7	14.01	344.9	13.10
		105.6	409.5	16.03	395.6	15.60	382.6	15.23	374.7	14.62	364.7	14.01	344.9	12.80
	104	31.8	409.5	16.89	395.6	15.72	382.6	15.08	374.7	14.47	364.7	13.86	344.9	12.57
		42.4	409.5	16.57	395.6	15.54	382.6	14.93	374.7	14.32	364.7	13.71	344.9	12.49
		84.4	409.5	15.29	395.6	14.61	382.6	14.32	374.7	13.71	364.7	13.10	344.9	12.19
		105.6	409.5	15.11	395.6	14.62	382.6	14.32	374.7	13.71	364.7	13.10	344.9	11.88
	113	31.8	409.5	16.36	395.6	14.97	382.6	14.16	374.7	13.56	364.7	12.95	344.9	11.66
		42.4	409.5	15.96	395.6	14.75	382.6	14.01	374.7	13.41	364.7	12.80	344.9	11.58
		84.4	409.5	14.38	395.6	13.89	382.6	13.41	374.7	12.80	364.7	12.19	344.9	11.27
		105.6	409.5	14.20	395.6	13.65	382.6	13.41	374.7	12.80	364.7	12.19	344.9	10.97
110	23	31.8	137.8	19.39	136.5	18.02	136.1	16.76	134.8	16.07	134.8	15.61	132.0	13.97
		42.4	142.5	19.73	141.6	18.37	140.6	17.13	139.4	16.42	139.4	15.95	136.5	14.28
		84.4	161.2	21.06	160.3	19.75	159.4	18.59	157.7	17.82	157.8	17.30	154.5	15.49
		105.6	176.1	22.40	177.1	21.13	176.1	20.05	174.2	19.22	174.3	18.66	170.8	16.71
	32	31.8	248.1	28.54	241.0	25.36	235.8	24.57	231.3	23.54	229.3	22.86	220.4	20.47
		42.4	247.6	28.61	242.4	25.48	237.2	24.84	232.7	23.61	230.7	22.93	221.7	20.53
		84.4	253.4	28.87	248.1	25.73	242.8	24.92	238.2	23.88	236.1	23.20	226.9	20.77
		105.6	257.3	28.87	251.9	25.73	246.5	24.92	241.8	23.88	239.7	23.20	230.4	20.77
	41	31.8	359.1	28.52	350.8	27.44	342.6	26.73	334.9	25.82	322.0	24.88	306.1	22.27
		42.4	360.4	28.85	351.5	27.57	342.7	26.87	334.9	25.75	322.0	25.01	306.1	22.39
		84.4	366.4	29.16	354.1	28.09	342.9	27.42	334.9	26.28	322.0	25.52	306.1	22.85
		105.6	367.5	29.34	355.2	28.28	342.9	27.62	334.9	26.47	322.0	25.71	306.1	23.02
	50	31.8	360.5	25.56	351.7	24.71	342.3	24.18	334.4	23.36	321.5	22.57	305.7	20.32
		42.4	361.9	25.63	352.6	24.78	342.8	24.25	334.9	23.39	322.0	22.56	306.1	20.34
		84.4	367.3	25.82	358.3	25.04	344.9	24.53	336.9	23.50	324.0	22.51	307.6	20.41
		105.6	369.4	25.82	357.9	25.05	345.9	24.47	337.4	23.44	324.5	22.60	308.6	20.65
	59	31.8	361.8	22.64	352.3	22.00	341.9	21.63	333.9	21.10	321.0	20.26	305.3	18.36
		42.4	363.3	22.61	353.8	22.00	342.9	21.63	334.9	21.02	322.0	20.11	306.1	18.28
		84.4	369.3	22.48	358.6	22.00	346.9	21.63	338.9	20.72	326.0	19.50	309.1	17.98
		105.6	371.3	22.30	360.6	21.81	348.8	21.33	339.9	20.41	327.0	19.50	311.1	18.28
	68	31.8	356.3	19.51	358.4	19.07	346.9	18.58	337.6	18.28	325.0	17.75	307.8	16.60
		42.4	370.3	19.56	359.6	19.07	347.9	18.58	338.9	18.28	326.0	17.67	309.1	16.57
		84.4	378.2	19.74	364.5	19.07	351.8	18.58	343.9	18.28	330.0	17.37	314.1	16.45
		105.6	380.2	19.74	367.5	19.07	353.8	18.58	344.9	17.98	332.0	17.37	315.1	16.45
	77	31.8	380.0	17.76	368.7	17.14	353.8	16.84	345.9	16.23	333.9	15.62	316.0	14.32
		42.4	380.7	17.73	368.7	17.06	353.8	16.76	345.9	16.15	333.9	15.54	316.0	14.32
		84.4	383.6	17.61	368.7	16.76	353.8	16.45	345.9	15.84	333.9	15.23	316.0	14.32
		105.6	385.6	17.61	368.7	16.82	353.8	16.15	345.9	15.84	333.9	14.93	316.0	14.01
	86	31.8	385.6	16.23	368.7	15.62	353.8	15.01	345.9	14.70	333.9	13.79	316.0	12.88
		42.4	385.6	16.15	368.7	15.54	353.8	14.93	345.9	14.62	333.9	13.71	316.0	12.80
		84.4	385.6	15.84	368.7	15.23	353.8	14.62	345.9	14.32	333.9	13.41	316.0	12.49
		105.6	385.6	15.72	368.7	14.93	353.8	14.32	345.9	14.01	333.9	13.41	316.0	12.49
	95	31.8	385.6	15.38	368.7	14.40	353.8	13.79	345.9	13.18	333.9	12.57	316.0	11.66
		42.4	385.6	15.23	368.7	14.32	353.8	13.71	345.9	13.10	333.9	12.49	316.0	11.58
		84.4	385.6	14.62	368.7	14.01	353.8	13.41	345.9	12.80	333.9	12.19	316.0	11.27
		105.6	385.6	14.26	368.7	13.71	353.8	13.10	345.9	12.80	333.9	12.19	316.0	11.27
	104	31.8	385.6	14.47	368.7	13.86	353.8	12.95	345.9	12.27	333.9	11.66	316.0	10.74
		42.4	385.6	14.32	368.7	13.71	353.8	12.80	345.9	12.19	333.9	11.56	316.0	10.66
		84.4	385.6	13.71	368.7	13.10	353.8	12.19	345.9	11.88	333.9	11.27	316.0	10.36
		105.6	385.6	13.53	368.7	12.80	353.8	12.19	345.9	11.58	333.9	10.97	316.0	10.05
	113	31.8	385.6	13.56	368.7	13.33	353.8	12.11	345.9	11.35	333.9	10.74	316.0	9.83
		42.4	385.6	13.41	368.7	13.10	353.8	11.88	345.9	11.27	333.9	10.66	316.0	9.75
		84.4	385.6	12.80	368.7	12.19	353.8	10.97	345.9	10.97	333.9	10.36	316.0	9.44
		105.6	385.6	12.80	368.7	11.88	353.8	11.27	345.9	10.36	333.9	9.75	316.0	8.84
100	23	31.8	130.2	19.39	129.5	18.26	128.7	16.76	127.5	16.07	126.5	15.36	124.2	13.97
		42.4	134.7	19.73	133.9	18.61	133.1	17.13	131.9	16.42	130.8	15.70	128.5	14.28
		84.4	152.4	21.06	151.5	20.01	150.6	18.59	149.3	17.82	148.0	17.04	145.4	15.49
		105.6	168.3	22.40	167.3	21.41	166.4	20.05	164.9	19.22	163.5	18.38	160.7	16.71

TC : Total Capacity (MBh), PI : Power Input (kW)

* [redacted] is used an anti freeze

Heating Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air temperature (°F DB)											
			61		65		68		70		72		75	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
100	32	31.8	232.6	26.54	227.7	25.73	222.8	24.57	219.0	23.54	215.2	22.51	207.6	20.47
		42.4	234.0	26.61	229.1	25.80	224.1	24.64	220.3	23.61	216.5	22.58	208.8	20.53
		84.4	239.5	26.87	234.5	26.06	229.4	24.92	225.5	23.88	221.5	22.84	213.7	20.77
		105.6	243.2	26.87	238.0	26.06	232.9	24.92	228.9	23.88	224.9	22.84	216.9	20.77
	41	31.8	343.7	28.52	332.2	27.92	323.7	26.73	317.0	25.62	302.1	24.50	288.2	22.27
		42.4	344.9	28.65	332.8	27.85	323.8	26.87	317.0	25.75	302.1	24.63	288.2	22.36
		84.4	349.7	29.16	335.2	28.47	324.0	27.42	317.0	26.28	302.1	25.14	288.2	22.85
		105.6	351.7	29.34	336.8	28.66	324.0	27.62	317.0	26.47	302.1	25.32	288.2	23.02
	50	31.8	345.4	25.51	333.2	24.95	323.9	24.18	317.0	23.36	302.1	22.19	288.2	20.32
		42.4	346.3	25.83	333.7	25.03	323.9	24.25	317.0	23.39	302.1	22.22	288.2	20.34
		84.4	349.7	26.09	335.5	25.33	324.0	24.53	317.0	23.50	302.1	22.32	288.2	20.41
		105.6	352.1	26.00	337.0	25.33	324.0	24.47	317.0	23.44	302.1	22.26	288.2	20.34
	59	31.8	347.2	22.50	334.4	22.10	324.0	21.63	317.0	21.10	302.1	19.88	288.2	18.36
		42.4	347.7	22.61	334.7	22.12	324.0	21.63	317.0	21.02	302.1	19.80	288.2	18.28
		84.4	349.7	23.03	335.7	22.18	324.0	21.63	317.0	20.72	302.1	19.50	288.2	17.98
		105.6	352.6	22.67	337.7	22.00	324.0	21.33	317.0	20.41	302.1	19.19	288.2	17.67
	68	31.8	349.5	19.23	336.4	18.75	324.0	18.28	317.0	18.06	302.1	16.84	288.2	15.99
		42.4	350.7	19.32	336.7	18.77	324.0	18.28	317.0	17.98	302.1	16.76	288.2	15.84
		84.4	355.6	19.68	337.7	18.83	324.0	18.28	317.0	17.67	302.1	16.45	288.2	15.23
		105.6	357.6	19.32	340.7	18.65	324.0	17.98	317.0	17.37	302.1	16.15	288.2	14.93
	77	31.8	353.5	16.80	341.9	16.30	324.0	15.62	317.0	15.01	302.1	14.09	288.2	12.80
		42.4	354.8	16.82	341.9	16.21	324.0	15.54	317.0	14.93	302.1	14.01	288.2	12.80
		84.4	359.8	16.88	341.9	15.84	324.0	15.23	317.0	14.62	302.1	13.71	288.2	12.80
		105.6	361.8	16.51	341.9	15.72	324.0	14.93	317.0	14.32	302.1	13.71	288.2	12.49
	86	31.8	361.8	15.31	341.9	14.09	324.0	13.13	317.0	12.88	302.1	11.88	288.2	11.35
		42.4	361.8	15.23	341.9	14.01	324.0	13.10	317.0	12.80	302.1	11.88	288.2	11.27
		84.4	361.8	14.93	341.9	13.71	324.0	12.98	317.0	12.49	302.1	11.88	288.2	10.97
		105.6	361.8	14.62	341.9	13.71	324.0	12.80	317.0	12.49	302.1	11.58	288.2	10.97
	95	31.8	361.8	14.16	341.9	12.95	324.0	11.81	317.0	11.35	302.1	10.74	288.2	9.83
		42.4	361.8	14.01	341.9	12.80	324.0	11.58	317.0	11.27	302.1	10.66	288.2	9.75
		84.4	361.8	13.41	341.9	12.19	324.0	11.46	317.0	10.97	302.1	10.36	288.2	9.44
		105.6	361.8	13.41	341.9	12.19	324.0	11.27	317.0	10.97	302.1	10.36	288.2	9.44
	104	31.8	361.8	13.25	341.9	12.03	324.0	10.39	317.0	10.13	302.1	9.52	288.2	8.82
		42.4	361.8	13.10	341.9	11.88	324.0	10.36	317.0	10.05	302.1	9.44	288.2	8.84
		84.4	361.8	12.49	341.9	11.27	324.0	10.24	317.0	9.75	302.1	9.14	288.2	8.53
		105.6	361.8	12.19	341.9	11.27	324.0	10.05	317.0	9.75	302.1	9.14	288.2	8.53
	113	31.8	361.8	12.34	341.9	11.12	324.0	9.17	317.0	8.92	302.1	8.31	288.2	8.00
		42.4	361.8	12.19	341.9	10.97	324.0	9.14	317.0	8.84	302.1	8.23	288.2	7.92
		84.4	361.8	11.58	341.9	10.36	324.0	9.02	317.0	8.53	302.1	7.92	288.2	7.62
		105.6	361.8	10.97	341.9	10.36	324.0	8.84	317.0	8.53	302.1	7.92	288.2	7.62
90	23	31.8	123.0	18.01	119.1	16.40	115.6	14.40	114.8	13.74	114.0	13.24	111.9	11.88
		42.4	127.2	18.52	123.2	16.71	119.6	14.72	118.7	14.04	117.9	13.53	115.7	12.14
		84.4	144.0	19.54	139.4	17.94	135.3	15.97	134.3	15.23	133.4	14.68	130.9	13.17
		105.6	159.1	20.76	154.0	19.18	149.5	17.23	148.4	16.43	147.4	15.84	144.6	14.20
	32	31.8	219.9	24.52	209.7	23.01	200.2	21.11	197.0	20.13	193.9	19.40	186.8	17.40
		42.4	221.2	24.58	210.9	23.07	201.4	21.17	198.2	20.19	195.1	19.46	187.9	17.45
		84.4	226.3	24.82	215.8	23.31	206.2	21.41	202.8	20.42	199.7	19.68	192.3	17.65
		105.6	229.8	24.82	219.1	23.31	209.3	21.41	205.9	20.42	202.7	19.68	195.3	17.65
	41	31.8	310.7	26.33	300.9	24.84	291.1	22.97	285.2	21.91	272.3	21.11	259.4	18.93
		42.4	311.0	26.45	300.6	24.96	291.1	23.09	285.2	22.02	272.3	21.22	259.4	19.03
		84.4	312.2	26.91	299.6	25.42	291.2	23.56	285.2	22.47	272.3	21.65	259.4	19.42
		105.6	314.1	27.07	300.5	25.59	291.2	23.73	285.2	22.63	272.3	21.81	259.4	19.56
	50	31.8	312.4	23.23	301.9	22.12	291.1	20.82	285.2	19.96	272.3	19.16	259.4	17.28
		42.4	312.3	23.25	301.5	22.14	291.1	20.84	285.2	20.00	272.3	19.14	259.4	17.29
		84.4	311.8	23.32	299.9	22.22	291.2	20.92	285.2	20.07	272.3	19.05	259.4	17.33
		105.6	313.7	23.25	300.8	22.15	291.2	20.85	285.2	20.00	272.3	19.13	259.4	17.40
	59	31.8	314.2	20.13	303.0	19.40	291.2	18.66	285.2	18.06	272.3	17.21	259.4	15.62
		42.4	313.6	20.05	302.4	19.32	291.2	18.58	285.2	17.98	272.3	17.06	259.4	15.54
		84.4	311.3	19.74	300.1	19.01	291.2	18.28	285.2	17.67	272.3	16.45	259.4	15.23
		105.6	313.3	19.44	301.1	18.71	291.2	17.98	285.2	17.37	272.3	16.45	259.4	15.23
	68	31.8	315.9	17.00	304.0	16.50	291.2	15.92	285.2	15.31	272.3	14.77	259.4	13.86
		42.4	315.6	17.00	303.4	16.45	291.2	15.84	285.2	15.23	272.3	14.62	259.4	13.71
		84.4	314.3	17.00	301.1	16.27	291.2	15.54	285.2	14.93	272.3	14.01	259.4	13.10
		105.6	315.3	16.70	302.1	16.15	291.2	15.54	285.2	14.93	272.3	14.01	259.4	13.10
	77	31.8	321.2	14.84	308.1	14.04	291.2	13.49	285.2	12.80	272.3	12.27	259.4	11.35
		42.4	322.0	14.81	308.1	14.01	291.2	13.41	285.2	12.80	272.3	12.19	259.4	11.27
		84.4	325.0	14.68	308.1	13.89	291.2	13.10	285.2	12.80	272.3	11.88	259.4	10.97
		105.6	326.0	14.32	308.1	13.59	291.2	13.10	285.2	12.49	272.3	11.88	259.4	10.97

TC : Total Capacity (MBh), PI : Power Input (kW)

* [redacted] is used an anti freeze

Heating Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air temperature (°F DB)											
			61		65		68		70		72		75	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
90	86	31.8	326.0	13.49	308.1	12.57	291.2	11.66	285.2	11.35	272.3	10.74	259.4	9.75
		42.4	326.0	13.41	308.1	12.49	291.2	11.58	285.2	11.27	272.3	10.66	259.4	9.75
		84.4	326.0	13.10	308.1	12.19	291.2	11.27	285.2	10.97	272.3	10.36	259.4	9.75
		105.6	326.0	12.80	308.1	11.88	291.2	11.27	285.2	10.97	272.3	10.36	259.4	9.44
	95	31.8	326.0	12.27	308.1	11.35	291.2	10.44	285.2	10.13	272.3	9.52	259.4	8.92
		42.4	326.0	12.19	308.1	11.27	291.2	10.36	285.2	10.05	272.3	9.44	259.4	8.84
		84.4	326.0	11.88	308.1	10.97	291.2	10.05	285.2	9.75	272.3	9.14	259.4	8.53
		105.6	326.0	11.58	308.1	10.66	291.2	9.75	285.2	9.44	272.3	9.14	259.4	8.53
	104	31.8	326.0	11.42	308.1	10.44	291.2	9.22	285.2	8.92	272.3	8.61	259.4	8.00
		42.4	326.0	11.27	308.1	10.36	291.2	9.14	285.2	8.84	272.3	8.53	259.4	7.92
		84.4	326.0	10.66	308.1	10.05	291.2	8.84	285.2	8.53	272.3	8.23	259.4	7.62
		105.6	326.0	10.66	308.1	10.05	291.2	8.84	285.2	8.53	272.3	8.23	259.4	7.62
	113	31.8	326.0	10.59	308.1	9.52	291.2	8.00	285.2	7.70	272.3	7.70	259.4	7.09
		42.4	326.0	10.36	308.1	9.44	291.2	7.92	285.2	7.62	272.3	7.62	259.4	7.01
		84.4	326.0	9.44	308.1	9.14	291.2	7.62	285.2	7.31	272.3	7.31	259.4	6.70
		105.6	326.0	9.75	308.1	9.44	291.2	7.92	285.2	7.62	272.3	7.31	259.4	6.70
80	23	31.8	116.2	12.85	106.9	12.34	102.9	11.81	102.0	11.41	101.5	10.87	99.4	10.01
		42.4	120.2	13.13	112.6	12.61	106.5	12.07	105.5	11.68	105.0	11.11	102.8	10.23
		84.4	136.1	14.24	127.4	13.69	120.6	13.09	119.3	12.66	118.8	12.06	116.4	11.10
		105.6	150.3	15.36	140.7	14.76	133.2	14.12	131.8	13.68	131.2	13.01	128.5	11.97
	32	31.8	207.8	18.83	191.8	18.09	178.8	17.30	176.1	16.72	172.7	15.83	166.0	14.67
		42.4	209.0	18.88	192.7	18.14	179.4	17.35	176.1	16.77	173.7	15.96	167.0	14.71
		84.4	213.9	19.09	197.2	18.35	183.6	17.55	180.2	16.96	177.8	16.17	170.9	14.88
		105.6	217.2	19.09	200.2	18.35	186.5	17.55	183.0	16.96	180.5	16.17	173.8	14.88
	41	31.8	287.2	20.48	271.2	19.66	256.3	18.82	253.4	18.20	242.5	17.34	230.6	15.97
		42.4	287.8	20.59	271.7	19.78	256.3	18.92	253.4	18.29	242.5	17.43	230.6	16.05
		84.4	290.2	21.01	273.7	20.18	256.4	19.31	253.4	18.66	242.5	17.79	230.6	16.38
		105.6	290.2	21.16	273.5	20.33	256.4	19.45	253.4	18.80	242.5	17.92	230.6	16.49
	50	31.8	288.7	18.84	272.2	17.99	259.3	17.07	253.4	16.60	242.5	15.71	230.6	14.56
		42.4	289.0	18.82	272.5	17.96	259.3	17.08	253.4	16.61	242.5	15.72	230.6	14.57
		84.4	290.2	18.73	273.5	17.86	259.4	17.12	253.4	16.64	242.5	15.75	230.6	14.59
		105.6	290.2	18.65	273.3	17.93	259.4	17.19	253.4	16.56	242.5	15.66	230.6	14.49
	59	31.8	290.2	17.21	273.3	16.30	259.4	15.31	253.4	15.01	242.5	14.09	230.6	13.18
		42.4	290.2	17.06	273.3	16.15	259.4	15.23	253.4	14.93	242.5	14.01	230.6	13.10
		84.4	290.2	16.45	273.3	15.54	259.4	14.93	253.4	14.62	242.5	13.71	230.6	12.80
		105.6	290.2	16.15	273.3	15.54	259.4	14.93	253.4	14.32	242.5	13.41	230.6	12.49
	68	31.8	290.2	14.40	273.3	13.79	259.4	13.10	253.4	12.88	242.5	12.27	230.6	11.35
		42.4	290.2	14.32	273.3	13.71	259.4	13.10	253.4	12.80	242.5	12.19	230.6	11.27
		84.4	290.2	14.01	273.3	13.41	259.4	13.10	253.4	12.49	242.5	11.88	230.6	10.97
		105.6	290.2	13.71	273.3	13.10	259.4	12.80	253.4	12.49	242.5	11.58	230.6	10.97
	77	31.8	290.2	12.88	273.3	11.96	259.4	11.27	253.4	11.05	242.5	10.44	230.6	9.83
		42.4	290.2	12.80	273.3	11.88	259.4	11.27	253.4	10.97	242.5	10.36	230.6	9.75
		84.4	290.2	12.49	273.3	11.58	259.4	11.27	253.4	10.66	242.5	10.05	230.6	9.44
		105.6	290.2	12.19	273.3	11.58	259.4	10.97	253.4	10.66	242.5	10.05	230.6	9.44
	86	31.8	290.2	11.35	273.3	10.74	259.4	10.13	253.4	9.83	242.5	9.22	230.6	8.61
		42.4	290.2	11.27	273.3	10.66	259.4	10.05	253.4	9.75	242.5	9.14	230.6	8.53
		84.4	290.2	10.97	273.3	10.36	259.4	9.75	253.4	9.44	242.5	8.84	230.6	8.23
		105.6	290.2	10.97	273.3	10.36	259.4	9.75	253.4	9.44	242.5	8.84	230.6	8.23
	95	31.8	290.2	10.44	273.3	9.83	259.4	8.92	253.4	8.53	242.5	8.31	230.6	7.62
		42.4	290.2	10.36	273.3	9.75	259.4	8.84	253.4	8.53	242.5	8.23	230.6	7.62
		84.4	290.2	10.05	273.3	9.44	259.4	8.53	253.4	8.53	242.5	7.92	230.6	7.62
		105.6	290.2	10.05	273.3	9.14	259.4	8.53	253.4	8.23	242.5	7.92	230.6	7.31
	104	31.8	290.2	9.90	273.3	8.92	259.4	7.92	253.4	8.00	242.5	7.31	230.6	7.09
		42.4	290.2	9.75	273.3	8.84	259.4	7.92	253.4	7.92	242.5	7.31	230.6	7.01
		84.4	290.2	9.14	273.3	8.53	259.4	7.92	253.4	7.62	242.5	7.31	230.6	6.70
		105.6	290.2	9.14	273.3	8.53	259.4	7.62	253.4	7.62	242.5	7.31	230.6	6.70
	113	31.8	290.2	9.37	273.3	8.00	259.4	6.93	253.4	7.46	242.5	6.32	230.6	6.55
		42.4	290.2	9.14	273.3	7.92	259.4	7.01	253.4	7.31	242.5	6.40	230.6	6.40
		84.4	290.2	8.23	273.3	7.62	259.4	7.31	253.4	6.70	242.5	6.70	230.6	5.79
		105.6	290.2	8.23	273.3	7.92	259.4	6.70	253.4	7.01	242.5	6.70	230.6	6.09
70	23	31.8	101.5	11.01	95.4	10.48	90.0	10.16	89.1	9.55	88.5	9.22	87.0	8.39
		42.4	105.0	11.25	98.7	10.71	93.1	10.38	92.2	9.76	91.6	9.42	90.0	8.57
		84.4	118.8	12.21	111.6	11.62	105.3	11.26	104.4	10.59	103.7	10.23	101.8	9.30
		105.6	131.3	13.17	123.3	12.63	116.3	12.14	115.3	11.42	114.6	11.03	112.5	10.03
	32	31.8	181.4	16.13	167.8	15.35	156.9	14.88	153.1	13.99	150.5	13.51	145.3	12.28
		42.4	182.5	16.18	168.8	15.40	156.8	14.92	154.0	14.03	151.7	13.55	146.2	12.32
		84.4	186.8	16.37	172.8	15.58	160.4	15.09	157.6	14.19	155.2	13.71	149.6	12.48
		105.6	189.6	16.37	175.4	15.58	162.9	15.09	160.0	14.19	157.6	13.71	151.9	12.48

TC : Total Capacity (MBh), PI : Power Input (kW)

* [redacted] is used an anti freeze

Heating Capacity(208/230V)

Combination (%)	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air temperature (°F DB)											
			61		65		68		70		72		75	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
70	41	31.8	250.8	17.56	237.6	16.70	226.5	16.18	221.6	15.22	211.7	14.70	201.8	13.37
		42.4	251.3	17.65	238.1	16.79	226.5	16.27	221.6	15.30	211.7	14.78	201.8	13.44
		84.4	253.4	18.01	239.9	17.14	226.6	16.61	221.6	15.61	211.7	15.08	201.8	13.71
		105.6	253.4	18.14	239.5	17.26	226.6	16.73	221.6	15.75	211.7	15.19	201.8	13.81
	50	31.8	252.1	16.17	238.6	15.28	226.5	14.73	221.6	13.90	211.7	13.33	201.8	12.20
		42.4	252.4	16.14	238.8	15.25	226.5	14.69	221.6	13.90	211.7	13.33	201.8	12.20
		84.4	253.4	16.01	239.7	15.12	226.6	14.55	221.6	13.90	211.7	13.33	201.8	12.19
		105.6	253.4	16.08	239.5	15.18	226.6	14.61	221.6	13.96	211.7	13.23	201.8	12.24
	59	31.8	253.4	14.77	239.5	13.86	226.6	13.25	221.6	12.57	211.7	11.96	201.8	11.05
		42.4	253.4	14.62	239.5	13.71	226.6	13.10	221.6	12.49	211.7	11.88	201.8	10.97
		84.4	253.4	14.01	239.5	13.10	226.6	12.49	221.6	12.19	211.7	11.58	201.8	10.66
		105.6	253.4	14.01	239.5	13.10	226.6	12.49	221.6	12.19	211.7	11.27	201.8	10.66
	68	31.8	253.4	12.27	239.5	11.66	226.6	11.35	221.6	11.05	211.7	10.44	201.8	9.83
		42.4	253.4	12.19	239.5	11.58	226.6	11.27	221.6	10.97	211.7	10.36	201.8	9.75
		84.4	253.4	11.86	239.5	11.27	226.6	10.97	221.6	10.66	211.7	10.05	201.8	9.44
		105.6	253.4	11.86	239.5	11.27	226.6	10.97	221.6	10.36	211.7	10.05	201.8	9.14
	77	31.8	253.4	11.05	239.5	10.44	226.6	9.83	221.6	9.52	211.7	8.84	201.8	8.23
		42.4	253.4	10.97	239.5	10.36	226.6	9.75	221.6	9.44	211.7	8.84	201.8	8.23
		84.4	253.4	10.66	239.5	10.05	226.6	9.44	221.6	9.14	211.7	8.84	201.8	8.23
		105.6	253.4	10.36	239.5	9.75	226.6	9.44	221.6	9.14	211.7	8.53	201.8	8.23
	86	31.8	253.4	9.83	239.5	9.22	226.6	8.61	221.6	8.23	211.7	8.00	201.8	7.31
		42.4	253.4	9.75	239.5	9.14	226.6	8.53	221.6	8.23	211.7	7.92	201.8	7.31
		84.4	253.4	9.44	239.5	8.84	226.6	8.23	221.6	8.23	211.7	7.62	201.8	7.31
		105.6	253.4	9.44	239.5	8.84	226.6	8.23	221.6	7.92	211.7	7.62	201.8	7.31
	95	31.8	253.4	8.92	239.5	8.31	226.6	7.62	221.6	7.70	211.7	7.01	201.8	6.78
		42.4	253.4	8.84	239.5	8.23	226.6	7.62	221.6	7.62	211.7	7.01	201.8	6.70
		84.4	253.4	8.53	239.5	7.92	226.6	7.62	221.6	7.31	211.7	7.01	201.8	6.40
		105.6	253.4	8.53	239.5	7.92	226.6	7.31	221.6	7.31	211.7	7.01	201.8	6.40
	104	31.8	253.4	8.31	239.5	7.70	226.6	7.09	221.6	6.70	211.7	6.40	201.8	6.17
		42.4	253.4	8.23	239.5	7.62	226.6	7.01	221.6	6.70	211.7	6.40	201.8	6.09
		84.4	253.4	7.92	239.5	7.31	226.6	6.70	221.6	6.70	211.7	6.40	201.8	5.79
		105.6	253.4	7.92	239.5	7.31	226.6	6.70	221.6	6.40	211.7	6.09	201.8	5.79
	113	31.8	253.4	7.70	239.5	7.09	226.6	6.55	221.6	5.71	211.7	5.79	201.8	5.56
		42.4	253.4	7.62	239.5	7.01	226.6	6.40	221.6	5.79	211.7	5.79	201.8	5.48
		84.4	253.4	7.31	239.5	6.70	226.6	5.79	221.6	6.09	211.7	5.79	201.8	5.18
		105.6	253.4	7.31	239.5	6.70	226.6	6.09	221.6	5.48	211.7	5.18	201.8	5.18
60	23	31.8	87.2	8.94	81.5	8.61	77.3	8.27	76.4	7.68	76.1	7.56	74.5	6.75
		42.4	90.2	9.14	84.3	8.80	80.0	8.45	79.0	7.85	78.7	7.73	77.1	6.90
		84.4	102.1	9.92	95.4	9.55	90.5	9.16	89.4	8.52	89.1	8.39	87.3	7.49
		105.6	112.7	10.70	105.4	10.30	100.0	9.88	98.8	9.19	98.4	9.05	96.4	8.08
	32	31.8	155.8	13.11	143.4	12.62	134.0	12.11	131.1	11.26	129.5	11.09	124.6	9.89
		42.4	156.7	13.15	144.3	12.66	134.8	12.15	131.9	11.29	130.3	11.12	125.3	9.92
		84.4	160.4	13.30	147.7	12.81	137.9	12.29	135.0	11.42	133.4	11.25	128.2	10.04
		105.6	162.9	13.30	150.0	12.81	140.0	12.29	137.1	11.42	135.4	11.25	130.2	10.04
	41	31.8	215.3	14.27	203.1	13.74	194.7	13.18	189.8	12.26	181.9	12.07	172.9	10.76
		42.4	215.8	14.34	203.5	13.81	194.7	13.25	189.8	12.32	181.9	12.13	172.9	10.82
		84.4	217.7	14.63	205.0	14.09	194.8	13.52	189.8	12.57	181.9	12.37	172.9	11.04
		105.6	217.7	14.74	204.7	14.19	194.8	13.61	189.8	12.66	181.9	12.46	172.9	11.12
	50	31.8	216.4	13.11	203.9	12.54	194.7	11.95	189.8	11.18	181.9	10.95	172.9	9.80
		42.4	216.7	13.11	204.1	12.54	194.7	11.95	189.8	11.19	181.9	10.94	172.9	9.83
		84.4	217.7	13.10	204.9	12.53	194.8	11.94	189.8	11.31	181.9	10.91	172.9	9.94
		105.6	217.7	13.16	204.7	12.43	194.8	11.83	189.8	11.20	181.9	10.80	172.9	9.83
	59	31.8	217.7	11.96	204.7	11.35	194.8	10.74	189.8	10.05	181.9	9.83	172.9	8.84
		42.4	217.7	11.88	204.7	11.27	194.8	10.66	189.8	10.05	181.9	9.75	172.9	8.84
		84.4	217.7	11.58	204.7	10.97	194.8	10.36	189.8	10.05	181.9	9.44	172.9	8.84
		105.6	217.7	11.58	204.7	10.66	194.8	10.05	189.8	9.75	181.9	9.14	172.9	8.53
	68	31.8	217.7	10.44	204.7	9.83	194.8	9.22	189.8	8.92	181.9	8.61	172.9	8.00
		42.4	217.7	10.36	204.7	9.75	194.8	9.14	189.8	8.84	181.9	8.53	172.9	7.92
		84.4	217.7	10.05	204.7	9.44	194.8	8.84	189.8	8.53	181.9	8.23	172.9	7.62
		105.6	217.7	10.05	204.7	9.44	194.8	8.84	189.8	8.53	181.9	8.23	172.9	7.62
	77	31.8	217.7	9.22	204.7	8.61	194.8	7.92	189.8	8.00	181.9	7.31	172.9	7.09
		42.4	217.7	9.14	204.7	8.53	194.8	7.92	189.8	7.92	181.9	7.31	172.9	7.01
		84.4	217.7	8.84	204.7	8.23	194.8	7.92	189.8	7.62	181.9	7.31	172.9	6.70
		105.6	217.7	8.84	204.7	8.23	194.8	7.62	189.8	7.62	181.9	7.31	172.9	6.70
	86	31.8	217.7	8.31	204.7	7.70	194.8	7.39	189.8	7.09	181.9	6.78	172.9	6.48
		42.4	217.7	8.23	204.7	7.62	194.8	7.31	189.8	7.01	181.9	6.70	172.9	6.40
		84.4	217.7	7.92	204.7	7.31	194.8	7.01	189.8	6.70	181.9	6.40	172.9	6.09
		105.6	217.7	7.92	204.7	7.31	194.8	7.01	189.8	6.70	181.9	6.40	172.9	6.09

TC : Total Capacity (MBh), PI : Power Input (kW)

* [illegible] is used an anti freeze

Heating Capacity(208/230V)

	Inlet Water Temperature (°F)	Water Flow Rate (gpm)	Indoor Air temperature (°F DB)											
			61		65		68		70		72		75	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
60	95	31.8	217.7	7.31	204.7	7.09	194.8	6.40	189.8	6.48	181.9	6.17	172.9	5.87
		42.4	217.7	7.31	204.7	7.01	194.8	6.40	189.8	6.40	181.9	6.09	172.9	5.79
		84.4	217.7	7.31	204.7	6.70	194.8	6.40	189.8	6.09	181.9	5.79	172.9	5.48
		105.6	217.7	7.31	204.7	6.70	194.8	6.09	189.8	6.09	181.9	5.79	172.9	5.48
	104	31.8	217.7	6.70	204.7	6.48	194.8	5.79	189.8	5.87	181.9	5.56	172.9	5.18
		42.4	217.7	6.70	204.7	6.40	194.8	5.79	189.8	5.79	181.9	5.48	172.9	5.18
		84.4	217.7	6.70	204.7	6.09	194.8	5.79	189.8	5.48	181.9	5.18	172.9	5.18
		105.6	217.7	6.70	204.7	6.09	194.8	5.79	189.8	5.48	181.9	5.18	172.9	5.18
	113	31.8	217.7	6.09	204.7	5.87	194.8	5.18	189.8	5.26	181.9	4.95	172.9	4.49
		42.4	217.7	6.09	204.7	5.79	194.8	5.18	189.8	5.18	181.9	4.87	172.9	4.57
		84.4	217.7	6.09	204.7	5.48	194.8	5.18	189.8	4.87	181.9	4.57	172.9	4.87
		105.6	217.7	6.09	204.7	5.48	194.8	5.48	189.8	4.87	181.9	4.57	172.9	4.87
50	23	31.8	72.4	7.11	68.1	6.75	64.3	6.38	61.6	6.06	58.2	5.68	52.2	5.35
		42.4	74.9	7.37	70.4	6.90	66.5	6.52	63.8	6.19	60.4	5.80	54.3	5.47
		84.4	84.6	7.89	79.7	7.49	75.3	7.07	74.4	6.71	74.0	6.29	72.7	5.94
		105.6	88.7	8.50	88.0	8.06	83.2	7.62	82.2	7.24	81.8	6.76	80.3	6.41
	32	31.8	126.5	10.42	119.8	9.89	111.4	9.34	109.1	8.87	107.5	8.31	109.8	7.85
		42.4	130.3	10.45	120.5	9.92	112.1	9.37	109.8	8.90	108.2	8.34	104.4	7.87
		84.4	133.3	10.57	123.3	10.04	114.7	9.48	112.4	9.00	110.8	8.44	106.8	7.96
		105.6	135.4	10.57	125.2	10.04	116.4	9.48	114.1	9.00	112.5	8.44	108.5	7.96
	41	31.8	170.0	11.34	160.6	10.76	151.9	10.17	150.0	9.65	151.1	9.05	144.1	8.33
		42.4	170.4	11.40	160.9	10.82	151.9	10.23	150.0	9.70	151.1	9.10	144.1	8.58
		84.4	170.8	11.83	171.2	11.04	162.0	10.43	158.0	9.90	151.1	9.29	144.1	8.76
		105.6	180.9	11.71	170.9	11.12	162.0	10.50	158.0	9.97	151.1	9.35	144.1	8.82
	50	31.8	179.9	10.43	170.2	9.84	162.0	9.23	158.0	8.82	151.1	8.17	144.1	7.82
		42.4	180.1	10.42	170.4	9.83	162.0	9.22	158.0	8.81	151.1	8.20	144.1	7.80
		84.4	180.9	10.38	171.1	9.79	162.0	9.17	158.0	8.76	151.1	8.30	144.1	7.73
		105.6	180.9	10.43	170.9	9.83	162.0	9.21	158.0	8.79	151.1	8.16	144.1	7.76
	59	31.8	180.9	9.52	170.9	8.92	162.0	8.31	158.0	8.00	151.1	7.31	144.1	7.09
		42.4	180.9	9.44	170.9	8.84	162.0	8.23	158.0	7.92	151.1	7.31	144.1	7.01
		84.4	180.9	9.14	170.9	8.53	162.0	7.92	158.0	7.62	151.1	7.31	144.1	6.70
		105.6	180.9	9.14	170.9	8.53	162.0	7.92	158.0	7.62	151.1	7.01	144.1	6.70
	68	31.8	180.9	8.31	170.9	7.70	162.0	7.39	158.0	7.09	151.1	6.78	144.1	6.09
		42.4	180.9	8.23	170.9	7.62	162.0	7.31	158.0	7.01	151.1	6.70	144.1	6.09
		84.4	180.9	7.92	170.9	7.31	162.0	7.01	158.0	6.70	151.1	6.40	144.1	6.09
		105.6	180.9	7.92	170.9	7.31	162.0	7.01	158.0	6.70	151.1	6.40	144.1	6.09
	77	31.8	180.9	7.39	170.9	6.70	162.0	6.48	158.0	6.09	151.1	5.79	144.1	5.48
		42.4	180.9	7.31	170.9	6.70	162.0	6.40	158.0	6.09	151.1	5.79	144.1	5.48
		84.4	180.9	7.01	170.9	6.70	162.0	6.09	158.0	6.09	151.1	5.79	144.1	5.48
		105.6	180.9	7.01	170.9	6.70	162.0	6.09	158.0	6.09	151.1	5.79	144.1	5.48
	86	31.8	180.9	6.78	170.9	6.17	162.0	5.87	158.0	5.48	151.1	5.56	144.1	5.26
		42.4	180.9	6.70	170.9	6.09	162.0	5.79	158.0	5.48	151.1	5.48	144.1	5.18
		84.4	180.9	6.40	170.9	5.79	162.0	5.48	158.0	5.48	151.1	5.18	144.1	4.87
		105.6	180.9	6.40	170.9	5.79	162.0	5.48	158.0	5.48	151.1	5.18	144.1	4.87
	95	31.8	180.9	6.17	170.9	5.48	162.0	5.18	158.0	5.26	151.1	4.87	144.1	4.57
		42.4	180.9	6.09	170.9	5.48	162.0	5.18	158.0	5.18	151.1	4.87	144.1	4.57
		84.4	180.9	5.79	170.9	5.48	162.0	5.18	158.0	4.87	151.1	4.87	144.1	4.57
		105.6	180.9	5.79	170.9	5.48	162.0	5.18	158.0	4.87	151.1	4.87	144.1	4.57
	104	31.8	180.9	5.56	170.9	5.26	162.0	4.95	158.0	4.57	151.1	4.65	144.1	4.27
		42.4	180.9	5.48	170.9	5.18	162.0	4.87	158.0	4.57	151.1	4.57	144.1	4.27
		84.4	180.9	5.18	170.9	4.87	162.0	4.57	158.0	4.57	151.1	4.27	144.1	4.27
		105.6	180.9	5.18	170.9	4.87	162.0	4.57	158.0	4.57	151.1	4.27	144.1	4.27
	113	31.8	180.9	4.95	170.9	5.02	162.0	4.72	158.0	3.88	151.1	4.42	144.1	3.96
		42.4	180.9	4.87	170.9	4.87	162.0	4.57	158.0	3.96	151.1	4.27	144.1	3.96
		84.4	180.9	4.57	170.9	4.27	162.0	3.96	158.0	4.27	151.1	3.86	144.1	3.96
		105.6	180.9	4.57	170.9	4.27	162.0	3.96	158.0	4.27	151.1	3.86	144.1	3.96

TC : Total Capacity (MBh), PI : Power Input (kW)

* [illegible] is used an anti freeze

Job Name/Location: Qty. 1 - Located in basement **Tag #:**

Date:

For: File Resubmit

PO No.: Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

PRHR020A
Multi V™ Sync II Heat Recovery Unit

LG

Performance:

Max Port Capacity Btu/h (each port)	48,100
Max Unit Capacity Btu/h (sum of ports)	96,200
Power Input (W)	26

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
MOP (A)	15
MCA (A)	0.2

Piping:
Refrigerant:

Port Liquid Line (in, OD)	3/8
Port Vapor Line (in, OD)	5/8
System Liquid Line (in, OD)	3/8
System Vapor Line High (in, OD)	3/4
System Vapor Line Low (in, OD)	7/8

Standard Features:

- Allows connected indoor units to be in cooling or heating mode simultaneously
  - Casing is internally insulated
  - External insulation not needed
- Condensate drain not needed
- Series or parallel connection with additional heat recovery units
  - Flexible placement for service access or pipe routing

Unit Data:

Refrigerant Type	R410A
Number of Indoor Unit Ports	2
Net Unit Weight (lbs)	45
Shipping Weight (lbs)	54
Communication Cable[1] (No. x AWG)	2 x 18

Notes:

1. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code
2. Kit components must be kept dry and free of debris before installation.
3. Must follow installation instructions in the applicable LG installation manual
4. Power wiring cable size must comply with the applicable local and national code.
5. This unit comes with a dry nitrogen charge.

Job Name/Location:

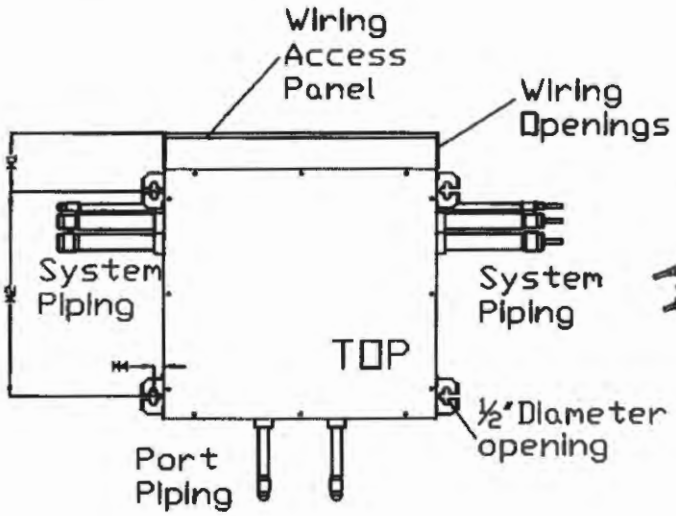
PRHR020A

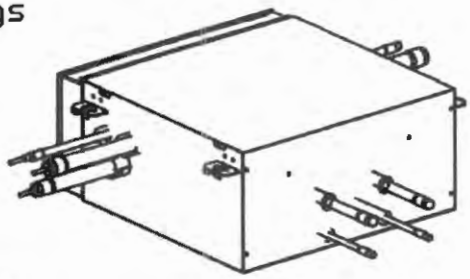
Multi V™ Sync II Heat Recovery Unit

Tag #:

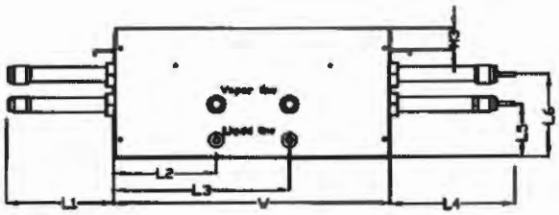
Date:

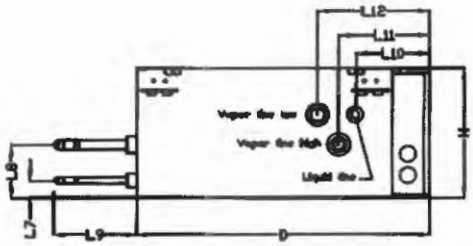
PO No.:

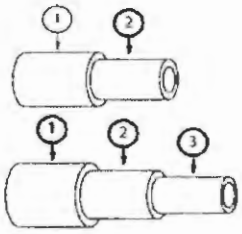




W	17-3/4"
H	8-5/8"
D	19"
L1	6-3/4"
L2	6-5/8"
L3	11-3/8"
L4	8"
L5	3-1/2"
L6	5-1/2"
L7	1-1/4"
L8	3-1/2"
L9	5-1/2"
L10	4-3/4"
L11	5-3/4"
L12	7-1/4"
M1	3-3/4"
M2	13-5/8"
M3	1-1/2"
M4	5/8"







Reducer Dimensions (in)				
		Port Identifier		
		1	2	3
Indoor Unit	Liquid Line	1/2 OD	3/8 OD	-
	Vapor Line	5/8 OD	1/2 OD	-
HR Unit	Liquid Line	3/8 OD	1/4 OD	-
	Vapor Line Low	5/8 OD	1/2 OD	-
		7/8 OD	3/4 OD	5/8 OD
	Vapor Line High	1/2 OD	3/8 OD	-
		3/4 OD	5/8 OD	1/2 OD

Job Name/Location: Qty. 2 - 1 in basement, 1 in 2nd Flr **Tag #:**

Date:

PO No.:

For: File Resubmit Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

PRHR030A
Multi V™ Sync II Heat Recovery Unit

LG

Performance:

Max Port Capacity Btu/h (each port)	48,100
Max Unit Capacity Btu/h (sum of ports)	144,300
Power Input (W)	40

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
MOP (A)	15
MCA (A)	0.2

Piping:
Refrigerant:

Port Liquid Line (in, OD)	3/8
Port Vapor Line (in, OD)	5/8
System Liquid Line (in, OD)	1/2
System Vapor Line High (in, OD)	7/8
System Vapor Line Low (in, OD)	1-1/8

Standard Features:

- Allows connected indoor units to be in cooling or heating mode simultaneously
- Casing is internally insulated
- External insulation not needed
- Condensate drain not needed
- Series or parallel connection with additional heat recovery units
- Flexible placement for service access or pipe routing

Unit Data:

Refrigerant Type	R410A
Number of Indoor Unit Ports	3
Net Unit Weight (lbs)	49
Shipping Weight (lbs)	57
Communication Cable[1] (No. x AWG)	2 x 18

Notes:

1 All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
2 Kit components must be kept dry and free of debris before installation.
3.Must follow installation instructions in the applicable LG installation manual
4.Power wiring cable size must comply with the applicable local and national code
5.This unit comes with a dry nitrogen charge.

Job Name/Location:

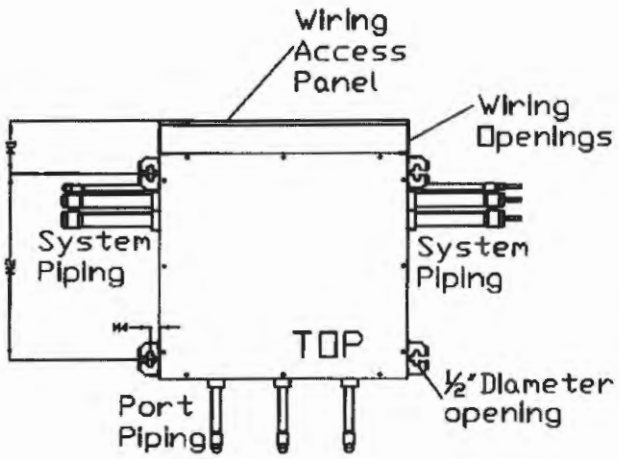
PRHR030A

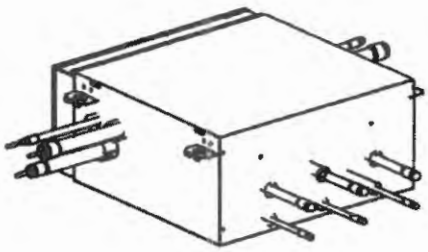
Multi V™ Sync II Heat Recovery Unit

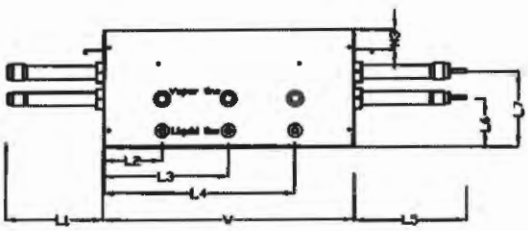
Tag #:

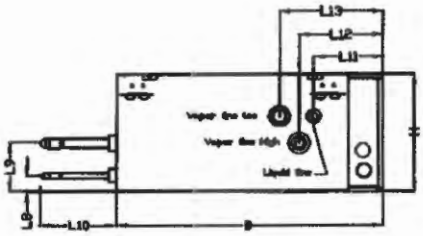
Date:

PO No.:

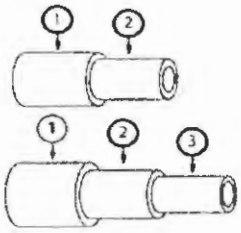








W	17-3/4"
H	8-5/8"
D	19"
L1	6-3/4"
L2	4-1/4""
L3	9"
L4	13-3/4"
L5	8"
L6	3-1/2"
L7	5-1/2"
L8	1-1/4"
L9	3-1/2"
L10	5 1/2"
L11	4-3/4"
L12	5-3/4"
L13	7-1/4"
M1	3-3/4"
M2	13-5/8"
M3	1-1/2"
M4	5/8"



Reducer Dimensions (in)				
		Port Identifier		
		1	2	3
Indoor Unit	Liquid Line	3/8 OD	1/4 OD	-
	Vapor Line	5/8 OD	1/2 OD	-
HR Unit	Liquid Line	1/2 OD	3/8 OD	-
	Vapor Line Low	3/4 OD	5/8 OD	-
		1-1/8 OD	7/8 OD	3/4 OD
	Vapor Line High	5/8 OD	1/2 OD	-
		7/8 OD	3/4 OD	5/8 OD

Job Name/Location: Qty 1 - located in 2nd Flwr Tag #:

Date:

PO No.:

For: File Resubmit Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

PRHR040A
Multi V™ Sync II Heat Recovery Unit

LG

Performance:

Max Port Capacity Btu/h (each port)	48,100
Max Unit Capacity Btu/h (sum of ports)	160,350
Power Input (W)	40

Electrical:

Power Supply (V/Hz/Ø)	208-230V/60/1
MOP (A)	15
MCA (A)	0.2

Piping:
Refrigerant:

Port Liquid Line (in, OD)	3/8
Port Vapor Line (in, OD)	5/8
System Liquid Line (in, OD)	1/2
System Vapor Line High (in, OD)	7/8
System Vapor Line Low (in, OD)	1-1/8

Standard Features:

- Allows connected indoor units to be in cooling or heating mode simultaneously
  - Casing is internally insulated
  - External insulation not needed
- Condensate drain not needed
- Series or parallel connection with additional heat recovery units
  - Flexible placement for service access or pipe routing

Unit Data:

Refrigerant Type	R410A
Number of Indoor Unit Ports	4
Net Unit Weight (lbs)	53
Shipping Weight (lbs)	62
Communication Cable[1] (No# x AWG)	2 x 18

Notes:

1. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
2. Kit components must be kept dry and free of debris before installation.
3. Must follow installation instructions in the applicable LG installation manual
4. Power wiring cable size must comply with the applicable local and national code
5. This unit comes with a dry nitrogen charge.

Job Name/Location:

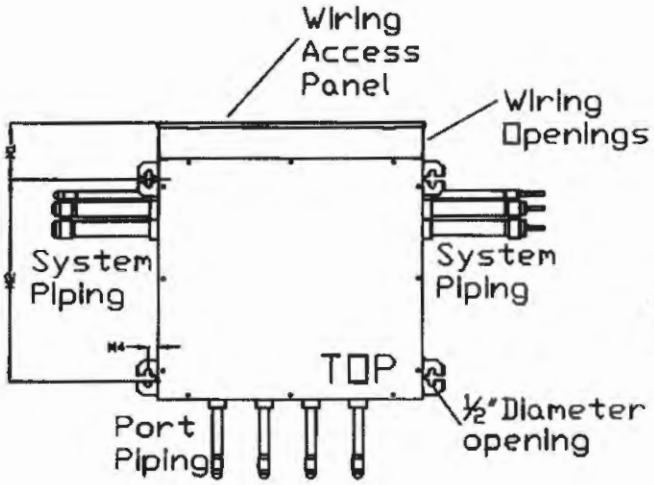
PRHR040A

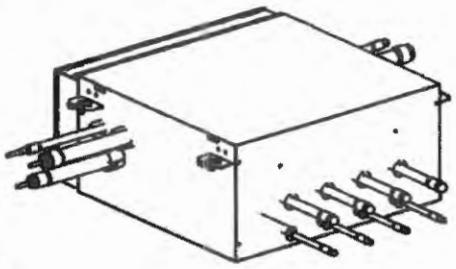
Multi V™ Sync II Heat Recovery Unit

Tag #:

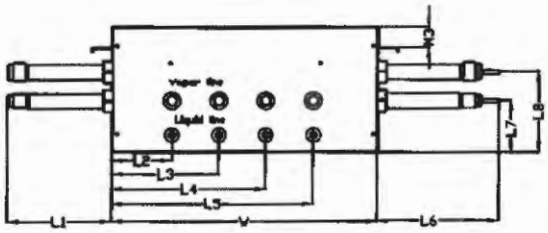
Date:

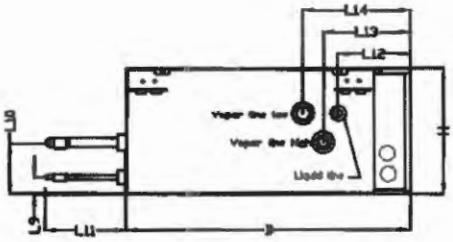
PO No.:

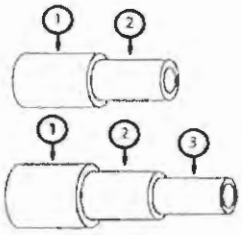




W	1-3/4"
H	8-5/8"
D	19"
L1	6-3/4"
L2	4-1/4"
L3	7-1/2"
L4	10-1/2"
L5	13-3/4"
L6	8"
L7	3-1/2"
L8	5-1/2"
L9	1-1/4"
L10	3-1/2"
L11	5-1/2"
L12	4-3/4"
L13	5-3/4"
L14	7-1/4"
M1	3-3/4"
M2	13-5/8"
M3	1-1/2"
M4	5/8"







Reducer Dimensions (in)				
		Port Identifier		
		1	2	3
Indoor Unit	Liquid Line	3/8 OD	1/4 OD	-
	Vapor Line	5/8 OD	1/2 OD	-
HR Unit	Liquid Line	1/2 OD	3/8 OD	-
	Vapor Line Low	3/4 OD	5/8 OD	-
		1-1/8 OD	7/8 OD	3/4 OD
	Vapor Line High	5/8 OD	1/2 OD	-
		7/8 OD	3/4 OD	5/8 OD

Job Name/Location: **Tag #:**

Date: For: File Resubmit

PO No.: Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

Indoor Y-Branch Kits
Multi V™ 3 Pipe

Insulation' Properties:

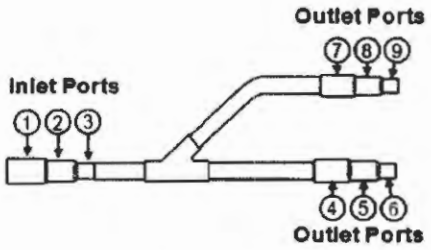
Material	**Polyolefin Foam**
UL94 Flame Classification	**HF-1**

Fitting Properties:

Material	Copper
Design Pressure	551 PSIG

Y-Branch Connection Diameters (in, ID)

Model	Y-Branch Type	Port Identifier								
		1	2	3	4	5	6	7	8	9
~~ARBLB01621~~	Liquid	-	1/4	3/8	3/8	1/4	-	3/8	1/4	-
	Vapor Line Low	-	5/8	1/2	1/2	5/8	-	1/2	5/8	-
	Vapor Line High	3/8	5/8	1/2	1/2	5/8	3/8	1/2	5/8	3/8
ARBLB03321	Liquid	1/2	3/8	-	3/8	1/2	1/4	3/8	1/2	1/4
	Vapor Line Low	1	7/8	3/4	5/8	3/4	1/2	5/8	3/4	1/2
	Vapor Line High	3/4	1	7/8	7/8	3/4	5/8	7/8	3/4	5/8
ARBLB07121	Liquid	1/2	3/4	5/8	5/8	3/4	1/2	5/8	3/4	1/2
	Vapor Line Low	1-1/4	1-1/8	-	7/8	3/4	5/8	3/4	5/8	1/2
	Vapor Line High	1-1/8	1	-	7/8	1	3/4	7/8	1	¾
ARBLB14521	Liquid	5/8	7/8	3/4	7/8	3/4	5/8	3/4	5/8	1/2
	Vapor Line Low	1-3/8	1-1/2	1-5/8	1-1/2	1-3/8	1-1/8	1-3/8	1-1/8	7/8
	Vapor Line High	1-1/8	1-3/8	1-1/4	1-1/8	1-1/4	1	1-1/8	1-1/4	1

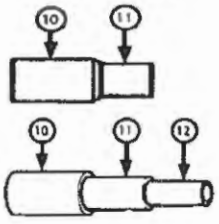


Not to scale

Reducer Diameters (in)

Model	Qty/Kit	Reducer Type	10	11	12	Length
~~ARBLB01621~~	2	Liquid	1/2 ID	3/8 OD	-	2-3/4
		Vapor Line Low	3/4 ID	5/8 OD	-	2-3/4
		Vapor Line High	-	-	-	-
ARBLB03321	5	Liquid	-	-	-	-
		Vapor Line Low	7/8 ID	3/4 OD	-	2-3/4
			1 ID	7/8 ID	3/4 OD	4-11/32
			1-1/8 ID	1 OD	-	3-5/32
		Vapor Line High	5/8 OD	1/2 ID	-	2-3/4
			5/8 OD	1/2 ID	3/8 ID	4-11/32
ARBLB07121	8	Liquid	1/2 OD	3/8 ID	-	2-3/4
			1/2 OD	3/8 ID	1/4 ID	4-11/32
		Vapor Line Low	1-1/8 ID	7/8 ID	3/4 OD	4-23/32
			1-1/4 ID	1-1/8 ID	7/8 OD	4-23/32
			1-3/8 ID	1-1/4 OD	-	3-17/32
		Vapor Line High	1/2 OD	3/8 ID	-	2-3/4
			3/4 OD	5/8 ID	-	2-3/4
			3/4 OD	5/8 ID	1/2 ID	4-11/32
ARBLB14521	12	Liquid	1/2 OD	3/8 ID	1/4 ID	4-11/32
			5/8 OD	1/2 ID	3/8 ID	4-11/32
			7/8 ID	3/4 OD	-	3-5/32
		Vapor Line Low	5/8 OD	1/2 ID	-	2-3/4
			7/8 OD	3/4 ID	5/8 ID	4-23/32
			1-1/8 OD	7/8 ID	3/4 ID	4-23/32
			1-5/8 ID	1-1/2 ID	1-3/8 OD	5-1/8
			1-5/8 ID	1-1/2 OD	-	3-17/32
		Vapor Line High	3/4 OD	5/8 ID	1/2 ID	4-11/32
			1/2 OD	3/8 ID	-	2-3/4
			1 OD	7/8 ID	-	3-5/32
			1 OD	7/8 ID	3/4 ID	4-23/32

Adapter Ports



Job Name/Location:

Indoor Y-Branch Kits

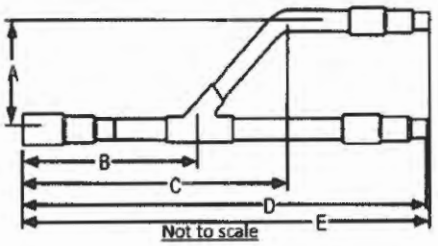
Multi V™ 3 Pipe

Tag #:

Date:

PO No.:

Y-Branch Dimensions[3] (In)						
Model	Y-Branch Type	A	B	C	D	E
~~ARBLB01621~~	Liquid	2-29/32	6-9/16	8-1/32	11-1/16	11-1/2
	Vapor Line Low	2-29/32	4-1/2	7-31/32	11-1/16	11-1/2
	Vapor Line High	2-29/32	6-3/32	9-7/16	13-13/16	14-21/32
ARBLB03321	Liquid	2-29/32	4-1/2	8-1/32	12-5/8	13-1/16
	Vapor Line Low	3-9/32	6-29/32	10-7/8	15-11/32	16-1/4
	Vapor Line High	3-25/32	7-3/32	11-3/8	16-9/16	17-15/32
ARBLB07121	Liquid	3-9/32	6-1/8	10-1/32	14-9/32	15-1/2
	Vapor Line Low	3-25/32	5-1/2	10	14-13/16	15-29/32
	Vapor Line High	3-25/32	5-1/2	10-3/32	15	16-3/32
ARBLB14521	Liquid	3-25/32	7-3/32	11-11/16	16-3/8	17-15/32
	Vapor Line Low	4-29/32	7-7/8	13-23/32	18-17/32	20-11/32
	Vapor Line High	4-3/8	7-7/16	12-3/4	17-27/32	19-11/32



Notes:

1. Each Y-Branch kit comes with insulation for the following piping components - liquid, vapor line low and vapor line high.
2. LG branch fittings must be used. Field supplied branch fittings are not permitted.
3. Kit components must be kept dry and free of debris before installation.
4. Must follow installation instructions in the applicable LG installation manual.

Job Name/Location: Basement Tag #: UH

Date: For: File Resubmit

PO No.: Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

ARNU243S5L2
Multi V™ Wall Mounted Unit
24,200 Btu/h Indoor Unit

LG

Performance:

Total Cooling Capacity (Btu/h)	24,200
Heating Capacity (Btu/h)	27,300
Power Input[1] (W)	40

Cooling Nominal Test Conditions: Indoor 80°F DB/67°F WB, Outdoor 95°F DB

Heating Nominal Test Conditions: Indoor 70°F DB, Outdoor 47°F DB/43°F WB

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps (A)	0.3

Piping:

Refrigerant:

Liquid Line (in, OD)	3/8 Flare
Vapor Line (in, OD)	5/8 Flare

Condensate:

Condensate Line (in, OD)	5/8
Factory Installed Pump	No

Controls Features:

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto clean (coil dry)
- Auto restart
- Child lock
- Dual thermistor control
- Forced operation
- Group control
- Hot start
- Self diagnostics
- Sleep mode
- Timer (on/off)
- Weekly schedule
- Soft dry (dehumidification)
- Auto direction/swing (up/down)
- Manual Direction (left/right)
- Fan speed control
- Chaos swing (random louver swing)
- Chaos wind (random fan speed)
- Jet cool (fast cooling)

Optional Accessories:

Wireless Handheld Remote Controller (PQWRHDF0)

7-Day Programmable Controller (PQRCUSA)

Simple Controller with Mode (PQRCUCS0C)

Simple Controller without Mode (PQRCFCS0C)

Dry Contact Unit (PQDSB1, PQDSBC)

Entering Mixed Air:

Cooling Max[2] (°F WB)	76
Heating Min (°F DB)	59

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure[3] dB(A) (H/M/L)	46/41/38
Primary Filter	Washable Pre-filter
Secondary Filter	Plasma
Net Unit Weight (lbs)	27
Shipping Weight (lbs)	32

Fan:

Type	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate H/M/L (CFM)	494/459/353

Standard Features:

- Limited Warranty with LG Certified Installation
  - Two Year Functional Parts Warranty

Notes:

1. The Power Input is rated at high speed.
2. See Engineering Manual for sensible and latent capacities.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 1996.
4. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
5. Power wiring cable size must comply with the applicable local and national code.
6. This unit comes with a dry nitrogen charge.
7. This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 – 105%.
8. Must follow installation instructions in the applicable LG installation manual.

Job Name/Location:

ARNU243S5L2

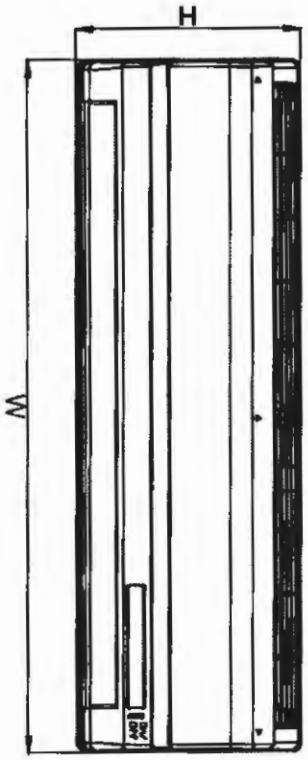
Multi V™ Wall Mounted Unit

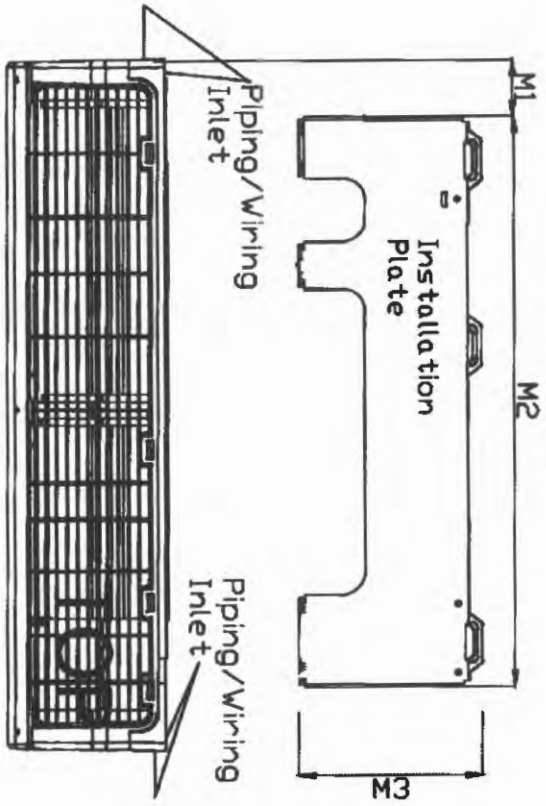
24,200 Btu/h Indoor Unit

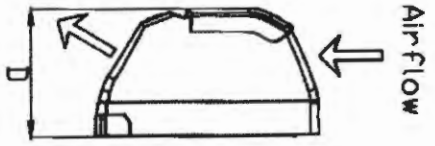
Tag #:

Date:

PO No.:







W	42-7/8"
H	11-13/16
D	7"
M1	3-1/2"
M2	31-5/8"
M3	11"

Note - All dimensions have a tolerance of ± 0.25 in.

Job Name/Location: AHU-1 | Tag #:

Date: | For: File Resubmit

PO No.: | Approval Other

Architect: | GC:

Engr: | Mech:

Rep:
(Company) (Project Manager)

ARNU073SEL2
Multi V™ Wall Mounted Unit
7,500 Btu/h Indoor Unit

LG

Performance:

Total Cooling Capacity (Btu/h)	7,500
Heating Capacity (Btu/h)	8,500
Power Input[1] (W)	40

Cooling Nominal Test Conditions:
Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB

Heating Nominal Test Conditions:
Indoor: 70°F DB
Outdoor: 47°F DB/43°F WB

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps (A)	0.3

Piping:

Refrigerant:

Liquid Line (in, OD)	1/4 Flare
Vapor Line (in, OD)	1/2 Flare

Condensate:

Condensate Line (in, OD)	5/8
Factory Installed Pump	No

Controls Features:

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto clean (coil dry)
- Auto restart
- Child lock
- Dual thermistor control
- Forced operation
- Group control
- Hot start
- Self diagnostics
- Sleep mode
- Timer (on/off)
- Weekly schedule
- Soft dry (dehumidification)
- Auto direction/swing (up/down)
- Manual Direction (left/right)
- Fan speed control
- Chaos swing (random louver swing)
- Chaos wind (random fan speed)
- Jet cool (fast cooling)

Optional Accessories:

Wireless Handheld Remote Controller (PQWRHDF0)

7-Day Programmable Controller (PQRCUSA)

Simple Controller with Mode (PQRCUCS0C)

Simple Controller without Mode (PQRCFCS0C)

Dry Contact Unit (PQDSB1, PQDSBC)

Entering Mixed Air:

Cooling Max[2] (°F WB)	76
Heating Min (°F DB)	59

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure[3] dB(A) (H/M/L)	37/33/23
Primary Filter	Washable Pre-filter
Secondary Filter	Plasma
Net Unit Weight (lbs)	20
Shipping Weight (lbs)	25

Fan:

Type	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate H/M/L (CFM)	198/177/163

Standard Features:

- Limited Warranty with LG Certified Installation
  - Two Year Functional Parts Warranty

Notes:

1. The Power Input is rated at high speed
2. See Engineering Manual for sensible and latent capacities.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 1996.
4. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
5. Power wiring cable size must comply with the applicable local and national code.
6. This unit comes with a dry nitrogen charge.
7. This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 – 105%.
8. Must follow installation instructions in the applicable LG installation manual.

Job Name/Location:

ARNU073SEL2

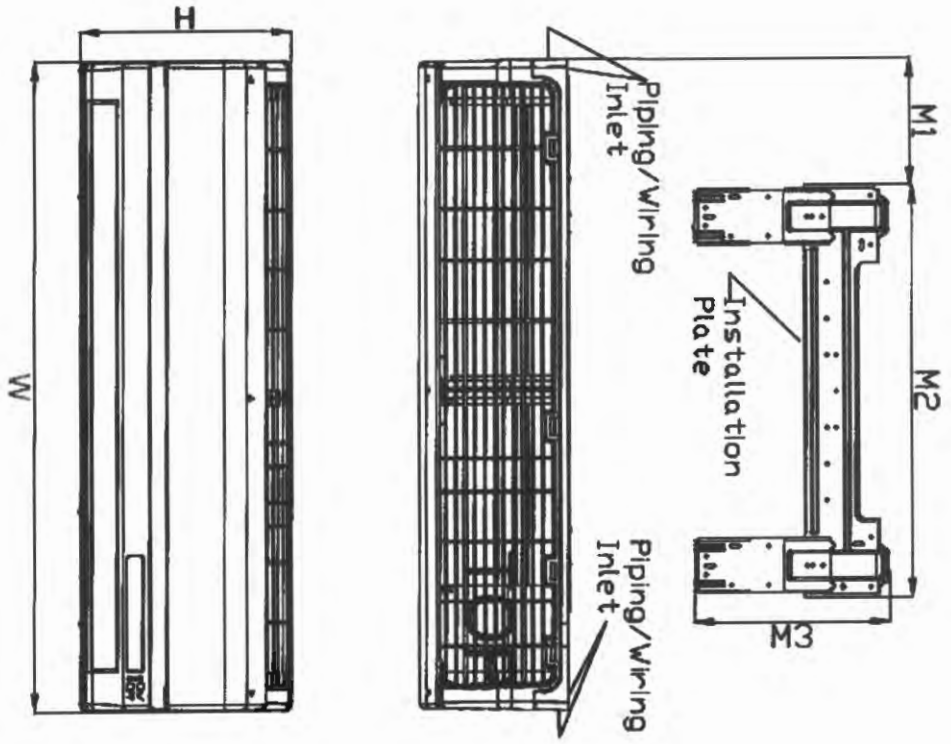
Multi V™ Wall Mounted Unit

7,500 Btu/h Indoor Unit

Tag #:

Date:

PO No.:



W	35-3/16"
H	11-1/8"
D	6-1/2"
M1	5-5/8"
M2	22-3/8"
M3	10-1/2"

Note - All dimensions have a tolerance of ± 0.25 in.

Job Name/Location:

ARNU243BHA2

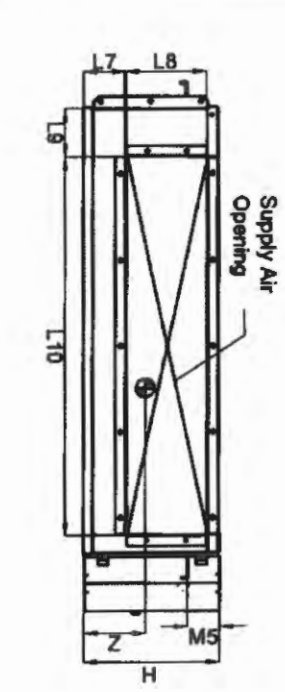
Multi V™ Ducted (High Static)

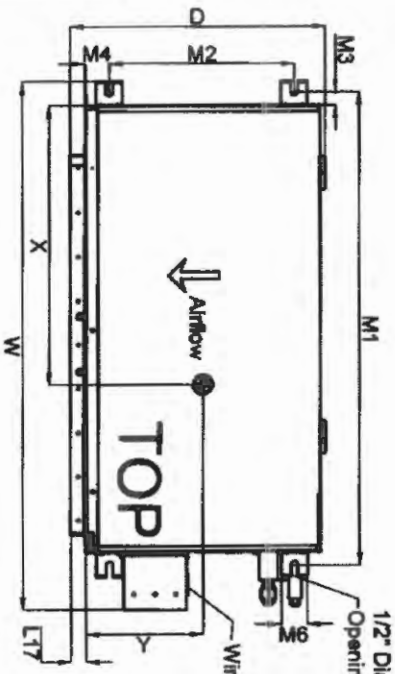
24,200 Btu/h Indoor Unit

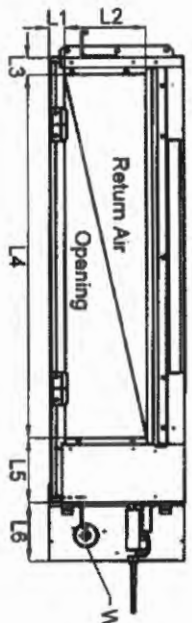
Tag #:

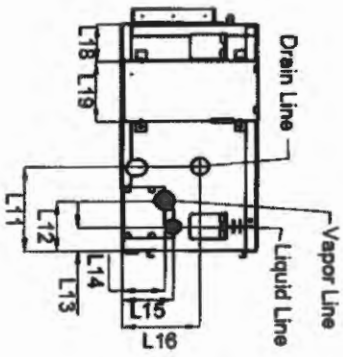
Date:

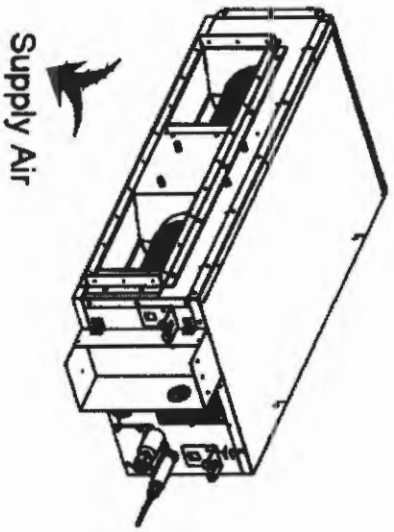
PO No.:











W	41 1/8"
D	19 5/16"
H	10 5/16"
L1	13/16"
L2	6 7/8"
L3	7/8"
L4	29 3/8"
L5	4 1/2"
L6	4 1/4"
L7	2 7/8"
L8	6 1/4"
L9	1 5/8"
L10	29 1/2"
L11	6 9/16"
L12	3 15/16"
L13	1 7/8"
L14	3 1/8"
L15	3 3/4"
L16	6 3/4"
L17	1 3/16"
L18	2 15/16"
L19	4 11/16"
M1	36 11/16"
M2	14"
M3	1"
M4	1 7/8"
M5	2 1/2"
M6	2"

Center of Gravity ARNU243BHA2

X	15 7/8"
Y	8 5/8"
Z	4 11/16"

Note - All dimensions have a tolerance of ± 0.25 in.

⊕ = Center of gravity

Job Name/Location: 04. 3

Tag #: AHU-3 AHU-4 AHU-7

Date:

PO No.:

For: File Resubmit Approval Other

Architect:

GC:

Engr:

Mech:

Rep:
(Company) (Project Manager)

ARNU283BGA2

Multi V™ Ducted (High Static)
28,000 Btu/h Indoor Unit

LG

Performance:

Total Cooling Capacity (Btu/h)	28,000
Heating Capacity (Btu/h)	31,500
Power Input[1] (W)	450

Cooling Nominal Test Conditions
Indoor 80°F DB/67°F WB
Outdoor 95°F DB

Heating Nominal Test Conditions
Indoor 70°F DB
Outdoor 47°F DB/43°F WB

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
Rated Amps (A)	2.3

Piping:

Refrigerant:

Liquid Line (in, OD)	3/8 Flare
Vapor Line (in, OD)	5/8 Flare

Condensate:

Condensate Line (In,OD)	1
Factory Installed Pump[2]	Yes

Controls Features:

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto restart
- Child lock
- Dual thermistor control
- Group control
- E.S.P. control
- Hot start
- Self diagnostics
- Sleep mode
- Timer (on/off)
- Weekly schedule
- Soft dry (dehumidification)
- Fan speed control

Optional Accessories:

Wireless Handheld Remote Controller[3] (PQWRHDF0)

7-Day Programmable Controller (PQRCUSA)

Simple Controller with Mode (PQRCUCS0C)

Simple Controller without Mode (PQRCFCS0C)

Dry Contact Unit (PQDSB1, PQDSBC)

Wall Mounted Temperature Sensor (PQRSTA0)

Entering Mixed Air:

Cooling Max[4] (°F WB)	76
Heating Min (°F DB)	59

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure[5] dB(A) (H/M/L)	44/42/40
Filter	Washable Pre-filter
Net Unit Weight (lbs)	84
Shipping Weight (lbs)	95

Fan:

Type	Sirocco
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate H/M/L (CFM)	915/851/770
External Static Pressure[6] (in wg)	0.39

Standard Features:

- Limited Warranty with LG Certified Installation
  - Two Year Functional Parts Warranty

Notes:

1. The Power Input is rated at high speed.
2. Maximum lift is 27 in from bottom of unit.
3. Requires a 7-Day programmable controller.
4. See Engineering Manual for sensible and latent capacities.
5. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 1996.
6. Factory set as standard.
7. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
8. Power wiring cable size must comply with the applicable local and national code.
9. This unit comes with a dry nitrogen charge.
10. This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 – 105%.
11. Must follow installation instructions in the applicable LG installation manual.

Job Name/Location:

ARNU283BGA2

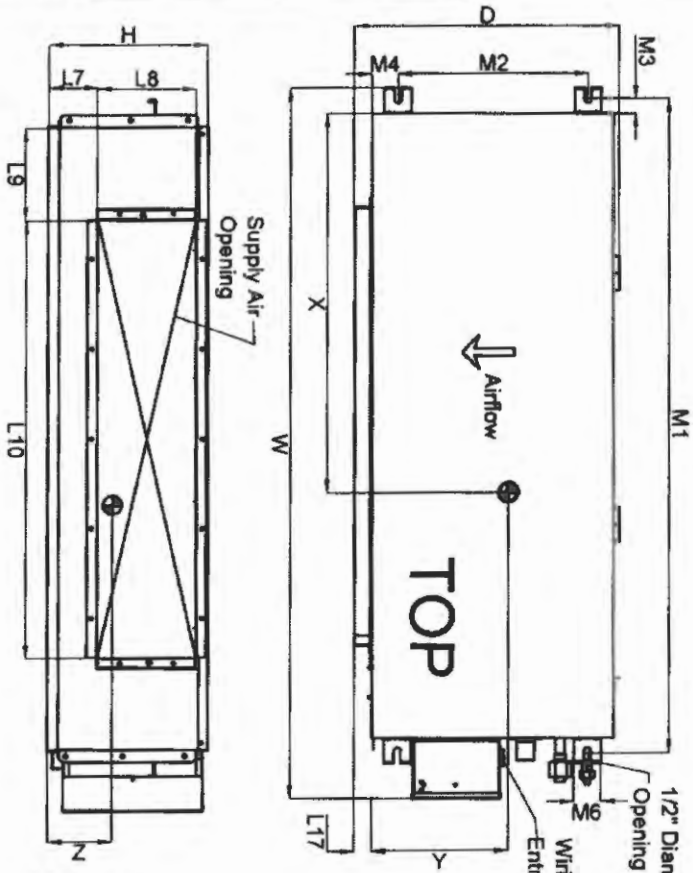
Multi V™ Ducted (High Static)

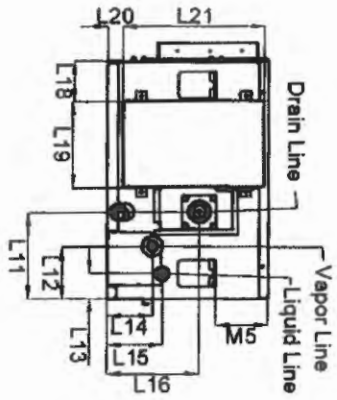
28,000 Btu/h Indoor Unit

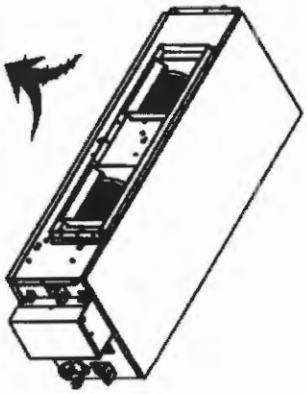
Tag #:

Date:

PO No.:







W	53"
D	19 5/16"
H	11 3/4"
L1	13/16"
L2	8 5/8"
L3	15/16"
L4	41"
L5	4 1/2"
L6	4 1/4"
L7	3 3/8"
L8	7 5/16"
L9	1 5/8"
L10	32 11/16"
L11	6 3/8"
L12	3 15/16"
L13	1 7/8"
L14	3 1/8"
L15	3 15/16"
L16	6 3/4"
L17	1 3/8"
L18	3"
L19	6 3/8"
L20	1 1/8"
L21	10 3/8"
M1	48 7/16"
M2	14"
M3	1"
M4	1 9/16"
M5	2 1/2"
M6	2"

Center of Gravity ARNU283BGA2

X	21 1/4"
Y	8 5/8"
Z	5 3/8"

Note - All dimensions have a tolerance of ± 0.25 in.

◔ = Center of gravity

CH-2

Tag #: AHU-10, AHU-11 | Architect:

Date : | Engineer:

Job Name: | General Contractor:

Job Location: | Installing Contractor:

PO No.: | Submitted By:

For : □ Approval □ Reference

Submittal Data : ARNU243NJA2

Multi V™ Series – 2.0 Ton Indoor Unit
Vertical (Upflow) / Horizontal (Left) Air Handling Unit

LG

Capacities :

Cooling Capacity (Btu/h)	24,000
Power Input (kW, Cooling)	0.120
Heating Capacity (Btu/h)	27,000
Power Input (kW, Heating)	0.120

Cooling Nominal Test Condition
Indoor 80°F DB / 67°F WB
Outdoor 95°F DB / 75°F WB

Heating Nominal Test Condition
Indoor 70°F DB / 59°F WB
Outdoor 47°F DB / 43°F WB

Power Supply[1] :

Power Supply (V/Hz/Ph)	208-230/60/1
Minimum Circuit Ampacity (A)	0.85
Maximum Overcurrent Protection (A)	15
Full Load Amps (A)	0.68

Fan :

Type/Drive	Sirocco/Drive
Quantity	1
Fan Motor Output (kW)	0.096
Airflow Rate (CFM, H/M/L, High Static Mode)	710/640/480
External Static Pressure (inAq, High Static Mode)	0.50

Static pressure without filter

Refrigerant Piping :

Refrigerant	R410A
Control	EEV
Liquid Line Connection (inches, O.D)	3/8
Gas Line Connection, O.D)	5/8
Drain Line Connection (inches, O.D, I.D)	3/4 FPT

For primary and secondary drain connection.

Unit Data :

Sound Pressure[2] (dB(A), H/M/L)	43/42/41
Net Weight (lbs)	130
Dimensions (W×D×H)	18 x 21-3/8 x 48-5/8

Standard Features :

- •Warranty with LG Certified Installation
  - • Two Year Functional Parts Warranty
- •ESP Control
- • Auto Changeover (available with Multi V Sync II)
- • Auto Restart
- • BLDC Fan Motor
- • Self Diagnosis
- •Two Thermistor Control
- •Access panel for field supplied air filter
  - • (16 x 20 x 1)

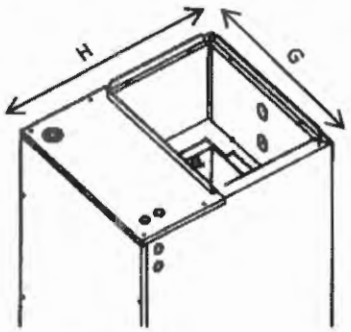
MULTI V™

Accessory Options:

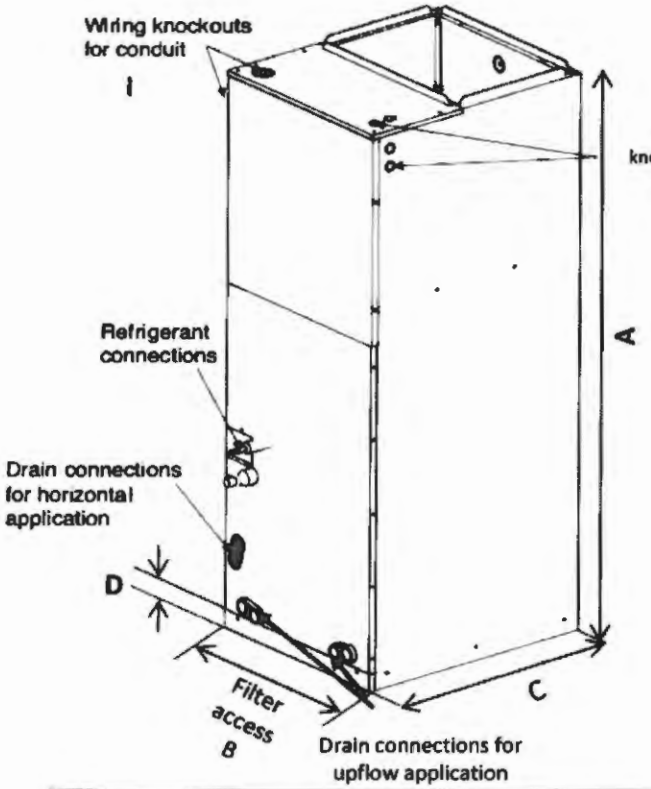
- • Handheld Remote Controller – PQWRHDF0 (PQRCUSA1 required)
- • Standard Type Wired Remote Controller – PQRCUSA1
- • Simple Type Wired Remote Controller – PQRCUCS0C
  - • without mode – PQRCFCS0C
- • Dry Contact Unit
  - • PQDSB1
  - • PQDSBC
- •Electric Heat Kit
  - •ANEH05381 (5 kW)
  - •ANEH103B2 (10 kW)

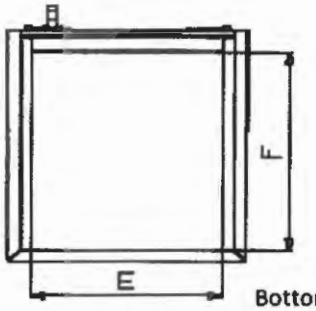
Notes:

1 Electrical data listed is without an electric heat kit accessory option. The addition of an electric heat kit accessory option will change the electrical data.
2 Sound Pressure levels are tested in an anechoic chamber under Korea Standard KSA0701
3 Wiring cable size must comply with the applicable local and national code.
4 Adjust fan speed to correct for static pressure increases when using field supplied air filter or heat kit



Top outlet dimensions





Bottom inlet dimensions

Unit: inch (mm)

Capacity (kBtu/h (RT))	Dimensions								Wiring Knock Out		Refrigerant Connections Pipe Size	
	A	B	C	D	E	F	G	H	I	J		
	Height	Width	Depth						Power	Communication	Liquid	Gas
18 (1.5)	48-5/8 (1236)	18 (457)	21-3/8 (540)	1-9/16 (40)	17-1/2 (445)	20-7/8 (530)	17 (432)	12-1/8 (308)	1-11/16 (43)	7/8 (22)	1/4 (6.35)	1/2 (12.7)
24(2.0) 30 (2.5)	48-5/8 (1236)	18 (457)	21-3/8 (540)	1-9/16 (40)	17-1/2 (445)	20-7/8 (530)	17 (432)	12-1/2 (308)	1-11/16 (43)	7/8 (22)	3/8 (9.52)	5/8 (15.88)
36 (3.0) 42 (3.5) 48 (4.0)	55-1/8 (1401)	25 (635)	21-3/8 (540)	1-9/16 (40)	24-1/2 (623)	20-7/8 (530)	24 (610)	12-1/2 (308)	1-11/16 (43)	7/8 (22)	3/8 (9.52)	5/8 (15.88)
54 (4.5)	55-1/8 (1401)	25 (635)	21-3/8 (540)	1-9/16 (40)	24-1/2 (623)	20-7/8 (530)	24 (610)	12-1/2 (308)	1-11/16 (43)	7/8 (22)	3/8 (9.52)	3/4 (19.05)

Job Name/Location: **Tag #:**

Date: For: File Resubmit

PO No.: Approval Other

Architect: GC:

Engr: Mech:

Rep:
(Company) (Project Manager)

PQRCVCL0Q(W)
Simple Controller with Mode Selection


PQRCVCL0Q


PQRCVCL0QW

Unit Data:

Max Number of Indoor Units (Group Control)	16
Temperature Value	Farenheit (1° Increments)/Celsius
Dimensions	4-3/4" L x 2-3/4" W x 5/8" H
Weight	0.18 lbs

Temperature Value depends on equipment.

Operating Range:

Cooling (°F)	64-86
Heating (°F)	60-86

Communications Cabling Specifications (V-Net):

Type	Included
Length	33 feet

Communication cable can be extended to a maximum of 164 feet by using the Wired Zone Controller Extension Cable - PZCWRC1 (maximum 4 kits). Field splicing is prohibited.

Standard Features:

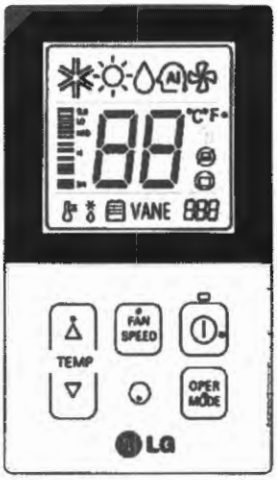
- Unit Operation – On/Off
- Mode Selection – Cool/Heat/Dry/Fan/Auto
- Fan Speed Selection
- Air Flow Direction[1]
- Static Pressure Setting
- Child Lock
- LED Indicator for unit operating status
- Master/Slave Setting for Multiple Controller Installation
- Room Temperature Sensing Location (Zone Controller, Indoor Unit, 2-Thermistor)
- Discharge Vanes – Auto Swing/Fixed[1]
- Manual Central Control Addressing

Notes:

1.Available with indoor units equipped for this function
Must follow installation instructions in the applicable LG installation manual.

Optional Accessories:

33-foot Extension Cable Assembly (PZCWRC1)
Group Control Cable Kit (PZCWRCG3)



1 - Operation Display
2 - Room Temperature Setting
3 - Fan Speed Button
4 - On/Off Button
5 - Operation Mode Selection Button
6 – Wireless Remote Controller Reciever