



O:860-942-0183 www.corbetthvac.com

Proposal for AN-11-2023-22 #02 2023 HVAC Replacement at Andover Fire Department

Corbett HVAC Services LLC 321 Jackson St Willimantic, CT 06226 860-942-0183

Corbett HVAC Services is an equal opportunity employer.



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AN -2022-23 #02

Corbett HVAC Services LLC. is a small business enterprise specializing in installation, maintenance, repair, and on call services for heating and air conditioning equipment. We pride ourselves on providing excellent work every time. Our technicians have a combined 45 years' experience and carry several licenses among them. They have passed background checks and undergone rigorous training after they completed schooling in heating ventilation and air conditioning. Our install technicians are trained to work efficiently and make sure that all safety protocols are followed. All of our technicians are well versed in preventative maintenance as well as identifying faulty or damaged equipment or parts as well as how to identify and fix emergency problems as we rotate an on-call schedule. Our technicians are efficient, professional, and courteous. They take pride in their work and always get the job done. Our office staff works diligently to ensure a pleasant experience and make sure that all matters are communicated.

We are an equal employment opportunity employer who prides ourselves on hiring people based on what they can bring to our company and only that.

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AN-2022-23 #02 Projects

St Joseph's Polish Roman Catholic Church 120 Cliff St Norwich CT 06360 860-705-4202

Fee Structure 50% deposit and 50% upon completion

Install 8 mini split heads in church around exterior walls to provide A/C for church. Each head will be connected to a condensing unit on exterior of church. All line sets will be ran in line set hide ducting from wall penetration to condensing unit.

Hillyland Farm Dairy LLC 75 Murphy Hill Rd Scotland, CT 06264 Doug Stearns 860-428-9599

Fee Structure: 50% deposit and 50% upon completion

Install new Daikin mini split system in new winery. There will be two condensing units at 36,000 BTU each with four indoor heads at 18,000 BTU each. Each condensing unit will be mounted on wall bracket to keep it above snow load. All indoor heads will be located on exterior walls and line set will run in attic space to far indoor heads.



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Berkshire Bruce MaClean 77 Industrial Park Rd Vernon, CT 06066 860-670-5226

Fee Structure: 50% deposit and 50% upon Completion.

Install 35 packaged units for heating and air conditioning.

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AN-11-2023-22 #02

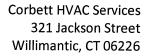
References

Bruce MaClean
MaClean Mechanical Contractors LLC
77 Industrial Park Rd
Vernon, CT 06066
860-607-5226

Real Property Management Margaret Gledhill 705 North Mountain Rd G105 Newington, CT 06111 860-377-8912

The Housing Authority of The City of Willimantic Edwin (Maintenance) 49 West Ave Willimantic, CT 06226 860-336-7591

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AN-2022-23 #02

Completion Timeline

Replace Existing System: Replacement of the existing system will take approximately 2 weeks once we obtain material.

Alternate System: Replacement of the existing system with high efficiency mini split heat pump system and new air handler and condenser will take approximately 2 weeks.



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AN-2022-23 #02 Cost Summary

Replacement of existing system and adding ductless heat pump mini splits to building.

Replace existing System: PTAC's Air Handler, and Condenser.

Materials: \$15,104.01

Labor: \$13,000.00

Alternate System: Mini Split System, Air Handler, and Condenser.

Materials: \$17,601.67

Labor: \$16,000.00

These prices were determines by our quote from our distributor and our hourly labor charge.

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Town of Andover

Proposal Summary

Lump Sum Price Bidder will complete the Project titled 2023 HVAC Replacement at Andover Fire Department in Andover, CT work in accordance with the Contract Documents as described: **Summary Description** Remove existing HVAC PTAC system, air handler, and condenser. Replace with new PTAC'S Daikin air handler, and Daikin Condenser. Lump Sum Cost Inclusive of Labor and Materials _\$ 28,104.01 **PRICE** ** All associated work to complete the work as requested by the Town shall be included. there shall be no additional costs except As noted below Option 1 Description Remove existing HVAC PTAC's, air handler, and condenser. Replace with new Samsung high efficiency heat pump system, Daikin air handler, and Daikin condenser. Lump Sum Cost Inclusive of Labor and Materials _\$ 33,601.67 **PRICE Option 2 Description** Lump Sum Cost Inclusive of Labor and Materials _\$_____ **PRICE**

By:	Corbett Bernier
Title:	Owner

Bidder: Corbett HVAC Services LLC

Address: 321 Jackson St Willimantic, CT 06226

Signature

Date 06/08/2023



STATE OF CONNECTICUT

NONDISCRIMINATION CERTIFICATION — Representation by Entity

For Contracts Valued at Less than \$50,000

Written representation that complies with the nondiscrimination agreements and warranties a	under
Connecticut General Statutes §§ 4a-60 and 4a-60a, as amended.	

INSTRUCTIONS:

DEDDECENTATION OF ENTITY.

For use by an <u>entity</u> (corporation, limited liability company, or partnership) when entering into any contract type with the State of Connecticut, valued at less than \$50,000 for each year of contract. Complete all sections of the form. Submit to the awarding State agency prior to contract execution.

REPRESENTATION OF ENTITY:		
	Owner /	, of Corbett HVAC Services LLC
(Authorized Signatory)	(Title)	(Name of Entity)
an entity duly formed and existing	under the laws of	Connecticut
		(Name of State or Commonwealth)
represent that I am authorized to e	execute and deliver t	his representation on behalf of
Corbett HVAC Services LLC	and that	Corbett HVAC Services LLC
(Name of Entity)		(Name of Entity)
agrees to comply with the nondiscr §§ 4a-60 and 4a-60a, as amended	_	ts and warranties of Connecticut General Statutes
		06/07/2023
(Authorized Signatory)		(Date)
Corbett Bernier		
(Printed Name)		



Load Short Form

Entire House

Corbett HVAC

321 Jackson St, Willimantic, CT 06226

For:

Andover Fire Department 11 School Rd Andover, CT

Design Information				
•	Htg	Clg	Infiltratio	n
Outside db (°F)	8	88	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	62	13	Fireplaces	0
Daily range	-	M	•	
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	26	28		

Project Information

HEATING EQUIPMENT

COOLING EQUIPMENT

Job: 060720231

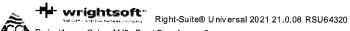
Date: Jun 07, 2023

By: Chris Fontaine

Make Trade Model AHRI ref			Make Trade Cond Coil AHRI ref		
Efficiency Heating input	80 AFUE 0	: Btuh	Efficiency Sensible cooling	0 SEER	Btuh
Heating output	0	Btuh	Latent cooling		
Temperature rise	0	°F	Total cooling	0	Btuh
Actual air flow	3020	cfm	Actual air flow	3020	cfm
Air flow factor	0.024	cfm/Btuh	Air flow factor	0.050	cfm/Btuh
Static pressure	0	in H2O	Static pressure	0	in H2O
Space thermostat			Load sensible heat ratio	0.74	

ROOM NAME	Area	Htg load	Clg load	Htg AVF	Clg AVF
	(ft²)	(Btuh)	(Btuh)	(cfm)	(cfm)
Office	300	9726	7832	174	161
Conference Room	540	8364	7235	106	125
Hallway	700	18936	17348	122	129

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Entire House Other equip loads Equip. @ 0.93 RSM Latent cooling	3516	37008 0	32415 0 30145 15072	3020	3020
TOTALS	3516	37008	77632	3020	3020

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Corbett HVAC

321 Jackson St, Willimantic, CT 06226

Project Information

For:

Andover Town Hall 17 School Rd, Andover, CT 06232

Notes:

Design Information

Weather: Hartford, Bradley IAP, CT, US

Winter Design Conditions

Summer Design Conditions

Outside db Inside db Design TD	8 °F 70 °F 62 °F	Outside db Inside db Desian TD	88 °F 75 °F 13 °F
•		Daily range	М̈́
		Relative humidity	50 %
		Moisture difference	28 gr/lb

Heating Summary

Sensible Cooling Equipment Load Sizing

Job: 060720231

Date: Jun 07, 2023 **Chris Fontaine**

Structure Ducts Central vent (0 cfm) (none)	119188 6670 0	Btuh Btuh Btuh	Structure Ducts Central vent (0 cfm) (none)	57460 2557 0	Btuh Btuh Btuh
Humidification Pining	0	Btuh Btuh	Blower	0	Btuh
Piping Equipment load	125858		Use manufacturer's data	n	
Infi	Itration		Rate/swing multiplier Equipment sensible load	0.93 55816	Btuh

Simplified

Method Construction quality		Simplified Average	Latent Cooling Equipme	ent Load Sizing
Fireplaces		0	Structure Ducts Central vent (0 cfm)	17150 Btuh 3875 Btuh
Area (ft²) Volume (ft³)	Heating 3516 32607	Cooling 3516 32607	(none) Equipment latent load	0 Btuh 21024 Btuh
Air changes/hour Equiv. AVF (cfm)	0.37 201	0.19 103	Equipment Total Load (Sen+Lat) Req. total capacity at 0.70 SHR	76840 Btuh 6.6 ton

Heating Equipment Summary Cooling Equipment Summary

Make Trade Model AHRI ref		Make Trade Cond Coil	
Efficiency Heating input Heating output Temperature rise Actual air flow Air flow factor Static pressure Space thermostat	80 AFUE 0 Btuh 0 Btuh 0 °F 3020 cfm 0.024 cfm/Btuh 0 in H2O	AHRI ref Efficiency Sensible cooling Latent cooling Total cooling Actual air flow Air flow factor Static pressure Load sensible heat ratio	0 SEER 0 Btuh 0 Btuh 3020 cfm 0.050 cfm/Btuh 0 in H2O 0.74

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Make

2023-Jun-07 11:42:58



J1 Form - Worksheet A

Entire House

Corbett HVAC

321 Jackson St, Willimantic, CT 06226

Job: 060720231 Date: Jun 07, 2023 By: Chris Fontaine

Supporting Detail						
Project Nam	ne:			Date: Jun 07, 2023		
Address:	17 School Rd, Andover, CT 06232					
Phone:		Job ID:	060720231			
	And Add to the Annual Control of the Annual					

Worksheet A Location and Design Conditions							
Weather Location: Hartford, Bradley IAP, CT, US	Elevation	n =	180	Latitude =	42		
Indoor Conditions, Heating: DB = 70 °F RH = 30 % Indoor Conditions, Co	oling:	DB =	75	°F RH=	50 %		
Table 1 Conditions 99% DB = 8 °F 1% DB = 88 °F Grains Difference =	28	gr/lb	Dail	y Range =	М		
Design Temperature Differences	HTD =	62	°F	CTD =	13 °F		

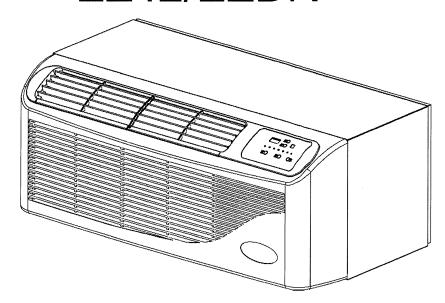
Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



PACKAGED TERMINAL AIR CONDITIONER/HEAT PUMP

INSTALLATION INSTRUCTIONS & OWNER'S MANUAL

EZ42/EZDR



ATTENTION INSTALLATION PROFESSIONAL

As a professional installer you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with this instruction manual. Pay special attention to all safety warnings.

Often during installation or repair it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

Remember, it is your responsibility to install the product safely and to know it well enough to be able to instruct a customer in its safe use.

Safety is a matter of common sense, a matter of thinking before acting. Most dealers have a list of specific good safety practices, follow them.

The precautions listed in this Installation Manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here take precedence.

CONTENTS

UNIT FEATURES	3
INSTALLATION INSTRUCTIONS	5
WIRING	9
OPERATING INSTRUCTIONS	10
MAINTENANCE AND CLEANING	12
NORMAL OPERATING SOUNDS AND CONDITION	14
DIAGNOSTIC CODES	15
TROUBLE SHOOTING	16

IMPORTANT NOTES:

Before using this manual, check the serial plate for proper model identification.

The installation and servicing of this equipment must be performed by qualified, experienced technicians only.

Due to our policy of continual product improvement, the right is reserved to change specifications and design without notice.

IMPORTANT NOTE TO THE OWNER

This manual is to be used by qualified, professionally trained HVAC technicians only. The manufacturer does not assume any responsibility for property damage or personal injury for improper service procedures or services performed by an unqualified Person.

IMPORTANT NOTE TO THE SERVICER

Read this manual and familiarize yourself with the specific items which must be adhered to before attempting to service this unit. The precautions listed in this Installation Manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here take precedence.

RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION

A WARNING

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY, DAMAGE ARISING FROM IMPROPER SERVICE OR SERVICE PROCEDURES. IF YOU INSTALL OR PERFORM SERVICE ON THIS UNIT, YOU ASSUME RESPONSIBILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE WHICH MAY RESULT, MANY JURISDICTIONS REQUIRE A LICENSE TO INSTALL OR SERVICE HEATING AND AIR CONDITIONING EQUIPMENT.

A WARNING

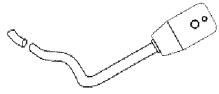
HIGH VOLTAGE

DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT, FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

UNIT FEATURES

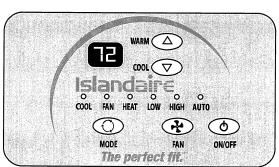
This unit has many features which are different than those found on conventional PTAC units. The servicer must be familiar with these features in order to properly handle the unit.

• LCDI Cords - Underwriters Laboratories and the National Electric Code (NEC) now require power cords that sense current leakage and can open the electrical circuit to the unit on units rated at 250 volts or less. In the event that unit does not operate, check the reset button located on or near the head of the power cord as part of the normal troubleshooting procedure.



LCDI power Cord

- Automatic 3-minute compressor lockout After the compressor cycles off, it will not restart for three minutes.
- Random restart delay To help eliminate power surges after a power outage, the unit is equipped with a two- to four-minute random restart delay feature. Whenever the unit is plugged in with the master switch turned on and the mode switch set in the cool or heat mode, a random restart will occur. A random restart condition can be avoided by setting the mode switch in the fan only or off position before applying power to the unit.
- Indication LEDs The touch pad has LEDs that correspond to fan operation and to indicate unit status. The LEDs next to the ON/OFF, FAN, COOL, and HEAT selections indicate which operational mode is active.



- High Pressure Protection The unit shuts off automatically when the pressure in the system is over 638 psi, and within 10 minutes after the compressor turns off, the unit will restart when the pressure falls back below 551 psi. This protection can effectively avoid bursting and leakage of pipes, lessen system failures and prolong service life.
- Failure Tolerance If the unit is in protection mode less than 4 times in one hour, the accumulation times will reset to avoid system failure. Only when the unit enters protection mode more than 4 times in one hour, the system will fail to restart automatically and need manual restarting.
- Standard Physical Dimensions The EZ42 and EZDR series PTAC's both have the same dimensions (42" wide \times 16" high \times 13-3/4" deep).
- Weather Protected Electrical Components Vital electrical components are protected from the weather by locating them on the indoor side of the weather barrier.
- Highly Featured Microprocessor Controls Microprocessor controls are programmed to interface with the temperature sensors to maximize comfort conditions for the room occupant and provides many outstanding features. Thermistors are used to sense small changes in temperature to give excellent room control and allow the microprocessor to monitor and react to changing conditions.
- Automatic Emergency Heat on Heat Pump Units -Automatically uses electric resistance heat if the heat pump output is not sufficient to maintain selected room temperature.
- High-Temperature Heat Pump Operation Protection Automatically protects the compressor if the heat pump is operated with high indoor coil temperatures. Power to the outdoor fan and the compressor are turned off if the indoor coil gets too hot during heat pump operation to prevent damage to the compressor.

• Permanently Lubricated Fan Motors - All units have two fan motors for quiet operation and maximum operating efficiency.

Motors are permanently lubricated to reduce maintenance and totally enclosed to keep dirt and water out of the motor windings.

- Indoor Fan Speed Selections LOW/HIGH Unit may be operated in low fan speed or high fan speed.
- Rotary Compressor Smoother operation for quiet, dependable service and high efficiency.
- Indoor Coil Frost Control Prevents indoor coil from freezing. Frost can form on the indoor coil when the unit is operated in cooling when outdoor temperature is low. The unit automatically shuts the compressor off until the indoor coil temperature warms to the point where frosting will no longer occur, then restarts the compressor.

A WARNING

HIGH VOLTAGE

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DR.PTAC INFORMATION

The Dr.PTAC system is an add on component to our standard PTAC unit to provide conditioned make up air into a space through the PTAC unit by providing up to 55 CFM of outdoor air 24/7 by forced fan and cycling dehumidifier compressor based on outdoor relative humidity levels.

Dr.PTAC is a two-stage system: The primary unit is responsible for control of Sensible Heat that is introduced into the room via make up air temperature and thermal load of the occupants. The secondary unit is primarily a dehumidification unit that provides up to 55 CFM of outside fresh air into the room. The correction of the Sensible Temperature comes from the main PTAC unit, which provides additional dehumidification with temperature correction.

Overall unit efficiency over standard PTAC's is approximately 3% improvement. The compressor/dehumidification process is controlled by a humidistat (factory set at 50% RH), which is monitoring the outdoor relative humidity level and is adjustable by a qualified servicer. When the outdoor humidity level raises above 50% RH, the compressor and dehumidification process starts. Below 50% RH, compressor operation and dehumidification is stopped, however, fan operation continues to provide up to 55 CFM of outdoor air into the space.

UNIT ACCESSORIES

This unit is designed for through-the-wall installation in new or existing buildings. To complete the installation of this PTAC, an insulated wall sleeve and an outdoor grille (either the stamped aluminum grille or the architectural grille) are required.

The chassis and the cabinet front are shipped in one carton. Optional accessories to complete a particular installation include the following:

OPTIONAL ACCESSORIES

Power Switch Kit
Wall Sleeve Kit
Key Lock Kit Drain Kit
Filter Kit
Hard Wire Kit
Wire Harness Kit
Architectural Grille Kit
Stamped Louver Kit
LCDI Power Cord
Wireless IR Antenna
Wireless IR Thermostat
Electric And Non Electric Sub Base Kit

NOTE: Consult sales literature for the appropriate voltage and amperage selections, if applicable.

INSTALLATION INSTRUCTIONS

To ensure that the unit operates safely and efficiently, it must be installed, operated and maintained according to these installation and operating instructions and all local codes and ordinances or, in their absence, with the latest edition of the National Electric Code. The proper installation of this unit is described in the following sections. Following the steps in the order presented should ensure proper installation.

A WARNING

HIGH VOLTAGE

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WALL SLEEVE ASSEMBLY (OPTIONAL ACCESSORY)

Welded Integrated Wall Sleeve

The wall sleeve features an aesthetically pleasing appearance and sturdy construction (refer to Fig 1.). Customers can purchase the Wall Sleeve together with the unit. See wall sleeve assembly instructions below:

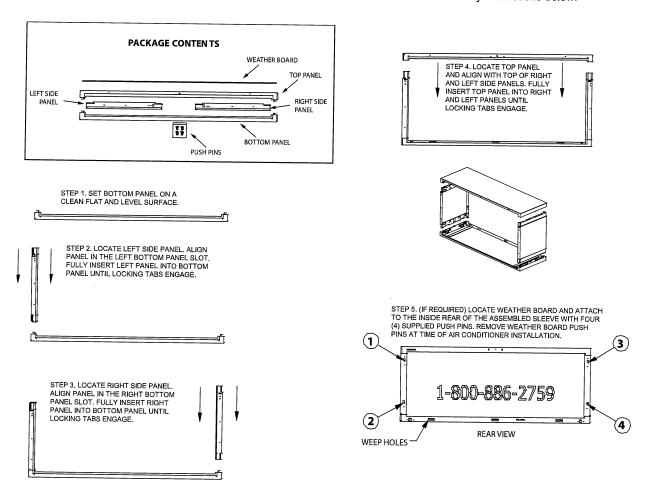


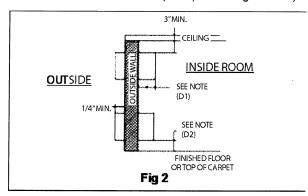
Fig 1

SLEEVE INSTALLATION

Wall sleeve location

When making the wall opening, please observe the following requirements:

- A) The air inlet and outlet should be unblocked and the air can be delivered to every corner of the room.
- B) Install the unit in places that are away from heat source or sources of flammable gases.
- C) Do not install the unit in places that are subject to excessive dust.
- D) Do not install the unit in places were the operational noise and exhausted air might disturb your neighbor.
- E) There should be sufficient space around the unit to facilitate maintenance and repairs (refer to Figs 2 and 3).



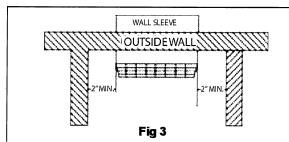


Chart 1

Dimensions	Recommended installation clearance
D1	Projection of case into room - 1/2" minimum, up to1-3/4" maximum without use of electrical sub-base. Note: 2-3/8" minimum when sub-base is used.
D2	Height above finished floor or top of carpet: 1/2"minimum, 2" recommended without sub-base, 3" minimum with sub-base.

Preparation of the wall

The sleeve should be installed during construction and lintels should be used to support the block above the wall sleeve. The sleeve can not support the load of bricks/blocks.

For existing construction, a wall opening must be created; proper dimensions are necessary to avoid use of fillers or additional framing. The sleeve is modular in heightand width (refer to Fig 4 and Chart 2). Height:

Fits 2 courses concrete block
Fits 6 courses standard brick

Fits 5 courses jumbo brick

Width:

Fit approximately 3 stud spaces.

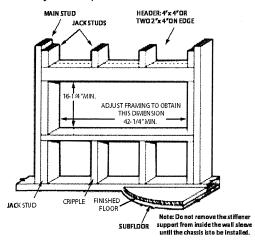


Chart 2

	minimum finished opening dimensions		sl	sleeve dimensions	
	Height	width	height	width	depth
NO. 1	16-1/4"	42-1/2"	40"	40"	13-3/4"
NO. 2	16-1/4"	42-1/4"	16″	42″	(16"/18"/24")

NOTE: NO. 1 means using field supplied sleeve angles NO. 2 means not using field supplied sleeve angles

In order for condensate water to drain properly inside the unit, the sleeve must be installed properly:

- Level from right-to-left
- A slight downward pitch from the indoor side to the outdoor side as shown below (Fig 5)
- Fasten the wall sleeve (Fig 6)

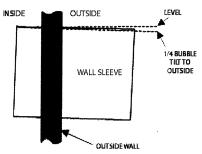


Fig 5. Proper Sleeve Tilt

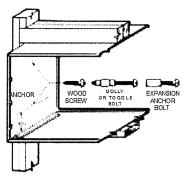


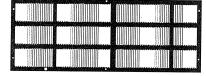
Fig 6. Wall Sleeve Anchors

OUTDOOR GRILLE (OPTIONAL ACCESSORY)

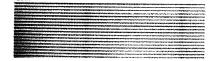
An outside grille must be installed to direct air flow for proper unit operation and also protect the outdoor coil. The grille must be installed before installing the chassis.

When replacing an old chassis with an existing grille or using a specialized grille in a new installation, please check with Islandaire engineering to determine if the new chassis should be used with the non-standard specialized grille. An improper outdoor grille can decrease cooling or heating capacity, increase energy usage and shorten compressor life and possibly void the warranty.

Flush Stamped Louver

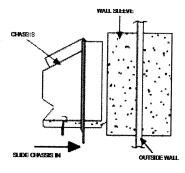


Architectural Louver



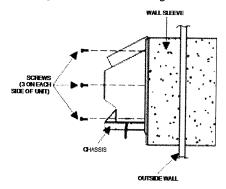
CHASSIS INSTALLATION

- Remove the cabinet front from the chassis as described in Front Removal.
- 2. Insert the chassis into the wall sleeve.



Chassis Installation View 1

3. Slide the chassis into the wall sleeve until the chassis flanges contact the front edge of the wall sleeve.



Chassis Installation View 2

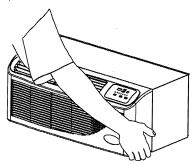
4. Secure the chassis to the wall sleeve using three screws on each side of the chassis to ensure a proper seal between the chassis and the wall sleeve. The screws are supplied in a plastic bag.

IMPORTANT NOTES:

- 1. The unit is equipped with a rubber grommet-mounted compressor. These grommets are factory set and require no adjustment.
- 2. Check the indoor and outdoor grilles for obstructions to air flow. The unit must be located where curtains, furniture, trees, or other objects do not block the air flow to and from the unit. If air is obstructed and/or deflected back into the unit, the air conditioner compressor may cycle on and off rapidly. This could damage the compressor or possibly void the warranty.

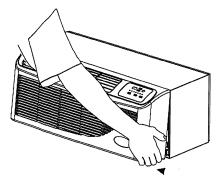
FRONT REMOVAL

1. Grasp the cabinet front.



Cabinet Front Removal (View 1)

2. Pull the bottom of the cabinet front away from the chassis until the retaining clips disengage.



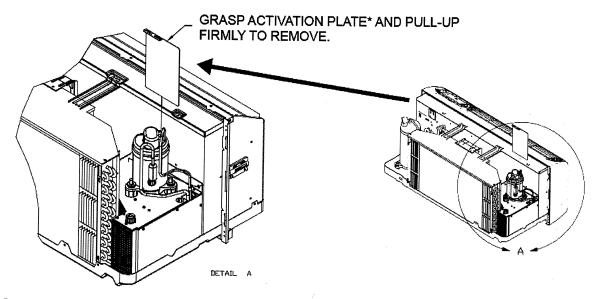
Cabinet Front Removal (View 2)

3. Lift the cabinet front off the chassis. Reverse this procedure to reinstall the cabinet front.

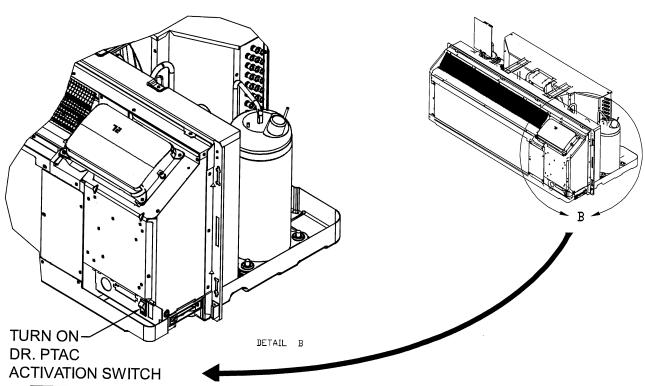
DR.PTAC UNITS (EZDR Series)

Only on EZDR units (these units are equipped with the Make-up Air Dehumidifier option) - Perform the following steps prior to turning on unit for the first time to activate this option:

STEP 1:



STEP 2:



- * IMPORTANT NOTES FOR PEFORMANCE TESTING!
 - 1. Activation Plate must be installed during Performance Testing in order to obtain accurate test
 - 2. DIP Switch 8 on the Main Board must be set to ON (Constant Fan) position during testing (refer to DIP Switch Settings paragraph on page 11).
 - 3. The DR. PTAC Activation Switch must be in the OFF position when Activation Plate is installed.
 - 4. Set fan speed to maximum speed (High).

WIRING

Cord connection to a wall socket is not permitted for 265V units. All 265V units must be hard-wired using the hard wire kit or make use of the plug-in receptacle in the standard sub-base.

230~208V units are equipped with LCDI power cords and can open the electrical circuit to the unit. In the event the unit does not operate, check the reset button located on or near the head of the power cord as part of the normal trouble shooting procedure.

A WARNING

HIGH VOLTAGE

DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT, FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

DO NOT SERVICE THIS UNIT WITHOUT FIRST SHUTTING OFF THE POWER TO THE UNIT FROM THE CIRCUIT BREAKER AND/OR REMOVING THE UNIT CORD SET PLUG FROM THE WALLOUTLET.

A WARNING

TO AVOID THE RISK OF PROPERTY DAMAGE, PERSONAL INJURY OR FIRE, USE ONLY COPPER CONDUCTORS.

A WARNING

TO AVOID THE RISK OF PROPERTY DAMAGE, PERSONAL INJURY OR FIRE, DO NOT INSTALL WITH POWER CORD STRETCHED OR UNDER A STRAIN AS THIS MAY CREATE LOOSE PLUG/RECEPTACLE CONNECTION.

A WARNING

TO AVOID THE RISK OF PERSONAL INJURY, WIRING TO THE UNIT MUST BE PROPERLY POLARIZED AND GROUNDED.

▲ WARNING

TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH DUE TO ELECTRICAL SHOCK, DO NOT USE AN EXTENSION CORD WITH THIS UNIT.

A WARNING

THIS AIR CONDITIONER IS NOT MEANT TO PROVIDE UNATTENDED COOLING OR LIFE SUPPORT FOR PERSONS OR ANIMALS WHO ARE UNABLE REACT TO THE FAILURE OF THIS PRODUCT.

THE FAILURE OF AN UNATTENDED AIR CONDITIONER MAY RESULT IN EXTREME HEAT IN THE CONDITIONED SPACE CAUSING OVERHEATING OR DEATH OF PERSONS OR ANIMALS.

VOLTAGE MEASUREMENTS

Once the unit is properly wired, measure the unit supply voltage. Voltage must fall within the voltage utilization range given in Chart 3.

Operating Voltage				
Unit Voltage Voltage Utilization Range				
Rating	Minimum	Maximum		
230/208	197	253		
265	238	292		

Chart 3 - Operating Voltage

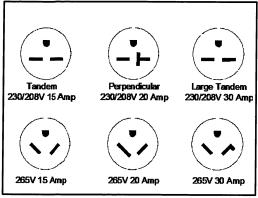


Fig 7. Receptacles/Sub-bases

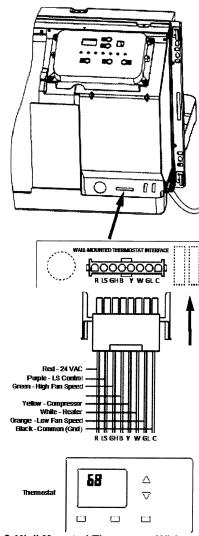


Fig 8. Wall Mounted Thermostat Wiring

OPERATING INSTRUCTIONS

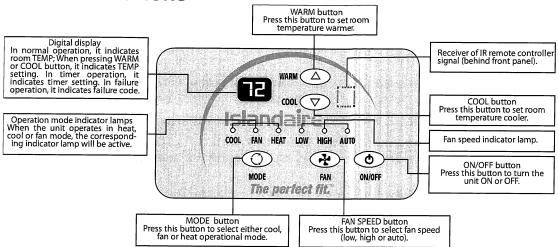


Fig 9. Use of Unit-Mounted Control Panel

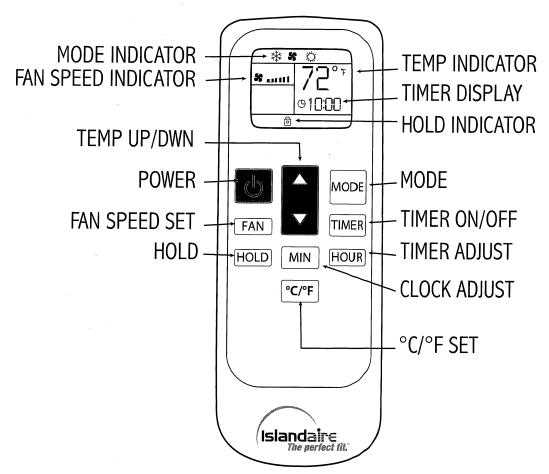


Fig 10. Use of Hand-Held Remote Controller

COOL/FAN/HEAT MODE OPERATION PROCEDURE

Control Panel:

- Press the ON/OFF button.
- Press the MODE button, select the operation mode: cool/fan/heat.
- Press + or button to set your desired temperature. The setting temperature range is 60 - 90 °F (16 - 32 °C).
- Press the FAN button, to set your desired air flow rate: low/high/auto.

Remote Controller:

- Press the Power button on the remote controller pointing toward the packaged terminal air conditioner.
- Press the MODE button to select the operation mode: Cool/Fan/Heat.
- Press TEMP UP or TEMP DOWN button to set your desired temperature. The setting temperature range is 61 - 88 °F (16 - 31 °C).
- Press the FAN button to set your desired air flow rate (Auto/High/Low).

Clock Setting (Remote Controller)

When battery cells are inserted, the default time is automatically set to "12:00" (note that clock is 24 hour format). Press the MIN button to set to current time.

Timer Setting (Remote Controller)

- To adjust the timer setting, use the HOUR button to select operation time (1 to 12 hours of operation).
- Press the TIMER ON/OFF button to enable/disable timer function.

SERVICE SETTINGS (Control Panel)

- 1) **Temperature Unit key**: Press + and buttons simultaneously for 3 seconds, the temperature is shifted between Centigrade and Fahrenheit units on the display.
- 2) **Temperature setting limiting**: Press + and FAN SPEED buttons simultaneously to enter the maximum and minimum temperature settings (see Chart 3). R1 \sim R8 will display every 3 seconds. Release the two keys to ensure the setting is effective and the set values will remain for 5 seconds. The temperature setting range is between 60 °F \sim 90 °F by default.

Chart 3. Temperature Setting Limiting

R1	R2	R3	R4	R5	R6	R7	R8
Heating Temperature Limits (°F)							
86	86	90	74	92	90	72	90
Cooling Temperature Limits (°F)							
63	65	72	72	67	69	68	60

3) Remote thermostat change: In standby off mode, press MODE and + buttons simultaneously for 3 seconds, the buzzer will chime and LED display reads "P" or "F".

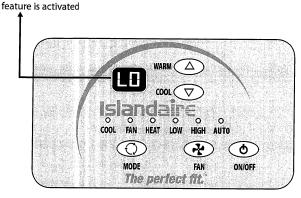
P: unit control panel has control of unit.

r: wall thermostat has control of unit.

LOW TEMPERATURE PROTECTION

A standard feature of the Islandaire electronic control system is the 'Low Temperature Protection' option. If an indoor temperature of 50 °F (or below) is detected, the heat cycle will automatically activate (even if the unit is in the OFF position). While the 'Low Temperature Protection' feature is activated, the letters 'LO' will be displayed. The heat cycle will continue until the room temperature reaches 55 °F, at which time the unit will satisfy and shut down.

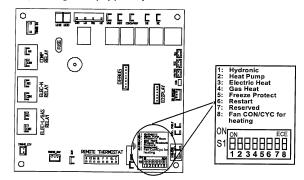
'LO" indicates that the Low Temperature Protection



Note: Cutting power to the unit or setting DIP Switch #5 (located on the Main Board) to OFF position can interrupt unit function while the 'Low Temperature Protection' feature is activated.

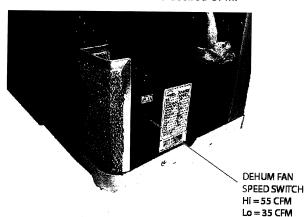
DIP SWITCH SETTINGS

A DIP switch is located on the Main Control Board, as shown in the diagram below. Settings are unit-specific, depending on equipped options.



DEHUMIDIFIER OPERATION (EZDR Series)

On EZDR units, the dehumidifier unit has a two-position switch (Lo - 35 CFM / Hi - 55 CFM). The factory default setting is 35 CFM for 7k BTU units (unless otherwise specified on the sales order) and 55 CFM for all other BTU units. Set the switch to the desired CFM.



VENTILATION CONTROL

The ventilation control lever is located at left side of unit, behind the front panel.

NOTE: The vent door shipping tape must be removed before using vent control lever (see Fig 11 and Fig 12).

When in CLOSE position, only the air inside the room is circulated and filtered.

When in OPEN position, some outdoor air will be drawn into room, this will reduce heating or cooling efficiency.

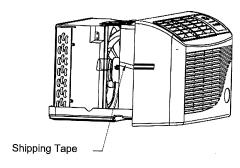


Fig 11. Shipping Tape Location

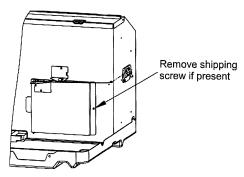


Fig 12. Shipping Screw Location

The vent control allows outside air to be drawn into the conditioned area. This outside air can provide ventilation when the blower is operating, but it will increase the heating or cooling load and operating costs.

To obtain access to the vent control:

- 1. Remove the cabinet front (see Front Removal).
- Remove the shipping screw (if installed) from the vent door.
- 3. Remove the label (if present) from over the vent control lever on the left side of the chassis.
- 4. Rotate the vent control lever to either open or close the damper.

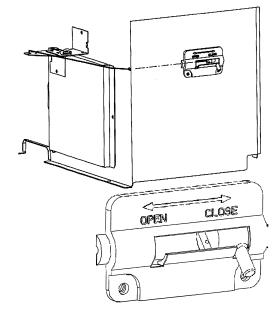


Fig 13. Vent Door Lever Positions

MAINTENANCE AND CLEANING

A WARNING

HIGH VOLTAGE

DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT, FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

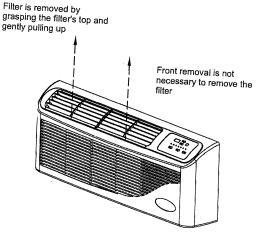
MONTHLY MAINTENANCE AND CLEANING

Intake Air Filters

To properly maintain the operational performance of your PTAC unit, it is extremely important that the inlet air filters be cleaned once per month or more often if operated in dusty or dirty locations or conditions. The intake air filters are constructed of durable polypropylene. The air intake filters can be easily inserted into the cabinet front, using the filter guides. Before cleaning the intake filter, turn the unit off by setting the mode switch to the OFF position. Filter should be cleaned as required.

The following procedure is used to remove the intake filter:

- Grasp each filter by its molded handle, located on the front edge of the front, below the discharge grille.
- 2. Pull the filter straight up and remove.
- 3. Clean filter with vacuum or with running water. Reverse this procedure to reinstall the filter



Vent Screen

Before cleaning the vent screen, disconnect power to the unit by unplugging the power cord at the wall outlet or subbase, or disconnect power at the fuse box or circuit breaker. If unit is operated with vent door closed, the vent screen does not need to be cleaned.

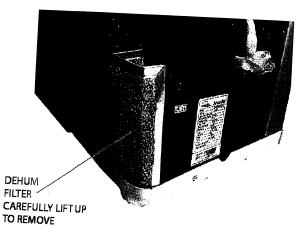
- Remove the cabinet front as described in Front Removal.
- 2 Remove the six screws securing the chassis to the wall sleeve.
- Slide the chassis out of the wall sleeve far enough so that the vent screen is accessible.
- 4. Clean the vent screen, slide the chassis back into the wall sleeve, secure it in place with six screws and reinstall the front cabinet.

Cabinet Front

The cabinet front and discharge air grille can be cleaned with a water dampened cloth. Under no circumstances should hydrocarbon-based cleaners (e.g., acetone, benzene, naphtha gasoline, etc.) or ammonia based cleaners be used to clean the front or air grilles. Use care when cleaning the control area.

EZDR Units - Dehumidifier Filter Cleaning

On EZDR Series units, the dehumidifier filter requires periodic cleaning (quarterly is recommended, more frequently if located in dusty or corrosive environment). The filter can be cleaned with water. See figure below for filter location.



YEARLY MAINTENANCE AND CLEANING

NOTE: Use a mild biodegradable detergent when cleaning the unit. Special care must be taken to protect the unit's control board and other electrical components from getting any water on them while cleaning. The use of harsh or caustic cleaning agents or materials such as bleach or coil cleaners that are not designed for PTAC products will cause damage or deterioration of the aluminum fin or coil material and is not recommended. Care must be taken not to bend the aluminum fin stock.

Routine Scheduled Maintenance

To achieve continuing top performance and high efficiency, establish a "once a year" cleaning/inspection schedule for the unit. Take the unit out of the sleeve and thoroughly clean and rinse. Be sure to include in the yearly cleaning the evaporator coil, condenser coil, base pan, and drain passages.

Scheduled maintenance can be accomplished by either qualified local maintenance staff or by an authorized servicer. They must follow the instructions described in this manual.

Adverse Operating Conditions Maintenance

Units operating in dusty or corrosive locations; i.e., dusty construction site or sea coast, must be cleaned more often. A minimum of four (4) times a year will maintain proper operational conditions and protect unit components.

Wall sleeve

Clean the wall sleeve while cleaning the unit. The caulking around the sleeve should be checked to make sure that any potential air and water openings around the sleeve are properly sealed. The wall sleeve's level should also be rechecked. Proper leveling for most installations are a 1/4 bubble tilt to the outside and level from right to left. Contact your sales person for detailed maintenance or cleaning instructions.

A WARNING

DO NOT USE COMMERCIAL GRADE COIL CLEANERS. SOME OF THESE CLEANERS MAY CONTAIN ETHYLENE DIAMINE TETRACETIC ACID (EDTA) WHICH CAN SHORTEN THE LIFE OF THE CONDENSER COIL.

A WARNING

HIGH PRESSURE AND HIGH TEMPERATURE CLEANING IS NOT RECOMMENDED.

DOING SO COULD DAMAGE THE ALUMINUM FIN STOCK AND ELECTRICAL COMPONENTS.

Base pan and Condenser coil

Before cleaning the base pan and condenser coil, turn OFF unit mode switch and disconnect power to the unit.

To disconnect power, either unplug the power cord at the wall outlet or subbase, or disconnect power at the fuse box or circuit breaker.

- 1. Create a water tight seal by tightly covering the entire control panel area and fan motor with plastic. Creating this seal prevents water from entering the control area or the fan motor and damaging the unit.
- 2. Spray condenser coil and base pan down with water. Next spray a mild biodegradable detergent onto the condenser coil and base pan. Let set for five (5) minutes.
- 3. Rinse condenser coil and base pan with water again.

NOTE: Ensure water pressure is no higher than that of an ordinary garden hose and the water temperature no higher than 120 °F.

- 4. Tilt the non-compressor side of the unit up no higher than 45° and allow water to drain out the other side of the unit.
- 6. Remove the water-tight seal from the motor and control panel area.
- 7. Reinstall unit back into wall sleeve.
- 8. Allow unit to dry for 24 hours before reapplying power. When power is reapplied, test unit for proper operation.
- 9. Place a non-acidic algaecide in the base pan to inhibit bacteria growth. Ensure the algaecide is compatible with wet coil operation and is not corrosive to the coil.

Clearance Check

Clearances around the unit should also be checked to make sure that the intake air and discharge air paths have not become blocked or restricted. A minimum of eight inches clearance is needed from unit to furniture, beds, or other objects for proper operation. Restricted discharge or intake air will reduce the unit's operational performance. In severe airflow restrictions damage can occur to unit components such as the compressor, electric heater or fan motor.

NORMAL OPERATING SOUNDS AND CONDITIONS

Water tricklingsounds

Water is picked up and distributed over the coil. This improves the efficiency and helps with water removal.

Water dripping

Water will collect in the base pan during high humidity days. This can cause overflow and drip from the outside of the unit.

Air sounds

The fan cycle switch sets the operational mode of the fan. In the ON position, the fan will run continuously whenever power is applied in this mode. In the AUTO position, the fan will cycle on and off with the compressor or electric heater.

Starting delay

You may notice a few minutes delay in starting if you try to restart the unit too soon after turning it off or if you adjust the thermostat right after the compressor has shut off. This is due to a built-in delay to protect the compressor.

Buzzer Response

The buzzer will chime "Di" (0.1 sec) in response when receiving the effective order from key pad control and remote control.

DIAGNOSTIC CODES

The Diagnostic Maintenance provides detailed information on PTAC control operation and operational status including present modes, failures, airflow restriction warnings, operating temperatures, and past failures.

To enter Diagnostic Status Report mode, press and hold the temp down (–) key and the FAN SPEED key simultaneously for a period of five (5) seconds.

The diagnostic information is presented in the following format: X.Y

Where:

"X" indicates the failure type:

- 1 = anti-frost
- 2 = overheat
- 3 = high pressure
- 4 = anti-freezing

"Y" indicates the number of occurrences within a one hour period (0~4: time of protection)

Note: If the number above is greater than 4, the compressor shuts off and a Failure Code appears in the display (e.g., "E8"). See chart below for Error Codes and their meanings:

Content of defect
Indoor coil temperature sensor failure
Indoor temperature sensor failure
Outdoor coil temperature sensor failure
Overheating protection/ defrosting
High pressure protection
֡

TROUBLESHOOTING

POSSIBLE CAUSES	SOLUTIONS
UNIT DOES NOT START	
Unit may have become unplugged	Chook that all and
	Check that plug is plugged securely in wall receptacle. Note: Plug has a test/reset but.
_	has a lestreset button on it Make sure the
Fuse may have blown	plug has not tripped.
Circuit breaker may have been tripped	Replace the fuse
Unit may be off or in wall thermostat mode.	Reset circuit breaker
Unit may be in a protection and it.	 Turn unit on (bottom right button on keypad).
Unit may be in a protection or diagnostic failure mode. STRANCE NUMBER OF THE PROPERTY O	Check diagnostic codes - See section on diagnostic cod
STRANGE NUMBERS/CHARACTERS ON DISPLAY	
Unit may be in a protection or diagnostic failure mode.	• The unit may be in a dia
	The unit may be in a diagnostic condition. Check diagnostic codes. See section.
 Check section on DIP switch settings to verify dip switches are set properly. 	diagnostic codes - See section on diagnostic codes. The unit may be set for SC (instead of SE)
Propony.	 The unit may be set for °C (instead of °F), see the keypa operation section.
UNIT MAKING NOISES	
	Clicking, gurgling and whooshing noises are normal during operation of units.
	during operation of unit.
UNIT NOT COOLING / HEATING ROOM	
Unit air discharge section is blocked	Make sure that ourtains I !!
Temperature setting is not bit.	 Make sure that curtains, blinds or furniture are not restricting or blocking unit airflow.
 Temperature setting is not high or low enough. 	Reset to a lower or higher temperature setting. Set point limits make the limits and th
	Set point limits may not allow the unit to heat or cool the room to the desired towns and towns
	room to the desired temperature settings. Check Service
Unit air filters are dirty.	
Room is excessively bet and the	Remove and clean filters.
Room is excessively hot or cold when unit is started.	Allow sufficient amount of time for a second s
	Allow sufficient amount of time for unit to heat or cool the room. Start heating or cooling early before outdoor temperature, earlier to the start heating or cooling to the start heat or cooling to the start heat or cool the start heat or cooling to the start heat or cooling to the start heat or cooling to the start heat or cool the start heat or cooling to the start heat or cool th
	temperature, cooking heat or gatherings of people make
Vent door left open.	
Unit may be in a protection and	Close vent door.
Unit may be in a protection or diagnostic failure mode.	Check section on Diagnostic Codes.
Compressor is in protective time delay	• Wait approximately 2 min 1
Note: To prevent tripping of the compressor overload, there is a protective time delay (approx. 2)	 Wait approximately 3 minutes for compressor to start.
Tarriod on.	
ATER DRIPPING OUTSIDE	
	If a drain kit has not been installed, condensation runoff during Very hot and humid weather is personal. If the property is not a property to the property of the prope
	" otaliod di la cultifecten in a drain evetem al i
TER DRIPPING INSIDE	and fittings around drain for leaks and/or clogs.
Vall sleeve is not installed level.	
	Wall sleeve must be installed level for proper drainage of condensation. Check that have the standard for proper drainage of condensation.
	obligation. Clieck mai installation is lovel and in the
OR FROST FORMS ON INDOOR COIL	any necessary adjustments.
ow outdoor temperature.	
	If outdoor temperature is approximately 55 °F (12.8 °C) or below, frost may form on indexes all.
ı	
nit air filters are dirty.	
	Remove and clean filters.
MPRESSOR PROTECTION	
ower may have cycled putting compressor in Random	• To prevent short such
ompressor restart protection.	To prevent short cycling of the compressor whenever the unit is plugged in or power has been suited.
	restart will occur. The restart delays start-up of the compressor for approximately 3 minutes, and then forces a minimum
	compressor run time of 3 minutes.

NOTES	
· · · · · · · · · · · · · · · · · · ·	



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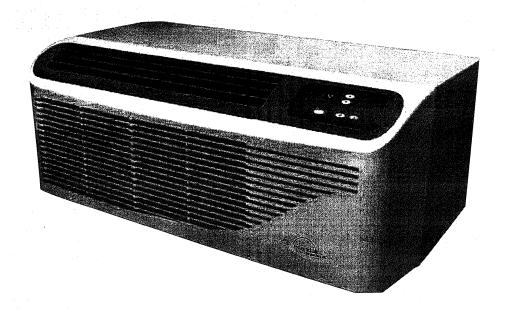
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E-mail: sales@islandaire.com Web www.islandaire.com



Doc. No. 6140432 Rev. D





EZ Series 42 & EZ Series DR (DR.PTAC)

42"W x 16"H PTAC/PTHP

Perfect fit for Replacing Existing 42" x 16" Units and for New Construction Projects



AHRI Certification applicable to EZ42 models only



ENGINEERING MANUAL

MANUFACTURER OF QUALITY AIR CONDITIONING AND HEATING PRODUCTS

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OUR COMPANY

Islandaire is the fastest growing specialty air conditioning and heating manufacturer in the country. Founded in 1992 by Robert Hansen, it has grown into a multi-million dollar company in just a few short years. Islandaire builds a full complement of high quality thru-the-wall replacement air conditioners and heat pumps, water source heat pumps, and gas units in St. James, New York. Each model fits perfectly into the existing original wall case assembly, thereby saving both time and money during installations.

Our Engineering, Production, Sales and Customer Service departments have been fully integrated to provide the maximum degree of user satisfaction. We at Islandaire feel that this team approach to manufacturing produces a superior overall product and assures a larger degree of flexibility in design and production scheduling to meet tight prototyping or construction timetables.

THE PERFECT FIT

Thru-wall air conditioners were developed in the late 1950's. Over the next forty years many companies engineered, manufactured and installed a variety of different units throughout the United States and Canada. Today, a number of these companies are no longer in business, or have discontinued their line of thru-wall air conditioners and no longer carry replacement parts.

Islandaire offers replacement air conditioners and heat pumps that are interchangeable with units no longer available from the original manufacturer. Our units are engineered to fit perfectly within the existing wall case, thereby reducing installation time and expense. They are manufactured at our modern 75,000 square foot plant on Long Island in New York.

Thank you for considering our products,

The Islandaire Team

APPLICATIONS

The EZ Series 42 and DR units are designed and manufactured for new construction or the replacement of packaged terminal air conditioning (PTAC) units in an existing building. Our packaged terminal air conditioning (PTAC) units provide year-round comfort control for hotels, motels, apartments, dormitories, shops, nursing homes, assisted living centers, satellite offices, room additions and other applications that require economical heating and cooling.

The product is designed for individually-zoned, comfortcontrolled, heating and cooling. The unit width is an industry standard 42". We offer our cooling chassis to operate with cooling only or electric heat. The design standards, heavy duty construction and the focus on indoor noise reduction has created our unit as the premier unit of the future. Individually controlled PTAC units are ideal for rooms that are not occupied during vacancies, holidays, weekends or nights. Individual units allow tenants to choose the degree of comfort and operating economy.

Thermostat and fan controls are built into the digital touch-pad, plus all units have the flexibility to convert to a wall thermostat control, or interface into energy management systems. Whether you are designing a new structure or replacing PTAC units in an existing building, Islandaire will meet your needs.

NEW CONSTRUCTION

The Islandaire EZ42 and EZDR Packaged Terminal Air Conditioning (PTAC) unit is designed to meet the needs of the architect, engineer, and contractor. For unit installation, Islandaire's expert support network will assist in all applicable aspects of the construction project, from preparing a budget to start-up.

ADVANTAGES FOR NEW CONSTRUCTION

Design Flexibility For The Architect Engineer

- Super-quiet performance, indoors and out
- No bulky duct system
- No separate equipment room
- No water towers or additional cooling equipment
- Less sensitivity or building orientation
- Optional architectural grille to permit custom exterior appearance

LOWER OPERATING COSTS & RELIABLE COMFORT FOR THE OCCUPANT

Islandaire helps lower utility costs with energy efficient units that exceed industry standards. Energy savings are achieved in both heating and cooling environments through efficient mechanical design and onboard electronic logic. Separate indoor and outdoor fans provide lower operating costs. Energy management software is built into the unit's standard digital controls.

These units may also qualify for electrical power company rebates. (Consult your local utility provider for rebate opportunities.)

RETROFIT/REPLACEMENT

Islandaire PTAC units are engineered to fit perfectly within most existing wall sleeves, thereby reducing installation time and expense. There is no time wasted on redesigning an existing wall opening or removing an old wall sleeve. Just slide the old chassis out and replace with a new one from Islandaire.

EZ Quick slide-out chassis eases installation into the wall sleeve. Rapid servicing reduces downtime: complete chassis can be replaced in minutes without disrupting other occupants.

APPLICATIONS (cont.)

APPLICATION CONSIDERATIONS

It is important for air conditioning systems to be properly sized for each application in order to achieve desired temperature and humidity levels. It is strongly recommended that a professional engineer match the PTAC units with the building structure and climate.

The following application considerations are all important in choosing the proper PTAC system for the building structure.

UNDERSIZING

If a PTAC unit is undersized (cooling capacity is less than required capacity for an application), the unit will not be able to cool the space down to the desired temperature during very hot days.

OVERSIZING

If a PTAC unit is oversized (cooling capacity is greater than required capacity for the specific application), the unit will cool the space down to the desired temperature too quickly creating a cool, yet excessively humid, space.

AIR INFILTRATION

Excessive air infiltration can intensify problems associated with undersizing or oversizing a PTAC unit. This can be the cause of insufficient cooling, dehumidification, or heating. Sources of air infiltration include vents, gaps around windows and doors, and improperly sealed floors, ceiling or wall joints.

GUARANTEED QUALITY

Each Islandaire unit is designed to operate quietly and efficiently and is backed by the best warranty program available. Standard warranty is one year parts and labor including five year compressor part only warranty or two year parts only including five year compressor part only warranty.

Whether it is an exact replacement unit or a new construction project, Islandaire is the smart choice for all your air conditioning and heating needs.

INDOOR AIR QUALITY - DR. PTAC (EZDR SERIES UNITS ONLY)

In addition to an already quiet unit, we have co-developed an indoor air quality option called Dr.PTAC.

Dr.PTAC is currently designed as a two-stage system. The primary stage conditions room air and tempers the air to acceptable air quality levels. The secondary stage brings in conditioned outside air at a rate of up to 55 CFM, to compensate for toilet exhaust and room occupancy, and continuously pressurizes the room. The secondary stage is initiated by an outdoor humidistat that allows the unit to condition the incoming fresh air about 50% RH. The system can be calibrated to run at higher outdoor RH levels, but the recommended maximum set point 50% outdoor RH. When outdoor RH levels are above the set point, the secondary compressor is initiated and conditions make up air below the set point.

The secondary fan continuously runs allowing fresh, conditioned, make-up air at a rate of up to 55 CFM (leaving coil CFM) to enter the room. The unit is manufactured in accordance to ARI, UL, CSA standards for the primary side and AHAM and UL standards for the secondary side.

PRODUCT OVERVIEW

QUIET OPERATION

The cross-flow tangential fan wheel design used in our PTAC units provide whisper quiet operation while delivering maximum airflow required for proper air circulation. Separate indoor and outdoor fan motors further reduce operating sound levels and costs.

The heavy gauge construction of the chassis and cabinet minimizes vibration for quieter operation. Vibration isolators on the rotary compressor keep it running smoothly and quietly. The unit bulkhead is fully insulated to decrease outdoor sound transmission. The compressor is isolated to minimize vibration and sound transmission for quiet operation.

DURABLE CONSTRUCTION

- Islandaire PTAC/PTHP units are built with durable, quality components designed for continuous operation in all environments.
- Our wall sleeves are constructed of thick 18-gauge steel with a tough baked-on finish for maximum durability.
- The outdoor fan motor is totally enclosed, preventing damage from moisture and debris introduced by extreme weather conditions. Both indoor and outdoor fan motors are permanently lubricated for extended life.
- Electrical components are located on the indoor side of the wall protecting them from driving rain and humidity.
- The compressor is a reliable, high efficiency design rotary compressor. It is hermetically sealed and designed for continuous operation.
- Repositionable discharge grille allows angle of airflow to be adjusted according to application. Made from tough plastic material that won't rust, resists scratches and is easy to clean.

CORROSION PROTECTION

All Islandaire PTAC units have corrosion protection that can help extend the life of the unit. Below are just some of the components that feature corrosion protections:

Wall Sleeve - The entire wall sleeve is constructed of 18-gauge steel. Treated inside and outside with a baked-on based powder coat paint to protect it from the corrosive effects of salt spray.

- Base Pan Base pan has a corrosion resistant coating to protect it from the elements.
- **Condenser Coil** Constructed using Blue hydrophilic aluminum fin coating.
- **Condenser Fan Blade** Constructed of strong engineered plastic that has excellent flame resistance and dimensional stability over a wide range of service temperatures.
- **Compressor** Durable, powder-coated paint
- Outdoor Louver Architectural style is made of anodized aluminum for maximum corrosion protection. Also available in stamped aluminum that can be powder-coated painted in a wide choice

OPTIONAL "SEACOAST PROTECTION"

Application of air conditioning equipment in a corrosive environment such as salt water spray, chlorine and acid vapor requires special consideration. Our Seacoast Corrosion Protection treatments shield the unit from corrosive environments and extends the life of the unit. especially in coastal locations. Islandaire offers two Seacoast Protection upgrade options:

- Islandaire Basic Seacoast Protection
- Islandaire Extreme Seacoast Protection

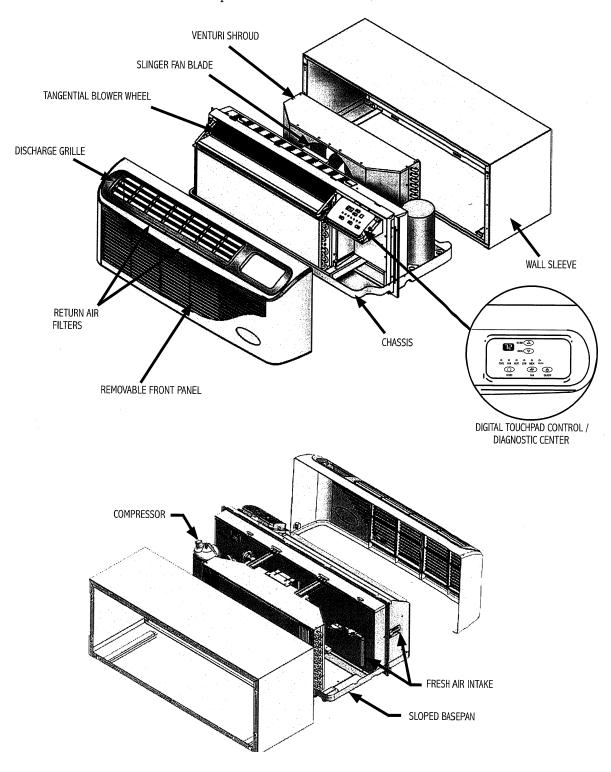
Basic Seacoast Protection includes Cal-Shield protective coating of both the Evaporator and Condenser coils.

Extreme Seacoast Protection includes Enercoat protection of the evaporator and condenser coils and all outdoor steel components (e.g., compressor, condenser motor, reversing valve and metering device), as well as all outdoor hardware

Contact your sales representative for additional Seacoast Protection details and pricing information.

PRODUCT OVERVIEW (cont.)

Islandaire manufactures the EZ42/EZDR unit loaded with standard features that other manufacturers often consider optional.

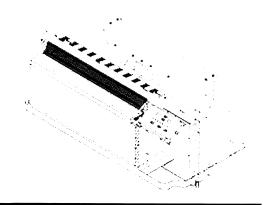


CHASSIS FEATURES AND BENEFITS

SLIDE OUT CHASSIS

- Slide-out chassis makes installation simple
- All components are readily accessible to service personnel
- On-board diagnostic software and display help diagnose potential problems
- Designed to replace older units with minimal modification
- Isolated rotary compressor design for continuous efficient, reliable and quiet operation

See page 28 for chassis installation instructions

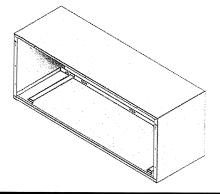


WALL SLEEVE

Part Number 2401135-00

- Thick insulation on the top and sides to reduce noise and increase efficiency
- Heavy 18 gauge steel with powder paint coating for maximum scratch, dent and corrosion resistance

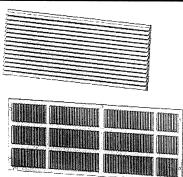
See page 19 for wall sleeve installation instructions



EXTERIOR LOUVER/GRILLES

- Architectural extruded aluminum grille, Part Number 6070422
- Custom colors available (Ask for our color chart sheet)
- Stamped Grille, Part Number 6070264

See page 22 for exterior grille installation instructions

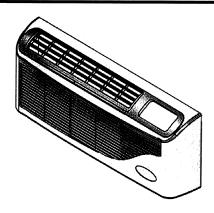


REMOVABLE FRONT PANEL

Part Number 6130133

- Made from durable ABS plastic that won't rust, resists scratches and is easy to clean and maintain
- Quick removal ensures shorter installation time and faster service calls
- Easy access to removable filters

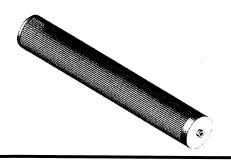
See page 29 for front cover installation instructions



CHASSIS FEATURES AND BENEFITS (cont.)

TANGENTIAL BLOWER WHEEL

- Creates extremely quiet indoor operating environment
- Generates a balanced and constant airflow into the room

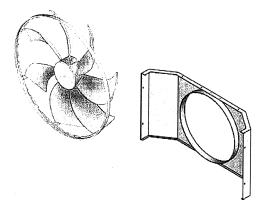


SLINGER FAN

- Curved fan blades increase airflow across the outside coil
- Creates a quiet operating environment outside of building
- Slinger ring efficiently removes condensate and increases cooling

Venturi Shroud

- Works with the fan to maximize air flow and increase efficiency
- Removes easily for quick access when cleaning the condenser coil



RETURN AIR FILTERS

(2 per) Part Number 6080067

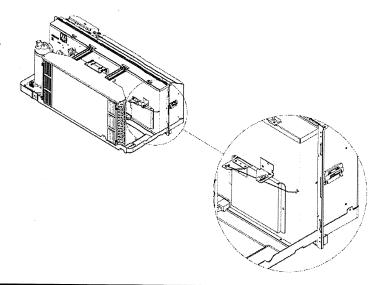
- Easily removable from the front of the unit for cleaning
- Filters the circulated air inside the room
- Keeps the system clean and working efficiently
- Clean filters increase life of the system components

See page 31 for maintenance information

FRESH AIR VENT

- · Allows fresh air to be drawn into the room when indoor fan is operating
- Manual control allows uninterrupted operation

See page 30 for fresh air vent information





ORDERING DATA - EZ SERIES 42

MODEL NOMENCLATURE

Please review the nomenclature/model number breakdown below for the EZ Series 42 options.

Units are available in four cooling BTUH sizes:

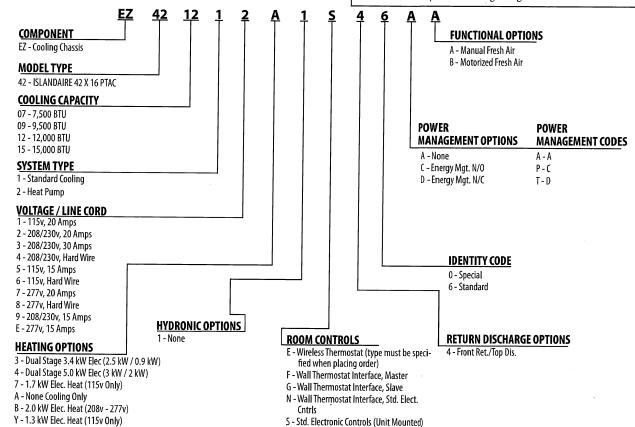
7,500; 9,500; 12,000; 15,000

Voltage options are: 115V, 208/230V, and 277V

Control choices include a unit-mounted digital control; multiple wired wall-mounted heating/cooling thermostats and a wireless wall thermostat, with occupancy sensor control.

NOTE

Note: 277V units must have a permanent wiring connection. This requirement can be met either by using a subbase for concealed cord connection or by direct wiring using a hard-wire kit.



REPLACEMENT GUIDE

MANUFACTURER MODEL	MODEL	MODEL WALL OPENING DIMENSION 16 1/4" x 42 1/4"		DISCHARGE		RETURN AIR		HEAT TYPE	
				ANGLED	FLAT	BOTTOM	FRONT	ELECTRIC	HYDRONIC
		AC	HP						
AMANA	PTC	•	•	•		•	•	•	•
CLIMATE MASTER	PIP	•	• .	. •	•	•	•	•	•
	PDE	•	•	•	•		•	•	
McQUAY	PSE	•		•		•	•	•	•
-	MQE	•	•	•			•	•	•
GREE	ETAC	•	•	•	•	•	•	•	•
TRANE	PTE		•	•	•	•	•	•	•
LG	LP	•	•	•	•	•	•	•	•
GE	AZ	•	•	•	•		•	. •	

PERFORMANCE DATA - EZ SERIES 42

PERFORMANCE DATA FOR EZ42 SERIES

					MOD	ELS					
		EZ07			EZ09			EZ12		EZ15	
/OLTS	115	208 / 230	277	115	208 / 230	277	115	208 / 230	277	208 / 230	277
3TUH COOL	7200	6,800 / 7,200	7,200	9,800	9,300 / 9,500	9,500	12,500	12,300 / 12,500	12,500	14,300 / 14,500	15,000
AMPS COOL	4.91	2.52 / 2.46	2,11	7.22	3.70 / 3.41	2.83	9.30	5.05 / 4.65	3.86	6.49 / 5.96	5.20
NATTS COOL	565	525 / 565	585	830	770 / 785	785	1,070	1,050 / 1,070	1,070	1,350 / 1,370	1,440
EER	12.8	13.0 / 12.8	12.3	11.8	12.1 / 12.1	12.1	11.7	11.7 / 11.7	11.7	10.6 / 10.6	10.4
OFM HIGH COOL	340	340 / 375	360	340	340 / 375	360	340	340 / 375	360	360 / 360	360
SFM LOW COOL/	240	240 / 260	260	240	240 / 260	260	240	240 / 260	260	240 / 260	260
3TUH HEAT	6400	6,300 / 6,400	6,100	8,500	8,300 / 8,500	8,500	11,400	11,000 / 11,400	11,400	13,200 / 13,600	14,000
NATTS HEAT	530	520 / 530	520	710	685 / 700	710	980	915 / 950	980	1,150 / 1,180	1,300
C.O.P.	3.5	3.6 / 3.5	3.4	3.51	3.6 / 3.6	3.51	3.4	3.5 / 3.5	3.4	3.4 / 3.4	3.16
NOISE INDOOR/ DUTDOOR (DBA)	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69
SHIPPING VEIGHT (LB)	116	116	116	116	116	116	116	116	116	112	119

HEATING OPTIONS

Heating Option	Voltage (I)	Wattage	BTU/h	Amps (2)
	208	2,780	9,500	13.37
3	230	3,400	11,600	14.78
	277	3,600	12,300	13.00
	208	4,090	14,000	19.66
4	230	5,000	17,100	21.74
	277	5,000	17,100	18.05
7	115	1,700	5,800	14.78
	208	1,635	5,600	7.87
В	230	2,000	6,800	8.70
	277	2,500	8,500	9.03
Υ	. 115	1,300	4,400	11.30

⁽I) Voltage is Single Phase, Alternating Current and R.M.S.

⁽²⁾ Amp values are for heating element only

ELECTRICAL				EZ42			
LINE VOLTAGE	115	115	208/230	208/230	208/230	277	277
MAXIMUM AMPERAGE	15	20	9	16	24	16	24
WALL SOCKET CONFIGURATION			•	<u>-</u>		(•)	(<u>*</u>)
RECEPTACLE NUMBER	NEMA 5-15R	NEMA 5-20R	NEMA 6-15R	NEMA 6-20R	NEMA 6-30R	NEMA 7-20R	NEMA 7-30R
ELECTRICAL HEAT OPTIONS	1.3	1.7	2.0	3.4	4.2 - 5.0	2.0 - 4.2	5.0

ORDERING DATA - EZ SERIES DR (DR.PTAC)

MODEL NOMENCLATURE

Please review the nomenclature/model number breakdown below for the EZ Series DR options.

Units are available in four cooling BTUH sizes:

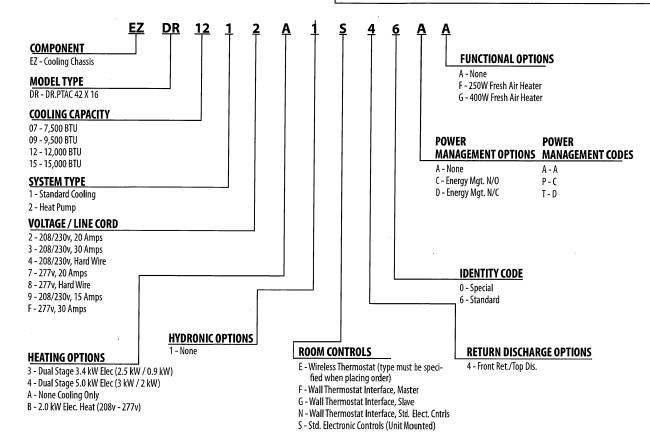
7,500; 9,500; 12,000; 15,000

Voltage options are: 208/230V and 277V

Control choices include a unit-mounted digital control; multiple wired wall-mounted heating/cooling thermostats and a wireless wall thermostat, with occupancy sensor control.

NOTE

Note: 277V units must have a permanent wiring connection. This requirement can be met either by using a subbase for concealed cord connection or by direct wiring using a hard-wire kit.



REPLACEMENT GUIDE

MANUFACTURER MODEL		WALL OPENI	NG DIMENSION	DISCHARGE		RETUR	N AIR	HEAT TYPE	
		16 ¾"	x 42 ¼"	ANGLED	ANGLED FLAT		FRONT	ELECTRIC	HYDRONIC
	AC HP								
AMANA	PTC	•	•	. •	•	•	•	•	. •
CLIMATE MASTER	PIP	•	•	•	•	• '		•	•
	PDE	•	•	•	•	•	•	•	
MC QUAY	PSE	•	•	•	•	•		•	•
	MQE	•	•	. •	. •	•	•	•	
GREE	ETAC	•	•	•	•	•	•	•	•
TRANE	PTE	•	•	•	. •	•		•	•
LG	LP	•	•	•	•	•	•	•	
GE	AZ	•	•	•	•	•		•	•

PERFORMANCE DATA - EZ SERIES DR (DR.PTAC)

PERFORMANCE DATA FOR EZDR SERIES

	<u> </u>	МО	0148				
	EZ07	EZ0	9	EZ 12	2	EZI!	5
VOLTS	208 / 230 277	208 / 230	277	208 / 230	277	208 / 230	277
BTUH COOL	6,800 / 7,200 7,000	9,300 / 9,500	9,200	11,800 / 12,000	12,000	14,300 / 14,500	15,000
AMPS COOL	2.74 / 2.63 2.09	3.82 / 3.63	2.89	5.31 / 4.98	4.08	6.73 / 6.17	5.36
WATTS COOL	570 / 605 580	795 / 835	800	1,105 / 1,145	1,130	1,400 / 1,420	1,485
EER	11.9 / 11.9 12.1	11.7 / 11.4	11.5	10.7 / 10.5	10.6	10.2 / 10.2	10.1
CFM HIGH COOL	340 / 375 360	340 / 375	360	340 / 375	360	360 / 360	360
CFM LOW COOL/HEAT	240 / 260 260	240 / 260	260	240 / 260	260	240 / 260	260
BTUH HEAT	6,100 / 6,400 6,100	8,300 / 8,500	8,500	10,800 / 11,000	11,400	13,200 / 13,600	14,000
WATTS HEAT	535 / 560 520	685 / 710	710	900 / 950	1,000	1,155 / 1,180	1,300
C.O.P.	3.3 / 3.4 3.4	3.6 / 3.5	3.51	3.5 / 3.4	3.3	3.4 / 3.4	3.16
NOISE INDOOR/ OUTDOOR (DBA)	45/69 45/69	45/69	45/69	45/69	45/69	45/69	45/69
SHIPPING WEIGHT (LB)	150 150	150	150	150	150	150	150

HEATING OPTIONS

Heating Option	Voltage (I)	Wattage	BTU/h	Amps (2)
	208	2,780	9,500	13.37
3	230	3,400	11,600	14.78
	277	3,600	12,300	13.00
	208	4,090	14,000	19.66
4	230	5,000	17,100	21.74
	277	5,000	17,100	18.05
7	115	1,700	5,800	14.78
	208	1,635	5,600	7.87
В	230	2,000	6,800	8.70
	277	2,500	8,500	9.03
Y	115	1,300	4,400	11.30

Dehumidifier Capabilities

Outdoor % RH	Outdoor Temp (F)	H ₂ O Removal (L/Day)					
60	80	7.9					
60	90	7.8					
62	84	9.6					
70	81	11.18					
85	90	14.4					
82	82	17.02					

⁽²⁾ Amp values are for heating element only.

ELECTRICAL			EZDR		
LINE VOLTAGE	208/230	208/230	208/230	277	277
MAXIMUM AMPERAGE	9	16	24	16	24
WALL SOCKET CONFIGURATION	<u>.</u>	<u>-</u> +	•	(*)	(<u>.</u>
RECEPTACLE NUMBER	NEMA 6-15R	NEMA 6-20R	NEMA 6-30R	NEMA 7-20R	NEMA 7-30R
ELECTRICAL HEAT OPTIONS	2.0	3.4	4.2 - 5.0	2.0 - 4.2	5.0

⁽¹⁾ Voltage is Single Phase, Alternating Current and R.M.S.

DR. PTAC FEATURES

FEATURES:

- Up to 55 CFM Continuous Conditioned fresh air
- Motion sensor/door switch capable
- Superior temperature control
- Dehumidification of room air
- Modern and elegant appearance
- Washable filter for easy cleaning
- User friendly control panel
- Hand held remote controller
- Wired wall thermostat capable
- Compressor freeze protection
- Self diagnosis
- Random Auto Re-Start
- Compressor time delay
- Front desk control
- Room side freeze protection

OPTIONS:

- Two-stage electric heat
- Electric heat add-on for the DR.PTAC fresh air system for cold climates

ACCESSORIES:

- Condensate removal kit
- 18 gauge insulated wall sleeve
- Wired remote thermostat
- Wireless remote thermostat
- I.R. motion sensor
- Door Switch
- Subbase kit
- Electrical subbase kit
- Duct kit
- Locking control cover

LEED POINTS ACHIEVED:

- 1. Energy Efficient Design and compliance with ASHRAE 62.1 and ASHRAE 90.1
- 2. Indoor Environmental Quality with improved IAQ through make up air.
- 3. Innovation in Design through the use of a "Make Up Air PTAC".
- 4. Regional Design through the use of Dr. PTAC in high humidity climates.
- 5. Diverting Construction Debris through the use of re-usable containers.
- 6. Recycling/reusing Dr. PTAC in secondary market where the "first costs" are prohibitive to owners.

DR.PTAC INFORMATION

The Dr. PTAC system is an add on system to our standard PTAC unit to provide conditioned makeup air into a space thru the PTAC unit by providing up to 55 CFM of outdoor air 24/7 by forced fan and cycling dehumidifier compressor based on outdoor relative humidity levels.

Dr. PTAC was created to solve issues with dehumidification in rooms and to introduce fresh air due to deficiencies of oxygen levels. Dr. PTAC is not only a PTAC but a Conditioned Make Up Air unit. New ASHRAE studies show that many illnesses in hotel rooms can be attributed to oxygen deficient atmospheres. Dr. PTAC solves that issue by introducing tempered conditioned make up air that satisfies both humidity level introduction and supplied oxygen.

Dr. PTAC is a two-stage system. The primary unit is responsible for control of Sensible Heat that is introduced into the room via make up air temperature and thermal load of the occupants. The secondary unit is primarily a dehumidification unit that provides up to 55 CFM of outside fresh air into the room. The correction of the Sensible Temperature comes from the main PTAC unit, which provides additional dehumidification with temperature correction. Overall unit efficiency over standard PTAC's is approximately 3% improvement. The compressor/dehumidification process is controlled by a humidistat (factory set at 50% RH), which is monitoring the outdoor relative humidity level and is adjustable by a qualified servicer. When the outdoor humidity level raises above 50% RH, the compressor and dehumidification process starts. Below 50% RH, compressor operation and dehumidification is stopped, however, fan operation continues to provide up to 55 CFM of outdoor air into the space.

The dehumidification system has a temperature switch which is monitoring both the refrigeration and the outdoor air temperatures. If the outdoor air goes below 38 °F, the compressor is disabled with fan operation continuing to provide outdoor air into the space. All dehumidifier controls and safeties are automatically reset. An optional air tempering heater is available for the fresh air system for applications where operation in cold winter climates is required. Condensate from the dehumidifier drains into the PTAC drain pan, where it is also slung onto the condenser coil for re-evaporation outside when the A/C runs. Excess condensate is drained into the wall case, which can then either drain to the outside through the louver OR is piped to a drainage system via an optional drain kit.

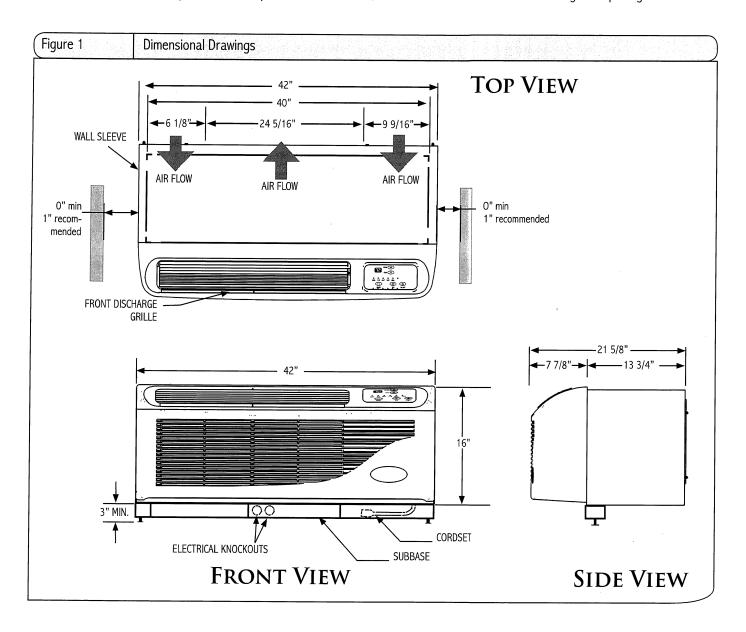
ADVANTAGES OF THE DR. PTAC SYSTEM:

- 1. Lower installation/renovation costs than typical DOAS*
- Decreased inconvenience to customer due to construction/installation of a DOAS* system
- More humidity control in a room over use of a simple PTAC vent or Power vent system
- 4. Allows fresh make up air to travel entirely across sleeping and living areas of a room, exiting through a duct or under the door

*DOAS = Dedicated Outdoor Air System

DIMENSIONAL DRAWINGS

Figure 1Units must be installed in accordance with all applicable codes. Ensure that there is adequate clearance for servicing and proper operation. A minimum of 18 inches in front of the chassis is required. Provide additional space for service technician to work on the unit. Ensure that drapes, beds, bedspreads, furniture, etc., DO NOT block either return or discharge air openings.



OPTIONS AND ACCESSORIES

HARD WIRE KIT

Part Number 6040756

- Used in place of a plug-in power cord
- All 265V units require either a hard wire kit or electric subbase

See page 31 for electrical information

REMOTE CONTROL

Part Number 6041146

- Ability to control PTAC from anywhere in the room
- Large full function display
- Operates on two AAA batteries

OPTIONAL 2-STAGE HEATER

AVAILABLE ON 208/230 VOLT UNITS WITH REMOTE THERMOSTATS

- Reduces energy cost during the heating season
- Maximizes year-round comfort
- Available in 3.4 kW and 5.0 kW only



CONDENSATE DRAIN KIT

Part Number 4090661

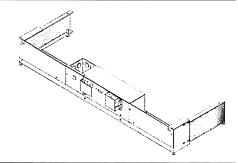
- Attaches to wall sleeve base pan to control condensate removal
- Can be adapted for left or right side exterior drainage or internal drain connection



SUBBASE

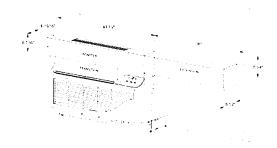
- Provides secure enclosure for electrical connections
- Provides structural support for units that extend into the room
- Includes leveling legs for support and precise adjustment

See page 26 for subbase installation instructions



LATERAL DUCT KIT ASSEMBLY

- Allows the air from one PTAC unit to be shared by an adjacent room
- The kit mounts to the top of the unit and can be configured for either right or left discharge







CLEARANCES AND PROJECTIONS

MINIMUM PROJECTION INTO ROOM

The wall sleeve will need to be installed so that the sleeve projects into the room a minimum amount according to the table below.

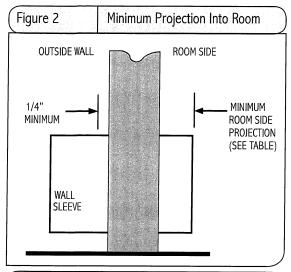
OPTION	MINIMUM PROJECTION INCHES (MM)
WALL SLEEVE ONLY	.25 (6)
SUBBASE KIT	4.5(114)
LEVELING LEGS KIT	2 (50)
DUCT KIT	1.0 (25.4)

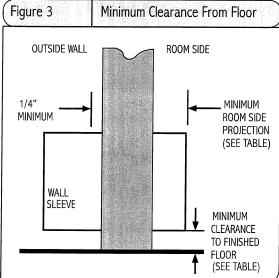
MINIMUM CLEARANCE FOR SUBBASE, LEVELING LEGS, AND LATERAL DUCT KIT

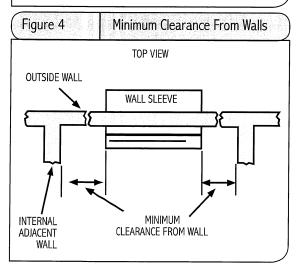
Installation of these kits requires drilling of mounting holes on both sides of the wall sleeve. The minimum required clearance distance between the wall sleeve and floor wall is shown in the first column of the table below.

The minimum clearance between the wall sleeve and adjacent (perpendicular) walls is shown in the second column. If the distance between wall sleeve and adjacent wall will be at or near the minimum clearance distance, mount these kits on the sleeve before installing the sleeve in the wall.

	MINIMUM CLEARANCES				
OPTION	TO FLOOR	WALLS			
	INCHES	INCHES			
WALL SLEEVE ONLY	3	0			
SUBBASE KIT	3	3.25			
LEVELING LEGS	3	3			
DUCT KIT	3	0			
DRAIN KIT	3	1.5			
HARD-WIRE KIT	3	1.25			

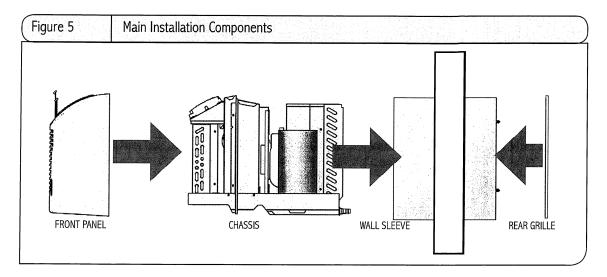






INSTALLATION INSTRUCTIONS

Installation of the PTAC unit involves four main components and various accessory components. The main components are the wall sleeve, chassis, rear grille, and decorative front. The accessory components are subbase, condensate drain, duct kits, and hardwire cable.



CAUTION! To prevent damage, this unit should NOT be operated to provide supplementary heating and cooling during the construction period. The unit is designed for operation in a normal indoor environment. Operating this unit in an unenclosed space or exposure to construction environment may result in permanent equipment damage.

Select a location for the unit.

- Locate the unit where it will evenly distribute air throughout the room without obstruction.
- The wall that the unit is mounted to must be a structurally sound outside wall able to support the weight of the unit.
- Locate the unit where there will be adequate drainage or access to a drain source.
- Place the unit so that the air filter can be removed easily and maintenance work can be performed without interference.
- Locate unit within reach of proper power supply.

- A minimum unobstructed distance of 36" should be kept around the outside portion of the sleeve.
- PTAC units should be installed no closer than 12" apart when two units are side by side. If three or more PTAC units are to operate next to one another, allow a minimum of 36" between units. Also, a vertical clearance of 60" should be maintained between units.
- Units must be installed in accordance with all applicable codes.
- Be sure that the amperage of the dedicated electrical service to the unit is correct.
- The subbase accessory includes leveling legs. If added wall sleeve support is required and a subbase is not to be used, an accessory leveling leg kit may be installed.

WALL SLEEVE INSTALLATION INSTRUCTIONS

Preparing the Wall OPENING

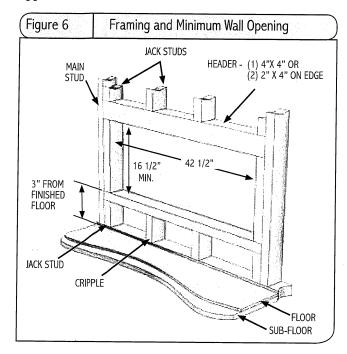
- Once a satisfactory location is found and height of unit is determined, create a wall opening to install the wall sleeve. The rough opening should measure a minimum of 16 ½" high x 42 ½" wide.
- If opening will start right at the finished floor level, leave enough clearance for carpeting, etc. If using a power cord, leave enough space for the cord to exit from under the front panel.
- When a subbase is used, the opening must start above the finished floor to match the height of the subbase selected.
- When construction is complete, check the wall opening to be sure the wall sleeve will slide into the opening without obstruction.
- If installed in a concrete or masonry wall, a lintel must be provided in the wall opening for support.
- Do not use the wall sleeve as a lintel.
- When installed in the opening, the wall sleeve must be horizontally level from side-to-side and pitched (one quarter bubble in the sight glass) to the outside.

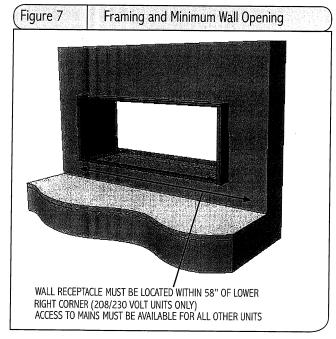
DO NOT SLOPE THE WALL SLEEVE TOWARD THE ROOM.

- The installer must provide adequate sealing and insulation around the sleeve after it is installed.
- If used, a 208/230 volt wall receptacle must be located within 58 inches of the lower right sleeve corner. Extension cords must not be used with the
- For installations in walls deeper than 13-7/8 inches, special care is necessary to prevent problems with rain water, condensate drainage and intake/discharge air. Consult with your Sales Representative before attempting such installations.

FRAMING

Proper building practices must be used when constructing a wall opening to support a PTAC wall sleeve and chassis. Units must be installed in accordance with all applicable codes.





WALL SLEEVE INSTALLATION INSTRUCTIONS (cont.)

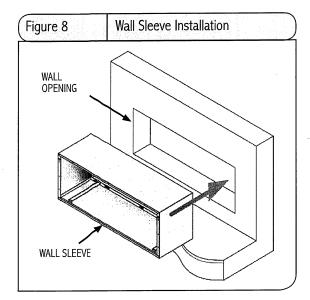
WALL SLEEVE INSTALLATION

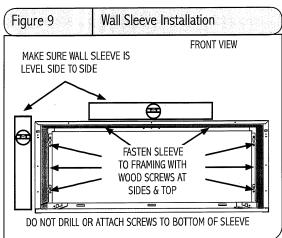
After the wall opening is checked for location, size, and clearances, proceed to wall sleeve installation.

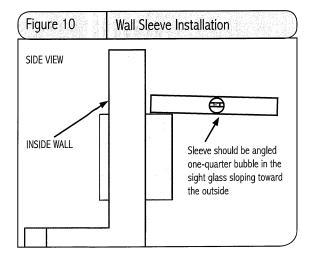
- 1. Install Condensate Drain Kit (if applicable).
- 2. Slide the wall sleeve into the wall opening. The unit chassis must fit snugly and uniformly into the wall sleeve without distortion.
- 3. Make sure the sleeve is within the range of minimum projections as outlined on the next page.
- 4. Level wall sleeve side-to-side. When using an INTERNAL DRAIN with this unit, it is recommended to install the wall sleeve in a level position front-to-back within the wall. If the internal drain was to clog up from lack of maintenance, water will still overflow through the weep slots in the sleeve near the louver and be directed outdoors. For proper drainage, the sleeve should be level from side-to-side and one-quarter bubble in the sight glass sloping to the outside (if unit is to drain outside).
- 5. Secure the wall sleeve by anchoring with fasteners through the sides and top. Drill holes of proper size and in the proper location so the screws will engage into strong supporting members of the wall. DO NOT DRILL THROUGH BOTTOM OF WALL SLEEVE. THIS CAN CAUSE LEAKAGE OF CONDENSATE WATER WITHIN THE WALLS.
- 6. Check the level of the wall sleeve and adjust if necessary.
- 7. Caulk or seal around the outside of the entire sleeve.
- 8. Recycle or dispose of packaging materials per local codes.

Note

The installer must determine and supply the mounting bolts and/or screws to attach the wall sleeve to the sides of the wall opening. Make sure the wall opening is adequate for strong support.







CONDENSATE DRAIN KIT

CONDENSATE DRAIN KIT

Part Number 4090661

An indoor/outdoor drain kit is available as an accessory item. When a drain kit is to be installed, do so before installing the wall sleeve in the wall.

During periods of high humidity and/or during heat pump operation condensate water will collect in the bottom pan of the chassis. When the chassis bottom pan is full, the water will overflow into the wall sleeve and out the drainage holes on the back edge of the wall sleeve.

The Condensate Drain kit contains an overflow tube to direct excess condensate water from the bottom of the sleeve to either an internal or external drainage path. Because heat pumps generate condensate even during the heating season, it is recommended to always use a drain kit with heat pump models. Determine whether the kit should be installed as an internal or external drain system.

EXTERNAL DRAIN INSTALLATION

Part Number 6140165

The drain kit can be installed as an external drain on the left or right side drain opening on the sleeve. Determine which drain opening will provide the best drainage for the installation.

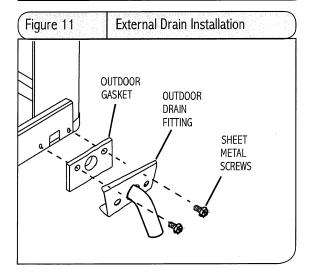
Local codes will determine the proper method for condensate disposal. The drain kit must be installed before installation of the wall sleeve condenser grille.

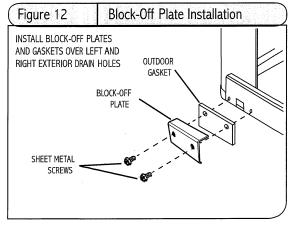
- 1. Remove the cardboard weather board from the wall sleeve.
- 2. Install the outdoor drain fitting and one of the outdoor drain fitting gaskets over one of the drain holes on the rear of the wall sleeve. Secure this assembly to the rear of the sleeve with two sheet metal screws into the holes provided in the wall sleeve.
- 3. Cover and seal the remaining drain hole using the remaining outdoor drain gasket, cover plate and remaining sheet metal screws provided.

Periodically inspect drain passages for blockage. Blow out drain tubing annually to prevent overflow from entering the building.

NOTE

The external drain kit is intended to be installed in conjunction with a field-supplied condensate drain system. Installing the kit without connecting it to an external drainage system may result in inadequate condensate removal, leakage and/or corrosion.





CONDENSATE DRAIN KIT (cont.)

Internal Drain Installation

Part Number 6140165

The drain kit can be installed as an internal drain on the bottom of the wall sleeve to allow condensate to drain into an internal drain system inside of the building. Locate the drain so that it will be on the room side of the wall when the cabinet wall sleeve is installed.

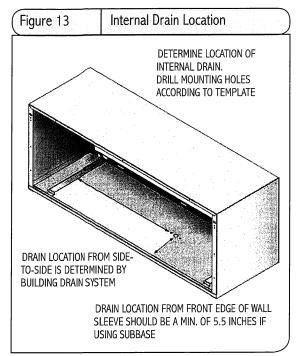
NOTE: The drain kit must be installed prior to the installation of the wall sleeve.

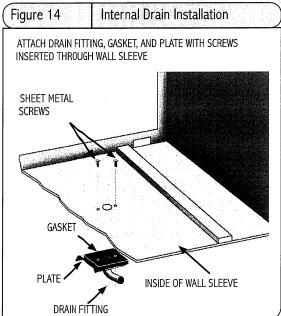
- 1. Locate an area on the wall sleeve that will be inside the room when the sleeve is installed. If a subbase is installed, locate the kit a minimum of 5 ½" from the front flange of the wall sleeve. This clearance will provide adequate clearance for the subbase.
- 2. Cutout the template shown to the right. Using this template, locate and drill the drain kit holes as close to the outside wall as possible.
- 3. Using detail figure 14 as a guide, assemble the drain gasket, drain fitting plate, and indoor drain fitting together. Install the assembly into the drilled holes and secure using the two indoor mounting screws provided. The screws must be inserted INSIDE the wall sleeve and TOP driven down into the drain fitting plate.

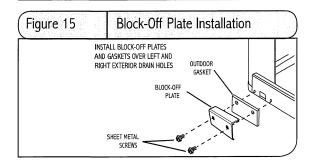
Ensure drain tube is not restricted. Cover the two screw heads with a good quality outdoor caulking (not supplied) for additional corrosion protection.

NOTE: If the drain fitting is not connected to an indoor drainage system immediately after the wall sleeve is installed, plug the hole with cork (not included) to prevent indoor water damage in case it rains.

- 4. Install a ½" ID tube or hose (not included) on the drain fitting and interconnect it to the drain system inside of the building. Ensure that there are no kinks or traps in tube or hose. Kinks or traps can cause improper drainage.
- 5. Install the two drain block-off plates and outdoor drain gaskets on the outdoor portion of the wall sleeve as shown in figure 15. These components can be installed after the sleeve is secured in the wall opening just prior to the installation of the condenser grille and chassis.







REAR GRILLE INSTALLATION INSTRUCTIONS

STAMPED REAR GRILLE

Part Number 6070264

The rear grille directs condenser airflow and provides a protective barrier for the outdoor coil. Either the approved Standard or Architectural grille must be installed before installing the chassis.

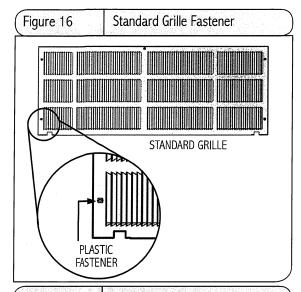
STANDARD LOUVERED GRILLE INSTALLATION

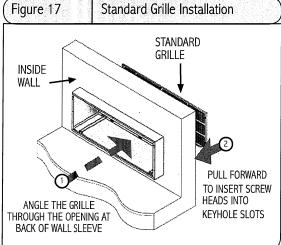
- 1. Prepare the grille for installation by installing the five plastic fasteners supplied through the holes in the grille.
- 2. Guide the alignment pins, located on the lower-right and lower-left hand corners of the grille, with their corresponding holes on the rear outside edge of the wall sleeve.

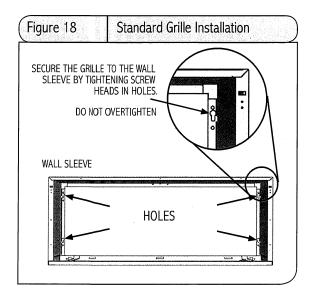
If installing the grille from inside the room:

Use the attached plastic handle to keep a firm grasp on the grille. Angle the grille through the opening at the rear of the wall sleeve, then pull the grille back to the wall sleeve and align the screw heads to the hole. Be sure to keep a firm grip on the plastic handle and grille to prevent it from dropping and/or causing possible injury or property damage. Remove the plastic handle when installation is complete.

3. Secure the grille to the wall sleeve by installing screws into the plastic fasteners. Be careful not to damage fasteners by overtightening.







REAR GRILLE INSTALLATION INSTRUCTIONS (cont.)

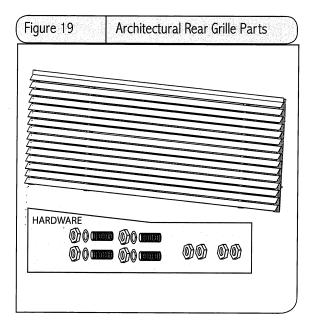
ARCHITECTURAL REAR GRILLE

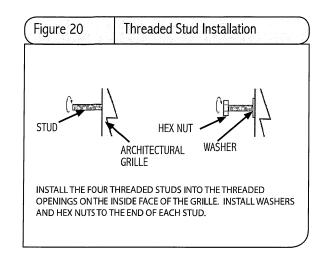
Part Number 6070422

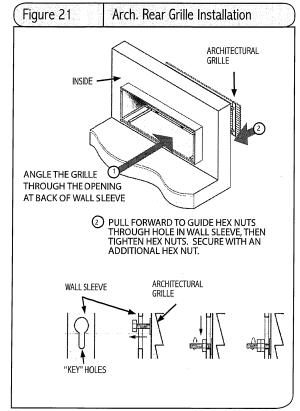
The rear grille directs condenser airflow and provides a protective barrier for the outdoor coil. Either the approved Standard or Architectural grille must be installed before installing the chassis.

ARCHITECTURAL LOUVERED GRILLE KIT INSTALLATION

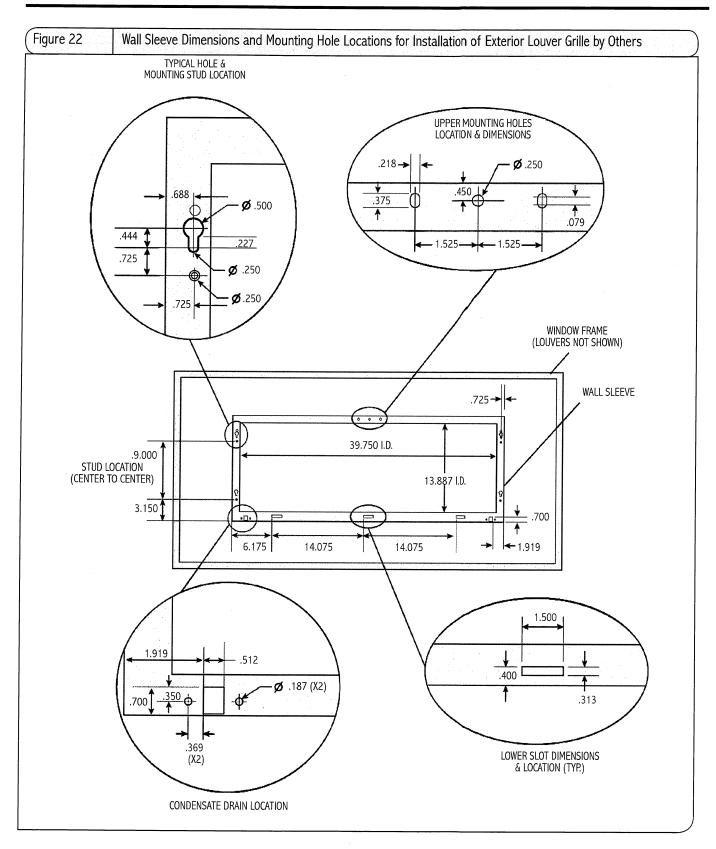
- 1. Install the four threaded studs into the threaded openings on the inside face of the grille. Install a washer and one hex nut to the end of each stud.
- 2. Manipulate the grille out through the rear wall sleeve opening. Be sure to keep a firm grip on the grille to prevent it from dropping and/or causing possible injury or property damage.
- 3. Attach the grille to the sleeve by aligning and inserting the hex nut threaded onto the studs through the holes in the wall sleeve.
- 4. Secure the grille to the sleeve by tightening the hex nut and adding and tightening an additional hex nut.



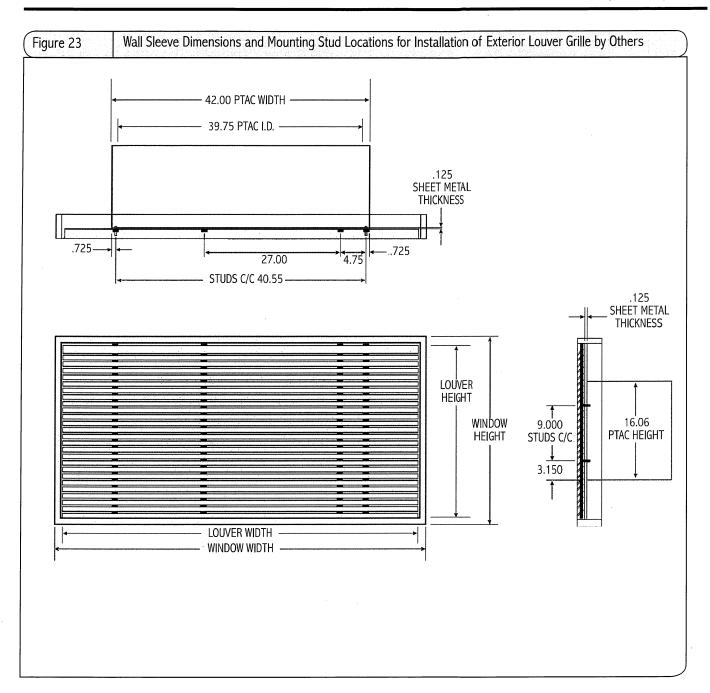




REAR GRILLE INSTALLATION INSTRUCTIONS (cont.)



REAR GRILLE INSTALLATION INSTRUCTIONS (cont.)



SUBBASE ASSEMBLY & INSTALLATION

SUBBASE ASSEMBLY & INSTALLATION

ELECTRICAL SUBBASE ASSEMBLY

An electrical Subbase provides a convenient location for unit wiring to be connected to building wiring. It also provides support for the indoor portion of the unit.

SUBBASE SELECTION

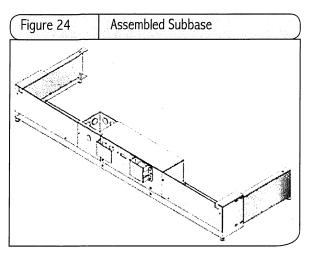
Select a subbase according to the power requirements of the unit. See Subbase Selection chart on page 27.

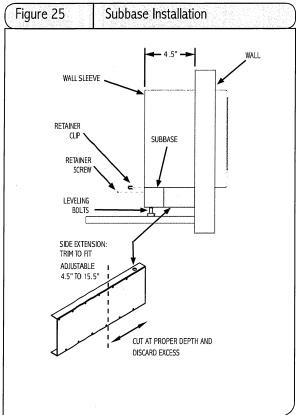
SUBBASE ELECTRICAL CONNECTION

The wiring should be roughed in and the conduit connected to the subbase junction box. Complete the installation by wiring the receptacle to the incoming power supply.

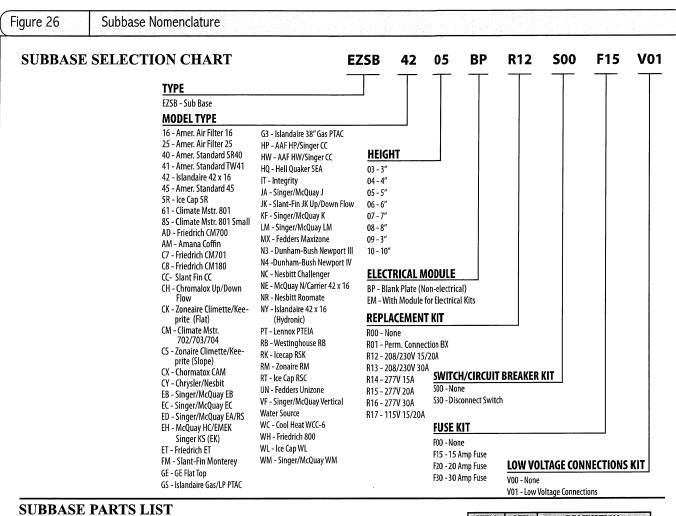
Subbase Installation Notes:

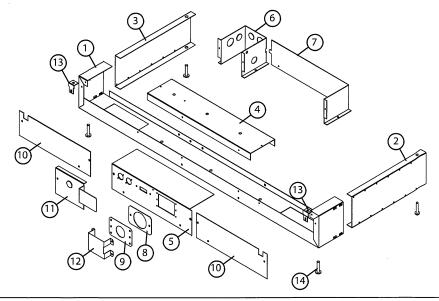
- 1. Insert the side extension pieces into the front assembly and determine the required assembly depth by placing the assembly under the wall sleeve.
- 2. Determine the depth of the side extension pieces desired and cut at the proper depth. Subbase may be installed without the side extension pieces.
- 3. Insert leveling bolts into the subbase bottom flange. Four (4) bolts are required if the side extensions are used.
- 4. Place the subbase on the floor and align its center line with the center line of the wall opening.
- 5. Secure the subbase to the wall sleeve with the two retainer clips provided.





SUBBASE ASSEMBLY & INSTALLATION (cont.)

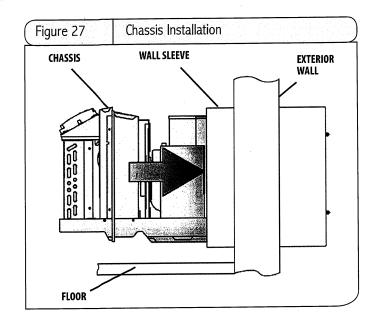


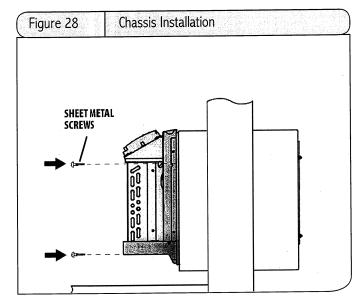


ITEM	QTY	DESCRIPTION
1	1	BASE FRAME
2	1	RH SIDE EXTENSION
3	1	LH SIDE EXTENSION
4	1	RECEPTACLE SUPPORT
5	1	REAR COVER PANEL
6	1	JUNCTION BOX
7	1	REAR COVER
8	1	RECEPTACLE PANEL
9	1	RECEPTACLE PANEL
10	- 2	FRONT PANEL
11	4	JUNCTION BOX COVER
12	4	LINE CORD GUARD
13	2	ATTACHMENT CLIP
14	4	LEGS

CHASSIS INSTALLATION

- 1. Remove the cabinet front from the chassis as described in Front Removal.
- 2. Insert the chassis into the wall sleeve.
- 3. Slide the chassis into the wall sleeve until the chassis flanges contact the front edge of the wall sleeve.
- 4. Secure the chassis to the wall sleeve using two screws on each side of the chassis to ensure a proper seal between the chassis and the wall sleeve.





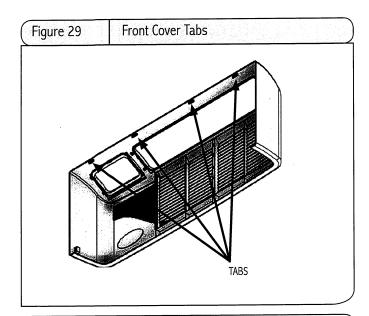
FRONT COVER INSTALLATION & REMOVAL

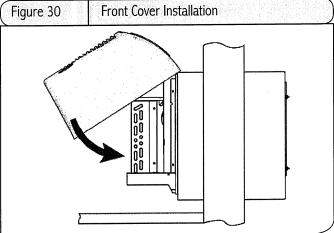
Use the following procedure to install the front panel onto the chassis:

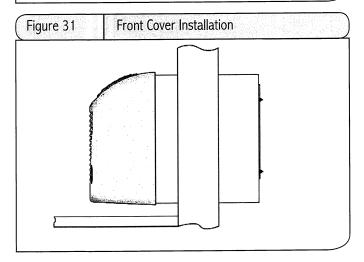
- 1. Attach the top of the front cover onto the top edge of the chassis.
- 2. Swing down the front cover over the chassis and apply pressure until it locks into place.
- 3. Make sure that digital display opening and filters align with proper locations on chassis.

FRONT COVER REMOVAL

Remove the front cover by pulling out at the bottom to release it, then lift it up to clear the rail along the chassis top.







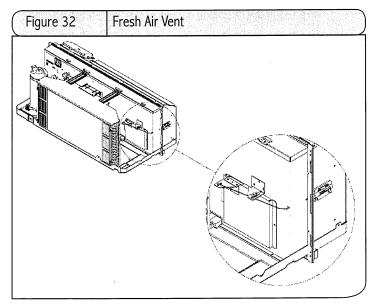
FRESH AIR VENT

The vent control allows outside air to be drawn into the conditioned area. This outside air can provide ventilation when the blower is operating, but it will increase the heating or cooling load and operating costs.

- * IMPORTANT NOTES FOR PEFORMANCE TESTING!
- 1. The Activation Plate must be installed during Performance Testing in order to obtain accurate test results.
- 2. DIP Switch 8 on the Main Board must be set to ON (Constant Fan) position during testing (refer to Control Board paragraph on page 41).
- 3. The DR. PTAC Activation Switch must be in the OFF position when Activation Plate is installed.

To obtain access to the vent control:

- 1. Remove the cabinet front (see Front Removal).
- 2. Remove the shipping screw (if installed) from the vent door.
- 3. Remove the label (if present) from over the vent control lever on the left side of the chassis. Remove the vent door shipping screw.



NOTE: Recommended for use on models with remote thermostat. Not recommended for models with built-in thermostats.

LATERAL DUCT KIT

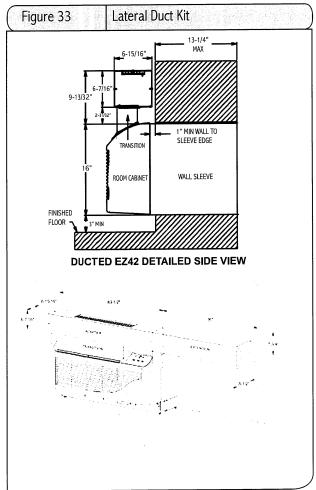
The Lateral Duct kit allows the air from one PTAC unit to be shared by an adjacent room. The kit mounts to the top of the unit and can be configured for either right or left discharge. The amount of air diverted to the second room is adjustable.

The kit consists of a main duct for the room of origin and an extension duct to reach the adjoining room and terminal duct.

Part Number 4082401 Main Duct with Transition

Part Number 4082404 Duct Extension

Part Number 6070199 End Grille



Installing Air Discharge Package

This original package allows for distribution of air into an adjacent zone requiring a controlled temperature. This assembly will discharge the conditioned air to either the right or left depending upon which end the end cap is placed. Total overall length of duct kit not to exceed 10 feet.

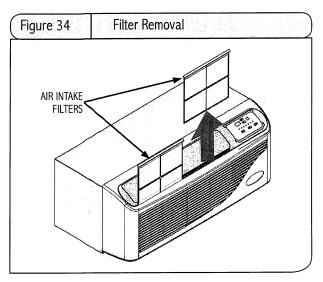
AIR INTAKE FILTERS

(2 per) Part Number 6080067

When the air conditioner is operating, indoor air is filtered and refiltered continuously trapping airborne dirt and dust in the washable filter. The air intake filters are removable for easy cleaning. A clean filter helps remove dust, lint, and other particles from the air and is important for best cooling and operating efficiency.

Check the filter every two weeks to see whether it needs cleaning.

- 1. Turn unit off.
- Remove each air filter by grasping the top edge of the filter frame and pulling each one up and out of the unit.
- 3. Wash in hot soapy water, rinse and shake dry.
- 4. Replace the filter, with the front of the filter toward you.
- 5. To dry the filter thoroughly, run your unit for a few minutes in fan mode.



ROUTINE MAINTENANCE

Keep air intake filter clean.

- Coils should be inspected periodically for build-up of lint, dirt, leaves, other debris, and bent fins.
- Clean coils with a soft brush and compressed air or vacuum. Do NOT use sharp objects to clean coils.
- The fan motors are permanently lubricated and do not require servicing.
- In areas of heavy snow and ice accumulation, snow and ice should not be permitted to accumulate against the unit. As soon as practical after such inclement weather, clean snow and ice from around the unit as much as possible.

INFORMATION FOR HEAT PUMP UNITS

Heat pump models offer substantial savings over models with conventional electric resistance heaters.

Islandaire's PTAC units provide indoor comfort in the same manner as conventional air conditioners, removing heat and humidity from indoor air. The heat and humidity is released to the outdoors. Islandaire's high efficiency design saves energy and reduces cooling costs.

When the outdoor coil temperature is above 20 °F (approximately 35 °F outdoor-air temperature), the heat pump draws heat from outdoor air and uses it to heat indoor air. Since heat is transferred and not produced, the heat pump uses less electricity and reduces energy costs significantly.

If the outdoor coil temperature falls below 20 °F (approximately 35 °F outdoor-air temperature), the unit automatically switches on a built-in electric heater. The compressor stops and a blower circulates warm air produced by the heater. When the outdoor coil temperature rises above 40 °F, heat pump operation resumes automatically.

HEAT PUMP FEATURES

OUTDOOR THERMOSTAT:

During the heating cycle, the outdoor thermostat senses outdoor coil temperature. It switches the unit to electric heat mode when the outdoor coil temperature is 20 °F or below (approximately 35 °F outdoor-air temperature).

The thermostat switches the unit back to heat pump mode when the outdoor coil temperature rises above 40 °F, which is enough to provide heat to meet demand. The entire operation is completely automatic.

REVERSING VALVE:

The reversing valve controls the direction of refrigerant flow for both heating and cooling functions and remains energized as long as the controls are in the heat position. When the cooling controls are activated, the valve automatically reverses to the cooling position.

NOTE: Be sure to connect reversing valve wiring to the B (blue wire) connection of the thermostat for heat pump applications.

ELECTRICAL INSTALLATION

HARDWIRE KIT

Part Number 6040756

Cord connection to a wall socket is not permitted for 265 volt units. All 265 volt units must be hard-wired using the hard wire kit or make use of the plug-in receptacle in the standard subbase.

LCDI CORDS

230/208V units are equipped with LCDI or AFCI power cords and can open the electrical circuit to the unit. In the event the unit does not operate, check the reset button located on or near the head of the power cord as part of the normal troubleshooting procedure.

PTAC WIRE HARNESS KIT

See PTAC Wire Harness Kit Installation Instructions for proper wire orientation and location for low voltage wiring.

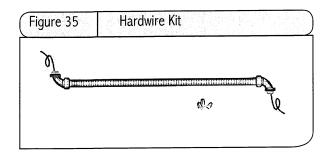
HEATERLESS UNITS

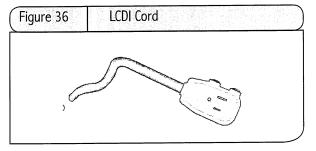
Refer to the Installation Instructions supplied with the kit for a complete description of the installation procedures. All 208/230 volt heaterless units are shipped with a 15 Amp power cord.

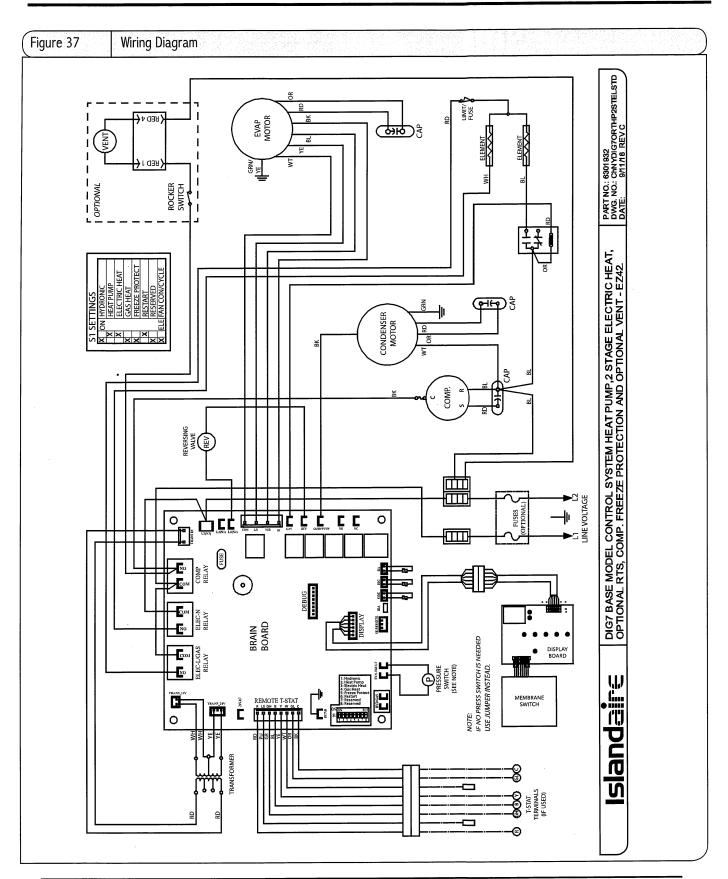
Voltage Measurements

Once the unit is properly wired, measure the unit supply voltage. Voltage must fall within the voltage utilization range as shown in the table below.

TO COUNT HOLD	OPERATING VOLTAGE	
UNIT VOLTAGE RATING	VOLTAGE UTILIZATION RANGE	
	MINIMUM	MAXIMUM
230/208	197	253
265	238	292







SYSTEM CONTROLS AND MANAGEMENT

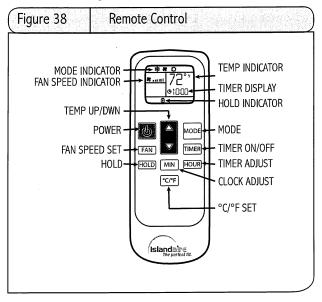
USER INTERFACES

The Islandaire PTAC can be operated by several different control systems. Listed on this page are some of the important control features and a brief description of their functions.

REMOTE CONTROL

Part Number 6041146

The unit can be conveniently operated with a battery operated wireless remote control. All functions are accessible through the remote control unit.



GENERAL OPERATION

Press the Power button on the remote control to power on and power off the unit.

Press the MODE button to select the desired operation mode: Cool/Fan/Heat. Press the TEMP UP or TEMP DOWN button (blue buttons) to set desired temperature. Press the FAN button to set the desired air flow rate (Auto/High/Low).

Setting the Clock:

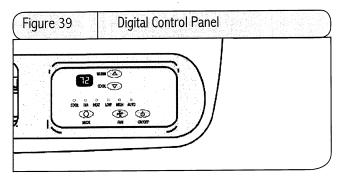
When new batteries are inserted, the default clock setting is 12:00 (note that clock is 24 hour format). To adjust the clock setting, use the MIN button to set the current time.

To adjust the timer setting, use the HOUR button to select operation time (1 to 12 hours of operation).

DIGITAL CONTROL PANEL

The built-in digital control panel features an easy to read digital display, large buttons and bright indicator lights. Energy management and temperature limiting preferences allow the owner to increase efficiency, limit extreme usage and optimize performance.

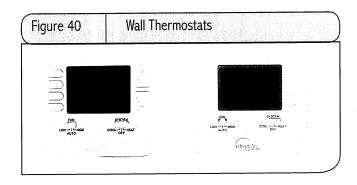
See page "Digital Control Panel" on page 37 for full details



WALL THERMOSTATS

Terminal connections on the main control board allow easy conversion from an on-board control panel to a wall mounted thermostat control (wired or wireless).

See page "Remote Thermostats" on page 39 for full details



FRONT DESK CONTROL

Low voltage terminals on the main control board allow easy connection to a front desk energy management system. Front desk controls allow the unit to be operated from a remote location. Front desk controls can reduce energy consumption by allowing front desk personnel to turn the unit off when a room is vacant.

SYSTEM CONTROLS AND MANAGEMENT (cont.)

SYSTEM MANAGEMENT SOFTWARE

The Islandaire PTAC unit is equipped with an on-board control system that contains system management software and sensors. Built in safety features protect the unit from the damaging effects of freezing temperatures and power interruptions. Energy management features allow unit performance to be customized and control power consumption. System monitoring software helps service personnel quickly correct any problems.

Listed below are some of the important control features and a brief description of their functions.

See Performance Specifications section starting on page 44 for full details of all functions.

FAN CYCLE CONTROL

The 'Auto' indoor fan cycle control setting allows the unit to operate more efficiently. This feature conserves energy by operating the fan only while the compressor or heater is operating. Constant fan operation in High or Low settings is also available.

ROOM FREEZE PREVENTION

The indoor freeze protection monitoring system prevents unoccupied rooms from reaching freezing levels that can damage plumbing and fixtures. This feature is automatic regardless of mode and does not require any additional settings. This feature can be turned on or off by adjusting DIP switch settings on control board.

HIGH TEMPERATURE COMPRESSOR PROTECTION

The life of the compressor is extended through a built in temperature protection. The system will initiate a compressor lockout if the compressor temperature exceeds 154 °F or if the outdoor air temperature falls below 35 °F.

LOW TEMPERATURE COMPRESSOR PROTECTION

An indoor frost sensor will disable the operation of the compressor if freezing conditions exist. This protects the compressor from damage due to airflow reduction or low outdoor air temperature. When the coil temperature rises to a safe temperature the compressor resumes normal operation.

DIAGNOSTIC SOFTWARE

The system management software performs self-diagnostic tests that can alert service personnel to potential problems. Error codes are stored and displayed on the digital display and can save service call time during troubleshooting and maintenance.

See page 43 for a list of Error Codes

CUSTOM OPERATION AND CONTINUAL ROOM Temperature Monitoring

The system controls utilize a built-in temperature sensor for measuring room temperature. When a pre-determined (user defined) temperature set point is reached, the on-board controls automatically adjust unit operation to match.

See page 42 for Temperature Limiting details

DIGITAL CONTROL PANEL

CONTROL PANEL

Use the control panel to power on/off, select mode, select fan speed, and adjust the set temperature.

Auto Restart Feature

To prevent multiple units from powering up simultaneously after a power outage, there will be a random 5 to 15 second delay before the unit turns on after power has been restored.

Memory Recall Feature

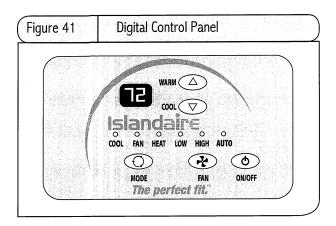
The control board utilizes "non-volatile" memory; computer memory that can retain stored information when not powered. This allows all control settings to be saved and recalled after a power failure or if power is disconnected while servicing the unit.

POWER CONTROL

The ON/OFF button turns the unit on and off.

Compressor Short Cycle Protection

Built-in three minute timing delay: If cycle is interrupted, the compressor will not restart for three minutes. On all initial power ups there is a one-time, 3 minute time delay before the unit will function.



DISPLAY

The display shows the room temperature (return air temperature) when the unit is in operation. When the temperature is adjusted by pressing the "Warm" or "Cool" buttons the display briefly shows the set temperature, for three seconds and then defaults back to room temperature.

Mode Control - Cool, Fan, and Heat

A light will indicate which mode is currently being utilized.

Cool Mode: The unit will circulate and cool the air.

Fan Mode: The unit will only circulate the air.

Heat Mode: The unit will circulate and heat the air.

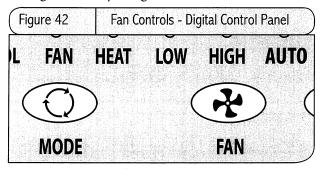
Heater Safety Feature

When heater is powered off, fan will automatically stay on and run for 60 seconds to ensure the removal of residual heat.

DIGITAL CONTROL PANEL (cont.)

FAN SPEED CONTROL - LOW, HIGH, AND AUTO

The fan speed settings are adjusted with the Fan button. Each time the button is depressed it changes the setting between Low, High and Auto. A light will indicate which setting is currently being used.

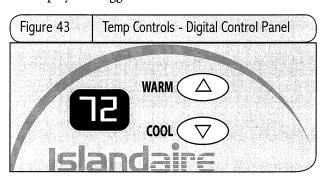


If either the Low or High fan settings are selected the fan will continuously operate in the selected Low or High speed even if the set temperature has been reached.

When the Auto feature is selected, while the air conditioner is in the COOL or HEAT mode, the fan speeds will change between low and high automatically as the temperature in the room changes and the fan will cycle off when the set temperature is reached.

TEMPERATURE CONTROLS

The Warm and Cool buttons are used to raise or lower the set temperature. By depressing both buttons at once, the display will toggle between Celsius and Fahrenheit.



Freeze Protection Feature

If the temperature in a vacant room falls below 50 °F (4.4 °C) the freeze prevention thermostat automatically starts the heating cycle to prevent freezing conditions. All other operations will be disabled until the temperature rises above

58 °F. When the temperature of the freeze prevention thermostat rises above 58 °F, the system will resume normal operation.

OPERATING GUIDELINES

- Do not block airflow. Efficient operation of the unit depends on free circulation of air.
- Paper, leaves, and other debris can reduce efficiency and cause serious damage to the compressor.
- Ensure that objects such as drapes, furniture, or plants are not blocking supply and return airflow.
- Do NOT operate unit with front panel removed or without filter, as this will void any warranties.
- Keep doors and windows closed. Leaving them open will increase the workload on the unit and will result in higher operating cost and excessive condensate.
- Do NOT operate unit during construction. Construction dust can clog filter and cause permanent damage to other components.

REMOTE THERMOSTATS

REMOTE THERMOSTAT CONTROL

The PTAC unit can be controlled by any remote electronic thermostat that can interface with RCBWYG terminals. A wiring harness is provided with conductors for all applications (Heat Cool, Heat Pump, Multispeed Fan, etc.). See details on the next page. The Control Selection jumper must be in T'STAT position. During a call, the remote thermostat will pass R back to the controller on a respective terminal. The push buttons on the touchpad become inactive in the remote thermostat mode.

Note: In terms of outputs, there are two types of thermostats: Relay Contacts and Solid State.

Manufacturers of solid state output thermostats include loading resistors in their installation kits. These 560 Ohm, 3W resistors are designed to load thermostat solid state outputs in order for the output voltage to be either 0 or 24 Vac (i.e., no floating voltage). These resistors are connected from W, Y, G to common (C), respectively.

You can wire any type of 24 Vac thermostat straight into the Remote Thermostat Interface on the PTAC control board (see page 40).

WIRELESS WALL Thermostat

Wireless wall thermostats are designed to provide precise temperature control without the installation labor and expense of wiring.

- Powered by AA batteries
- Mounts in any suitable location that will provide an accurate room temperature reading.
- Large LCD display provides the user with current room temperature, set point temperature, time, program interval, and other system status information.

REMOTE CONTROL NODE

Used with a wireless wall thermostat, the RCN communicates with the thermostat using unlicensed 900 MHz, radio frequency energy.

ENERGY SAVING OPTIONS

Automatic Change-Over Remote Mounted Thermostats can be obtained to switch from heating to cooling and from cooling to heating automatically. With automatic change over, the operation of the heating cycle or the cooling cycle is determined by the temperature requirement of the space.

Most thermostats with this feature are set to change over when the room temperature varies 3-½ °F from the set-point. The unit is placed in cooling mode when the set-point is over 3-½ °F; 3-½ °F under the set point places the unit in the heating mode. This 3-½ °F variation is usually adjustable from a ½ °F dead band to a 5 °F dead band. Each cycle is run until the set point temperature is reached, then that cycle is de-energized. On some thermostats, the automatic change over function can be overridden manually by moving the thermostat selector switch to "heat" or to "cool."

Fan operation with an automatic change over thermostat is controlled by the fan selector switch. When placed in the "fan" mode, the fan runs continuously. When placed in the "auto" mode, the fan will only energize when the thermostat calls for heating or cooling.

REMOTE THERMOSTAT INTERFACE

The remote thermostat interface terminal block is located on the main circuit board. A wiring harness is provided with conductors for all applications (Heat Cool, Heat Pump, Multispeed Fan, etc.). It provides a connection for remote thermostat and energy management inputs. To convert to thermostat operation:

- 1. In standby off mode, press MODE and WARM (+) buttons simultaneously for 3 seconds. The buzzer will chime and LED display reads " P" or " P".
 - **?** : unit control panel has control of unit.
 - : wall thermostat has control of unit.
- 2. Make sure " " " is selected. If not, toggle setting by pressing and holding the MODE and WARM (+) buttons simultaneously for 3 seconds.
- 3. Plug in the supplied thermostat harness.
- 4. Connect wires to field-supplied thermostat.

Terminal R (Red)

Low voltage terminal to supply voltage to an external wall mounted thermostat. This terminal is capable of supplying 100 mA at 18-30 Vac RMS over the entire input voltage range specified.

Terminal LS (Purple)

When this low voltage terminal is connected to the R terminal, the compressor and electric heater are disabled to provide an energy management system interface.

Terminal GH (Green)

When this low voltage terminal is connected to the R terminal, and the unit is in remote mode, the blower/fan will be requested for operation on high speed.

Terminal B (Blue)

When this low voltage terminal is connected to the R terminal, and the unit is in the remote mode, the reversing valve is energized. Hydronic and electric heat shall be attempted as backups if the B terminal is asserted and the compressor is locked out or disabled. This is subject to the configured heat modes available.

Terminal Y (Yellow)

When this low voltage terminal is connected to the R terminal, and the unit is in remote mode, the compressor will be switched on (the GL or GH terminal must also be connected to the R terminal).

Terminal W (White)

When this low-voltage terminal is connected to the R terminal and the unit is in the remote mode, first hydronic

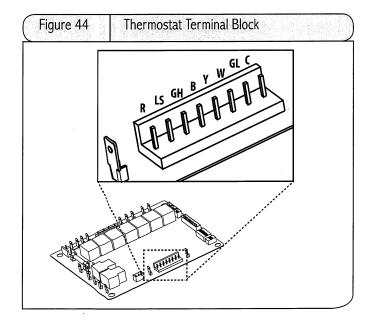
heat is attempted and electric heat is switched on as backup (the GL or GH terminal must also be connected to the R terminal). This is subject to the configured heat modes available.

Terminal GL (Orange)

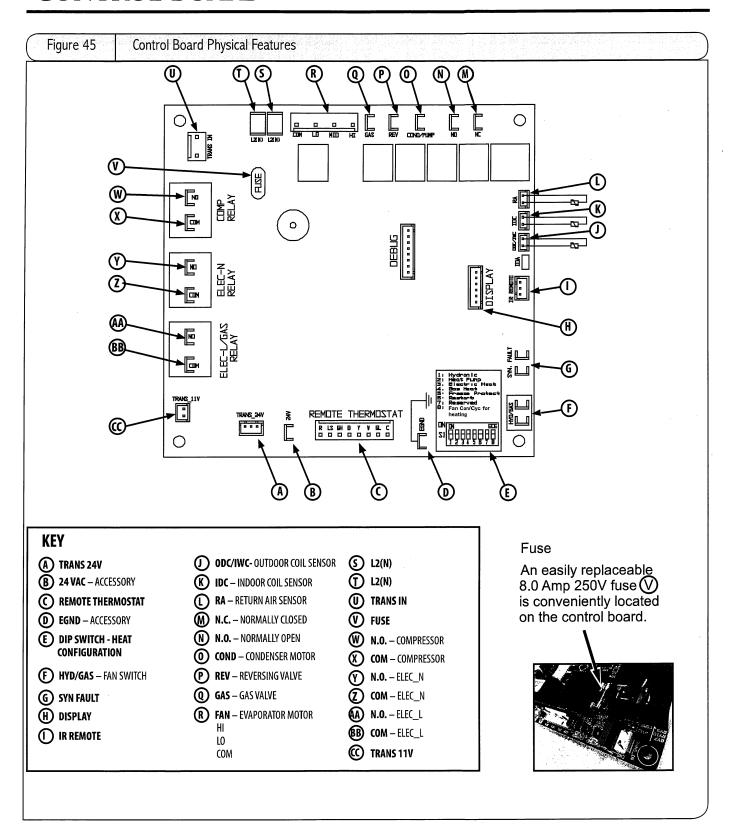
When this low voltage terminal is connected to the R terminal, and the unit is in remote mode, the blower/ fan will be requested for operation on low speed.

Terminal C (Black)

Low voltage terminal, 24 Vac common, to provide opposite polarity voltage to wall thermostat.



CONTROL BOARD



TEMPERATURE LIMITING

SET TEMPERATURE LIMITING

HOW TO SET THE HEATING AND COOLING LIMITS

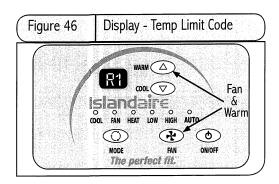
Setting customized temperature set point ranges can save energy costs by limiting extreme settings.

To enter the Set point setup mode, hold down the FAN + WARM buttons for 5 seconds.

While the unit is in this mode, you can now scroll through a series of codes (R1, R2, R3, R4, etc.) to select the desired temperature limiting setting. To move from one code to the next, press the Fan + Warm buttons together to move to the next code on the digital display. See chart at right for the codes and the set point range they each represent.

To accept the new set point, release the buttons for 10 seconds when the desired code is displayed. The change will take effect when the ON/OFF key is pressed a second time, returning the display to normal function.

To cancel the change, wait 10 seconds without pressing the ON/OFF button a second time.



Available Set Point Ranges

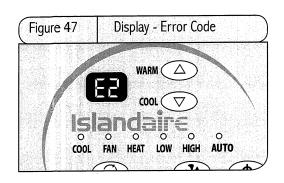
DISPLAY CODE	LOW LIMIT (DEGREES F)	HIGH LIMIT (DEGREES F)
R1	63	86
R2	65	86
R3	65	90
R4	67	88
R5	67	92
R6	69	90
R7	68	72
R8 (FACTORY DEFAULT)	60	90

ERROR CODES

DIAGNOSTIC & ERROR CODES

CONTROL PANEL DISPLAY DIAGNOSTICS

Sensors in the unit continually monitor the indoor coil, outdoor coil, and outdoor air conditions. If abnormal conditions are detected, an error code is displayed, removing the guess work in troubleshooting a unit.



ERROR CODE	DIAGNOSIS	CAUSE	NOTE
E2	RETURN AIR (RA) TEMPERATURE SENSOR FAILURE	RA SENSOR BROKEN OR LOOSE AT BOARD CONNECTION	UNIT OPERATION DISABLED
В	INDOOR COIL (IDC) TEMPERATURE SENSOR FAILURE	IDC SENSOR LOOSE OR BROKEN AT BOARD CONNECTION	UNIT OPERATION DISABLED
E5	OUTDOOR COIL (ODC) TEMPERATURE SENSOR FAILURE	ODC SENSOR BROKEN OR LOOSE AT BOARD CONNECTION	UNIT OPERATION DISABLED
E8	OVERHEAT / FREEZE PROTECTION	REFRIGERANT RESTRICTION DIRTY FILTER / EVAPORATOR COIL FAILED EVAPORATOR MOTOR RETURN SUPPLY AIR RESTRICTED	UNIT OPERATION DISABLED
E9	SYN, FAULT TERMINALS OPEN	HIGH PRESSURE SWITCH OPEN: DIRTY CONDENSER COIL (COOLING) FAILED CONDENSER MOTOR (COOLING) ENSURE BAFFLES ARE INSTALLED (IF REQUIRED) REFRIGERANT RESTRICTION DIRTY FILTER / EVAPORATOR COIL (HEAT PUMP) EVAPORATOR MOTOR FAILURE (HEAT PUMP) ALL ADDITIONAL SAFETIES TIED TO SYN. FAULTTERMINALS SHOULD BE CHECKED	UNIT OPERATION DISABLED

PERFORMANCE SPECIFICATIONS

PACKAGED TERMINAL COOLING UNIT WITH HEAT PUMP OR ELECTRIC HEATING

PART I: SPECIFICATIONS

Size Range: Cooling: 6,800 to 15,000 BTUh

Heating: 6,100 to 14,000 BTUh Heat Pump

4,400 to 17,100 BTUh Electric

PART II: GENERAL

1.01 SYSTEM DESCRIPTION

Single piece, thru-the-wall electrically controlled unit using hermetic rotary compressor for cooling and heat pump or electric resistance heat.

A. Insulated Wall Sleeve:

Shall be entirely constructed of galvanized, heavy-gauge steel with an Antique Ivory powder paint corrosion resistant finish. Wall sleeves shall be installed through the wall as shown on plans and shall have factory provisions for use of appropriate fastening devices to secure sleeve to the wall. In no event shall fasteners be installed through the base pan in the bottom of the wall sleeve.

Wall sleeve shall provide excellent thermal insulation, will have superior outdoor noise absorption and shall be corrosion free for the life of the product

Wall sleeve must have dimensions of 42 in. width x 16 in. height x 14-7/8 in. depth and be shipped with a rear weather barrier installed.

B. Outdoor Louvered Grille:

Shall be (stamped) (architectural) anodized aluminum as shown on plans. Louver shall be (finished natural) (painted) as shown on the schedule. Louvers shall be easily installed from the inside of the building after the cabinet/wall sleeve has been installed. Special field fabricated louvers must be approved by the PTAC manufacturer as to free area and air circulation requirements.

Outdoor grille shall resist corrosion, breakage and match the color specified on drawing schedule and specifications.

C. Subbase:

Subbase will support the wall sleeve when it extends into the room more than 4 inches. Subbase must come from the factory pre-assembled, with a built in receptacle (size as specified on drawing schedule and specifications) or with factory installed hardwire, pre-sized for an exact fit to the unit.

1.02 QUALITY ASSURANCE

System shall be approved and certified by ETL. Chassis capacity and efficiency performance shall be tested in accordance with ARI standard 310/380. Chassis shall meet ASHRAE Standard 90.1 for minimum energy efficiency.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. The packaging of the chassis shall be sufficient to protect the chassis from damage during shipment via an enclosed truck.
- B. Chassis, wall sleeves, and grilles shall be shipped in separate cartons. Universal handling instructions shall be defined and visible on the carton, from front, back and sides.
- C. Unit shall be stored and handled per manufacturer's recommendations.

2.01 EQUIPMENT

A. General:

Factory-assembled, single-piece heating and/or cooling unit. Contained within the unit enclosure shall be compressor, coils, fans and fan motor, heating means, controls, all wiring and piping, and a full refrigerant charge (R410A).

B. Chassis:

The chassis shall be a factory-assembled, single piece heating and/or cooling unit, that is simple to install and operate. Just slide the chassis into a wall sleeve, plug it into an outlet, and operate after installation. The chassis dimensions shall not exceed 42 in. wide and 16 in. high with room cabinet in place. The chassis shall consist of the following functional sections and components:

1. Operating Characteristics:

Chassis shall be capable of starting and running at 115 °F ambient outdoor temperature per maximum load criteria of ARI Standard 310/380.

2. Electrical:

Chassis shall be equipped with a 58 in. power cord. The chassis current draw shall be specified on the chassis nameplate and match electrical requirements specified on the Contract drawing schedule and specifications.

The power cord plug configuration shall conform to NEMA standards and the rating shall support the current draw of the electric resistance heater.

For 265V installations, UL codes require the use of an electrical equipped subbase for power cord usage or hardwire conduit for non-corded installations.

C. Airflow System:

The airflow system shall consist of one permanent split-capacitor, direct-drive permanently lubricated, two-speed fan motor for the indoor and outdoor fans. The outdoor fan shall be a dynamically balanced, corrosion resistant polymer multi-blade axial flow design, with integrated slinger ring. The indoor fan shall be a dynamically balanced, polymer, reverse curve blower wheel, to assure uniform air distribution. The Fan Motor shall be of an enclosed design to reduce the effects of moisture and corrosion.

D. Compressor and Refrigerant:

The rotary-type Compressor shall be fully hermetic with internal and external vibration isolation. The refrigeration system will be sealed and contain a full refrigerant charge (R410A).

E. Coils:

Condenser and evaporator coils to be constructed of high-efficiency, lanced sine wave enhanced aluminum fins and seamless axial grooved copper tubing, necessary to achieve EER and COP rating, as specified on the chassis name plate.

F. Factory-Installed Electric Heater:

The factory-installed, open coil type, electric heater is standard in heat/cool and heat pump chassis. The electric heater shall contain both an automatic reset and a one-shot over temperature protection device.

The heating capacity of the electric heater shall be as identified on the Contract drawing schedule and in the specifications.

G. Front Panel (supplied with chassis):

Front panel shall be constructed of a polymer material to resist breakage and corrosion. It shall have a front louvered surface with integrated air filters. The air filters shall be easily accessible without removing the front panel from the chassis.

H. Fresh Air Vent

The chassis shall have a manual adjustable fresh air vent with a concealed manual control. The vent control shall allow a maximum of up to 72-75 CFM of fresh air to be drawn into the room when the indoor fan is operating and the door is open.

I. Condensate Removal System

The chassis shall have a condensate removal system consisting of a condensate suction port, to draw and atomize condensate, and a slinger ring integrated in the outdoor fan, to disperse condensate onto the condenser coil to be evaporated.

Condensation accumulated during reverse cycle heating must NOT be evaporated against the indoor coil so as to prevent contamination of the indoor air with pollutants and odors. Condensation must be disposed of using a (external/internal) drain system as shown on plans.

3.01 CONTROLS

All standard models shall be equipped with electromechanical controls to simplify the serviceability of the unit.

A. Standard Controls

The chassis shall have standard controls, accessible. The mode selection control shall provide OFF, FAN ONLY, HEAT or COOL operations.

The temperature selection control shall be an adjustable thermostat with upper and lower limits.

B. Continuous Fan

All standard models shall have a continuous/ fan cycle selector switch located behind the front panel. It shall allow the selection of continuous fan operation for maximum comfort or cycle operation (fan only runs with cooling or heating operation) for maximum energy savings.

C. Temperature Limiting

All standard models shall have Temperature Limiting management built in to the system controls.

The temperature limiting controls allow a room temperature set-point range to be established, to avoid extreme temperature settings, to maximize energy savings.

D. Emergency Heat

Emergency Heat Switch (Heat Pump Models Only), upon failure of the compressor, shall automatically disable the compressor in heating mode and only allow the use of electric strip heater during heating cycles. The Emergency Heat switch is active at all outdoor ambient temperatures.

E. Thermostat

Wall thermostat chassis shall come from the factory ready for wall thermostat installation, including a blank out plate in place of the digital control panel. Installation of harness and DIP switch required.

F. Fan Speed Control

Wall thermostat chassis (RC and RP models) shall have a user-selectable fan speed control switch, on the control panel, to optimize fan speed for maximum comfort.

G. Protection Circuits:

Compressor shall have automatic reset, over temperature and over current protection. The fan motor shall have an inherent, automatic reset over temperature protection. The electric heater shall have two over temperature protectors.

4.0.1 HEAT PUMP OPERATION

Heat pump units shall have the selected room temperature maintained by cycling either in the heat pump mode or electric strip heat. A heat pump unit with electric heat is switched from the heat pump mode to electric strip heat when the outdoor coil temperature is 20 °F or when the heat pump cannot keep up with the heating load and a two-stage thermostat is used.

For heat pump operation, a room thermostat with a B** (heating changeover) terminal is required. This will mean that some "auto changeover" thermostats cannot be used, as many of them either do not have a B** terminal, or else energize the B** terminal continuously when in the "auto" position.

4.0.2 ELECTRIC HEAT OVERRIDE

For heat pump applications, electric heat comes on only when the outdoor coil temperature is below 28 °F, maximizing the amount of time the unit operates in the more efficient heat pump mode. The minimum COP for heat pumps, at 47 °F DB outdoor, must be 2.9 for all sizes.

(Heat pump models shall also include reversing valve).

4.0.3 REVERSE CYCLE

A Heat Pump WITH back-up electric heat -

The reversing valve, the compressor, the outdoor condenser fan motor and the indoor fan motor shall be energized. Reverse cycle heating shall occur when the outdoor coil temperature is 28 °F and above. If outdoor coil temperature drops below 28 °F or the Outdoor air temperature drops to 35 °F or less, electric heat is the only source of heat. When the outdoor coil temperature rises back to 40 °F or above, the Compressor or electric heater is used.

A temperature-sensing device shall be used to monitor the outdoor coil temperature to limit frost buildup. Defrosting of the outdoor coil will be activated when outdoor coil temperature drops below 28 °F or outdoor air temperature drops to 35 °F or less. Defrosting is terminated when outdoor coil temperature rises back to 40 °F. During defrosting, both compressor and the outdoor fan are turned off. The indoor fan will run at its set speed.

Condensation accumulated during reverse cycle heating must NOT be evaporated against the indoor coil so as to prevent contamination of the indoor air with pollutants and odors. Condensation must be disposed of using a (external/internal) drain system as shown on plans.

B. Heat Pump WITHOUT back-up electric heat

The reversing valve, the compressor, the outdoor condenser fan motor and the indoor fan motor shall be energized. Reverse cycle heating shall occur when the outdoor temperatures are 35 °F and above.

If outdoor coil temperature drops below 28 °F or the outdoor air temperature drops to 35 °F or less, the compressor stops and there is no source of heat. When the outdoor coil temperature rises back to 40 °F or above, the compressor reverse cycle is the heat source.

A temperature-sensing device shall be used to monitor the outdoor coil temperature to limit frost buildup. Defrosting of the outdoor coil will be activated when outdoor coil temperature drops below 28 °F of outdoor air temperature drops to 35 °F or less. Defrosting is terminated when outdoor coil temperature rises back to 40 °F. During defrosting, both compressor and the outdoor fan are turned off.

The indoor fan will stop if indoor coil temperature falls below 78 °F. It will restart at its set speed when indoor coil temperature rises back to 80 °F.

4.01 ACCESSORIES:

- A. Metal Wall Sleeve shall be a one-piece, extended wall sleeve, with factory installed insulation.
- B. Architectural louver shall be painted aluminum for a superior color match to the building.
- C. Subbase shall be pre-assembled from the factory and be UL listed.

Subbase options include:

 Non-electrical subbase: The non-electrical subbase shall be pre-assembled and provides mechanical support and requires no wiring.

- 2. Electrical subbase: The electrical subbase shall be pre-assembled with factory-installed electrical junction box containing a receptacle for corded units.
- 3. Hardwired subbase: The hardwired electrical subbase shall be pre-assembled with factory installed electrical junction box containing 19 inches of flexible conduit (for a perfect fit to the unit) and all mating connections.
- D. Hardwire kit shall provide a permanent connection to the unit.

The hardwire kit mounts on the front right side of the unit and shall have 36 inches of flexible steel conduit and a connector for easy connect/disconnect.

E. Condensate Drain

This universal drain kit shall be used internally or externally to route excess condensate to a drainage system. It can be field-installed on any Islandaire wall sleeve. The drain kit shall be attached to the exterior right or left side of the wall sleeve for external draining or may be mounted to the bottom of the wall sleeve for internal draining.

F. Lateral Duct:

The kit shall include an adapter plenum, extension duct, wall register and wall molding. The lateral duct system allows one system to heat or cool two adjacent rooms, by directing up to 30% of the airflow to the adjacent room.

G. Power Vent:

This specially designed fan delivers up to approximately 95 CFM of fresh air through the vent while the fan is operating.

H. Front Desk Control:

Unit controls shall provide front desk control on all units, allowing individual units to be turned on and off from a remote location or by a motion-sensing device. Front desk controls shall interface to most energy management systems.

I. Security Door:

The key-locking security door kit shall prevent unauthorized access to the unit's heating and cooling controls and prevents tampering with units in public locations and institutions. The security door shall include two matching keys and keys shall be common to all Islandaire Security Door kits.

NOTES

NOTES

LIMITED ONE YEAR PARTS AND LABOR PLUS ADDITIONAL 2ND THROUGH 5TH YEAR SEALED SYSTEM PART ONLY WARRANTY COVERING ISLANDAIRE THRU-WALL AIR CONDITIONERS & HEAT PUMPS

THIS WARRANTY APPLIES TO THE AIR CONDITIONER UNIT ("THE UNIT") THAT IS THE SUBJECT OF THIS SALE AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. THIS WARRANTY DOES NOT APPLY TO ANY ACCESSORY THAT IS NOT A PART OF THE UNIT AS SHIPPED BY ISLANDAIRE. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL EQUIPMENT AT THE ORIGINAL INSTALLATION LOCATION. PROOF OF PROPER, ROUTINE MAINTENANCE WILL BE REQUIRED IN ORDER TO MAINTAIN EXTENDED WARRANTY.

ISLANDAIRE the "Company" of St. James, New York warrants that the unit is free from defects in material and workmanship under normal use and service, for the twelve-month period following the date of installation*.

WARRANTY Coverage includes repair or replacement, at the Company's option, of any defective parts that fail under normal use for the first 365 days after the date of equipment installation* under the terms, conditions and limitations of the warranty. All defective parts shall be returned within thirty days after removal to the Company at such locations as the Company may designate. Islandaire reserves the right to impose an inspection charge and/or a restocking fee in cases where parts or equipment have been improperly returned as defective and/ or as being in warranty. A warranty part can only be replaced one time over the duration of the warranty period.

WARRANTY coverage also includes Labor Charges on all covered repairs performed by a Islandaire Authorized Service Agent in accordance with the terms, conditions and limitations of the warranty. Extra charges such as emergency calls, nuisance calls, mileage, overtime or shipping are not covered.

On occasion, wires may become disconnected or components may be dislodged from their bases as a result of rough handling during transport, causing improper functioning of the unit. Immediately following installation, the installing contractor is responsible to check, test and start the unit, including physically operating the unit in both cooling and heating modes, and correcting any minor deficiencies noted. Additionally, the installing contractor is responsible to provide unit operation instruction by an experienced person.

ADDITIONAL SEALED SYSTEM WARRANTY Coverage includes replacement of any part of the sealed refrigeration system, including the compressor, evaporator, condenser and connecting tubing, that proves to be defective from the 2nd through 5th year from date of installation. Labor is not included. Freight charges for replacement and return of defective warranty parts will be the Company's responsibility.

IN NO EVENT SHALL THE COMPANY'S MAXIMUM LIABILITY EXCEED THE SELLING PRICE OF THE UNIT CLAIMED TO BE DEFECTIVE.

As a condition precedent to the Company's obligation under this WARRANTY, it shall be the obligation of the Owner during the designated WARRANTY period to furnish the following information to the Company within three days after unit failure: 1) Model Number and Serial Number of unit involved, 2) A full and complete description of the problem encountered with the unit. Upon receipt of the above information, the Company will reply to the Owner within a period not to exceed fifteen working days, with a description of the action the Company desires to take.

For warranty service, contact an Islandaire Authorized HVAC Service Agent.

Contact the Islandaire Customer Service Department at U.S. 800-886-2759.

To validate this WARRANTY, you must complete the registration information below and return the pre-addressed card to Islandaire within seven days of equipment installation. The actual warranty type for your equipment is stated on the original Islandaire invoice for said equipment. Proof of installation date is required. *Please be advised where no Warranty Registration Card has been returned, the original date of invoice of the equipment shall become the start date of the warranty period.

Original Model	Case Height	Case Width	Our Model	Original Model	Case Height	Case Width	Our Model
Amana®				Keeprite®			
PT 42 x 16 Series	16	42	42	Climette	18 5/16	32	CS
PB 26 x 16 Series	16	26	26	Seasonall	18 5/16	32	CS
merican Air Filter®				Lennox®			
Enersaver Type 16	16	37 1/2	16	PTEIA Series	22 1/4	38	PT
Type 16 Hydronic	16	41 1/2	16	McQuay®			
Nelsonaire Series 25	16	36 1/2	25	C/EC	27 3/8	54 1/2	EC
	10	30 1/2	23	EB Series	22	30 5/8	EB
American Standard®	1.0	26.1/2	44		14	30	JA
TW Series Type 41	16	36 1/2	41	J/EJ Series	13 15/16	36	KF
Type 40 Remotaire(SR)	16 1/2	37	40	K, EK and RK Series Type EA, ES and RS	16 3/8	44 7/8	ED
pplied Comfort®			 				
DM/DMQ	18 5/16	32	CS	Type NE	16	42	NE
SC Series	16	40	sc	Mueller®			<u> </u>
SC Series	16	36	RM	Climatrol	16	48	UN
arrier®				Remington®	•		
51PH Wallmate	18 15/16	32	CS	J/EJ Series	14	30	JA
artaret®				K, EK and RK Series	13 15/16	36	KF
Type 45	16 1/2	37	45	Type 41	16	36 1/2	41
hromalox®				Type 45	16 1/2	37	45
Space Command	16 1/2	45 1/8	СН	Simonaire®			
CAM (2 section)	15	35 1/2	CX	SSK	16	42	RT
hrysler®	15 1/2	36	CY	SSEZ	16	42	RT
	13 1/2	30	CI	SSCT	16	42	RT
limate Master®					10	42	NI -
Climate Master Series 700AD	16	36	AD	Singer®			
Climate Master Series 701	16	40 1/2	C7	C/EC	27 3/8	54 1/2	EC
Climate Master Series 702, 703 & 704	16	36	CM	EB	22	30 5/8	EB
unham Bush®				J/EJ Series	14	30	JA
New Port III	25 ´	52	N3	K, EK and RK Series	13 15/16	36	KF
New Port IV	25	52	N4	Type 41	16	36 1/2	41
mbassy®				Type 45	16 1/2	37	45
Weathertwin	16	36	RM	Type EA, ES and RS	16 3/8	44 7/8	ED
edders®				Slant Fin®			
Maxizone Series	16 1/4	27	мх	JK	16	42	JK
Unizone	16	48	UN	CC Monterrey	16	42	cc
riedrich®	10	1 40		Monterrey	17 1/2	36	FM
	10	36	AD		17 1/2	30	
Climate Master Series 700AD	16	36		Suburban Dynaline®	16	42	CC
Climate Master Series 701 Climate Master Series	16 16	40 1/2 36	C7 CM	Gas Unit TPI®	16	42	GS
702, 703 & 704							
ET Series	20	28	ET	Ra-Matic	16 .	36	RM
ΓE Series	16	42	TE	Weil-Mclain			
/ert-I-Pak	32	23	VP	ClimateMaster Series 700AD	16	36	AD
eneral Electric®				Climate Master Series 702, 703 & 704	16	36	CM
Zoneline	16	42	42	Westinghouse®			
AJ Series	16	26	26	RB Series	15	38 1/2	RB
AZ Vertical	31	23 1/4	VP	Worthington®	16	48	UN
eil Quaker®		<u> </u>		Zoneaire®			
SEA Series	14 1/2	35 7/8	HQ	CHP Series	18 5/16	32	CS
SHA Series	14 1/2	35 7/8	HQ	CSM Series	18 5/16	32	CS
			CS	Zoneaire, RM Series	16 3/10	36	RM
Series C	18 5/16	32		Zoneaire, SC Series	16	40	SC
e-Cap / Ice Air®	1.5	36			10	 	
RSK Series	16	36	RK	Custom Products	ļ	<u> </u>	L
RSCT Series	16	42	RT	Vertical Units, Fan Coils, and of	ther related l	HVAC produ	ıcts.
RSWL Series	13 1/4 ·	56 1/2	WL	(Consult with Factory)			
T Nesbitt®							
Challenger Series	16 1/4	42 1/4	NC				
Roomate Series - N		-	CY	If you don't see the unit you're loo about having a unit custom desig		above list, p	lease call ι

Ask your salesman about our DR. PTAC option!*

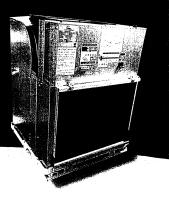


*100% conditioned fresh air

Vertical Unit Available

For New Construction and as Replacement for:

GE AZ Vertical and Friedrich Vert-I-Pak

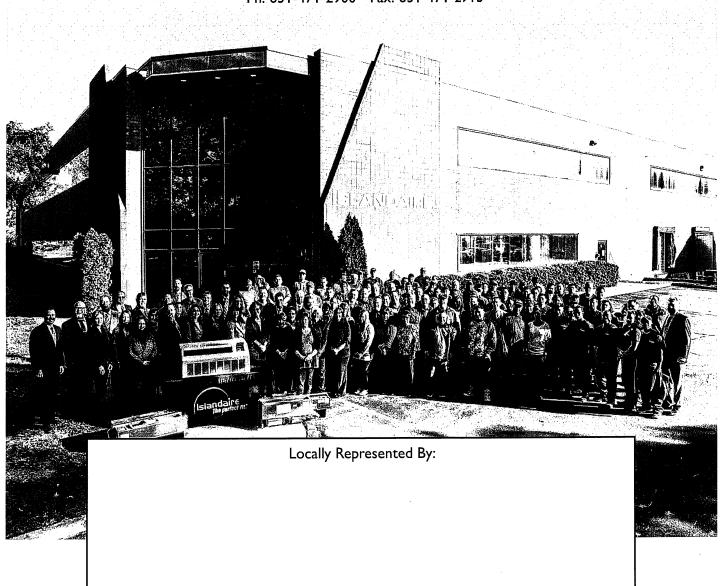








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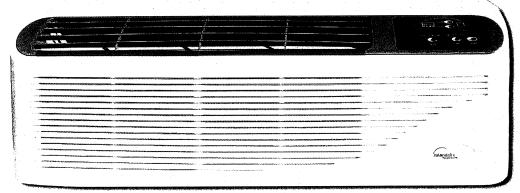
EZ SERIES 42

THRU-THE-WALL/BUILT-IN AIR CONDITIONERS





Two-stage electric heat for energy savings!!



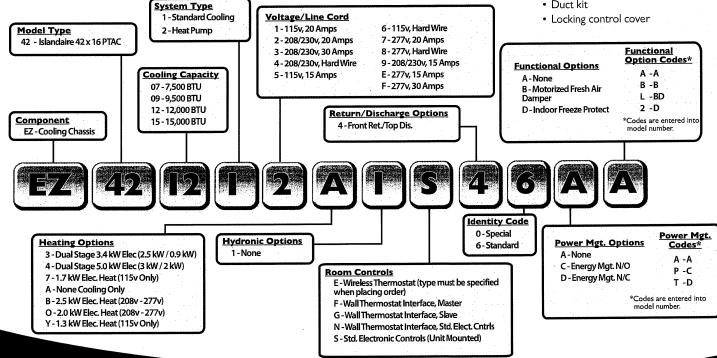
The EZ Series 42 units are designed and manufactured for new construction or the replacement of existing Amana, GE, LG, Friedrich, Gree, Trane and all other 42" by 16" PTACs & PTHPs. The product is designed for individually-zoned, comfort-controlled heating and cooling. The unit width is an industry standard 42". We offer our cooling chassis to operate with cooling only or heat pump with back up electric heat, or just straight electric heat. The design standards, heavy duty construction and the focus on indoor noise reduction has created our unit as the premier unit of the future. Standard warranty is a one year parts and labor including five year sealed system part only warranty or a two year parts only including a five year sealed system part only warranty.

FEATURES:

- Dual fan motors
- · Ouiet and energy-efficient compressor
- Superior temperature control
- · Conventional thermostat compatible for heat pump applications
- Modern and elegant appearance
- Washable filter for easy cleaning
- User friendly control panel, remote controller and wall thermostat
- Compressor freeze protection
- Manual fresh air damper
- Random start-up delay after power
- Room side freeze protection (optional)
- On-board Diagnostics

ACCESSORIES:

- · 18 gauge insulated wall sleeve
- · Condensate removal kit
- Architectural louver
- Sub-base kit
- · Electrical sub-base kit
- Wired remote thermostat
- · Wireless remote thermostat
- I.R. motion sensor
- · Door switch
- Duct kit



EZ SERIES 42

THRU-THE-WALL/BUILT-IN AIR CONDITIONERS

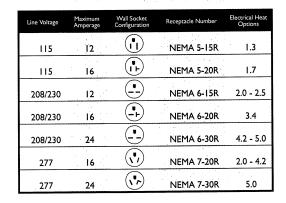


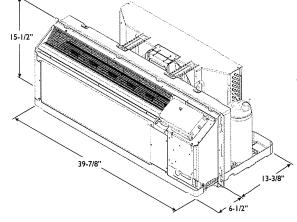
					MODE	\$					
		EZ07			EZ09			EZI2		EZI	5
VOLTS	115	208 / 230	277	115	208 / 230	277	115	208 / 230	277	208 / 230	277
BTUH COOL	7200	6,800 / 7,200	7,200	9,800	9,300 / 9,500	9,500	12,500	12,300 / 12,500	12,500	14,300 / 14,500	15,000
AMPS COOL	4.91	2.52 / 2.46	2.11	7.22	3.70 / 3.41	2.83	9.30	5.05 / 4.65	3.86	6.49 / 5.96	5.20
WATTS COOL	565	525 / 565	585	830	770 / 785	785	1,070	1,050 / 1,070	1,070	1,350 / 1,370	1,440
EER	12.8	13.0 / 12.8	12.3	11.8	12.1 / 12.1	12.1	11.7	11.7 / 11.7	11.7	10.6 / 10.6	10.4
CFM HIGHCOOL	340	340 / 375	360	340	340 / 375	360	340	340 / 375	360	360 / 360	360
CFM LOW COOL/HEAT	240	240 / 260	260	240	240 / 260	260	240	240 / 260	260	240 / 260	260
BTUH HEAT	6400	6,300 / 6,400	6,100	8,500	8,300 / 8,500	8,500	11,400	11,000 / 11,400	11,400	13,200 / 13,600	14,000
WATTS HEAT	530	520 / 530	520	710	685 / 700	710	980	915 / 950	980	1,150 / 1,180	1,300
C.O.P.	3.5	3.6 / 3.5	3.4	3.51	3.6 / 3.6	3.51	3.4	3.5 / 3.5	3.4	3.4 / 3.4	3.16
NOISE INDOOR/ OUTDOOR (DBA)	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69	45/69
SHIPPING WEIGHT (LB)	116	116	116	116	116	116	116	116	116	112	119

Where applicable, cooling capacities are specified at conditions of 95 °F DB/75 °F WB outdoor and 80 °F DB/67 °F WB indoor and heating capacities are specified at conditions of 47 °F DB/43 °F WB outdoor and 70 °F DB/60 °F WB indoor in accordance with AHRI 310/380 and CSA C744 standards. Wattage, Amperage, EER, and COP listings include compressor, evaporator motor and condenser fan motor. The above ratings are a typical heat pump style unit.

Heating Option	Voltage (I)	Wattage	BTU/h	Amps (2)
	208	2,780	9,500	13.37
3	230	3,400	11,600	14.78
	277	3,600	12,300	13.00
	208	4,090	14,000	19.66
4	230	5,000	17,100	21.74
	277	5,000	17,100	18.05
7	115	1,700	5,800	14.78
	208	1,635	5,600	7.87
0	230	2,000	6,800	8.70
	277	2,500	8,500	9.03
	208	2,045	7,000	9.83
В	230	2,500	8,500	10.87
	277	2,500	8,500	9.03
Y	115	1,300	4,400	11.30

- (1) Voltage is Single Phase, Alternating Current and R.M.S.
- (2) Amp values are for heater element only.









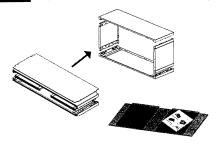


*Islandaire has a policy of continuous improvement of its products and reserves the right to change the materials and specifications without notice.

EZ SERIES 42 THRU-THE-WALL/BUILT-IN AIR CONDITIONERS



		APPROX		DIMENSION	
PART NUMBER	DESCRIPTION	WT.	DEPTH	WIDTH	HEIGHT
Consult Factory	Custom Wall Sleeves available for all building types/wall thicknesses	- ,	-	-	-
2400405-00	EZ42 Wall Sleeve, Recessed Louver	34.0 lb.	15.00"	42.00"	16.00"
2401135-00	EZ42 Wall Sleeve Assembly, Break Down	33.0 lb.	13.75"	42.00"	16.00"
1090339-00	EZ42 Wall Sleeve Extension Kit	5.0 lb.	2.000"	42.00"	16.00"
1092502	Kit, Acoustic Insulation for Sleeve 2401135-00	1.35 lb.	1.000"	40.375"	13.000



	DUCT ASSEMBL	IES			
PART NUMBER	DESCRIPTION	APPROX WT.	DEPTH	DIMENSION	S HEIGHT
4082401-00	EZ42 Duct Assembly, Standard w/ Plenum	20.0 lb.	N/A	N/A	N/A
4082404-00	EZ42 Duct Extension, 3'	10.0 lb.	N/A	N/A	N/A
6070199	EZ42 Duct End Grille, 6" x 6"	5.0 lb.	N/A	N/A	N/A



	LOUVERS				
PART NUMBER	DESCRIPTION	APPROX WT.	DEPTH	DIMENSION WIDTH	IS HEIGHT
6070264	EZ42 Stamped Louver, Formed, Standard (use with 2401135-00 wall sleeve)	5.0 lb.	1.063″	41.00"	15.50"
6070422	EZ42 Architectural Louver, External, Standard (use with 2401135-00 wall sleeve)	7.0 lb.	1.125″	42.00"	15.90"
6070134	EZ42 Louver, Recessed (use with 2400405-00 wall sleeve)	7.0 lb.	1.125″	41.50"	15.50"

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	THEMMOSTATIO				
1 1		APPROX	FI	EATURES	
PART NUMBER	DESCRIPTION	WT.	CONNECTION	STAGE	DISPLAY
6041206	Islandaire Non-Programmable, Two Fan Speed	1.0 lb.	Wireless	Single	Horizontal
5041210	Islandaire Programmable ,Two Fan Speed	1.0 lb.	Wireless	Single	Horizontal
6041228	Islandaire Programmable (7 Day/5-1-1 Day/ Non-Programmable), 2-Fan Spd	1.0 lb.	Wired	Single	Horizontal



	FILTERS				
PART NUMBER	DESCRIPTION	APPROX WT.	DEPTH	DIMENSION WIDTH	IS HEIGHT
6080067	EZ42 Plastic Filter (2 Pieces), Standard	2.0 lb.	N/A	N/A	N/A

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202239200	ST CTOMPERSONS	Becommode:	September 17	
				Sec.
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3000014011	MARKETT WAS	Ç.,	AVIIIII	
		CONTRACTOR OF THE PARTY OF THE		
	and the second			

	SUBBASES				
PART NUMBER	DESCRIPTION	APPROX WT.	VOLTAGE	FEATURES AMPERES	HEIGHT
4083349	EZSB4203EMR12S00F00V00	14.5 lb.	208/230v	15/20A	3.00"
4083350	EZSB4203EMR13S00F00V00	15.0 lb.	208/230v	30A	3.00"
4083351	EZSB4203EMR15S00F00V00	13.0 lb.	265/277v	20A	3.00"
4083352	EZSB4203BPR00S00F00V00	13.0 lb.	N/A	N/A	3.00"
4083200	EZSB4204EMR12S00F20V00	13.0 lb.	208/230v	15/20A	4.00"
4084008	EZSB4205EMR12S00F00V00	13.0 lb.	208/230v	15/20A	5.00"



	OTHER OPTION	S	
PART NUMBER	DESCRIPTION	APPROX WT.	FEATURES
4090345	EZ42 Louver Hardware Kit #10-32	1.0 lb.	-
4090661	EZ42 External/Internal Drain Kit	1.0 lb.	-
4090970	EZ42 Stamped Louver Hardware Kit	1.0 lb.	
4091104	EZ42 Air Deflector Kit, Standard	5.0 lb.	· -
6041146	EZ42 Hand Held Remote Replacement	1.5 lb.	-
6130133	EZ42 Front Panel (Plastic)	10.0 lb.	_



Ask your salesman about our DR. VTAC option!*



*100% conditioned fresh air

Vertical Unit Available

For New Construction and as Replacement for:

GE AZ Vertical and Friedrich Vert-I-Pak

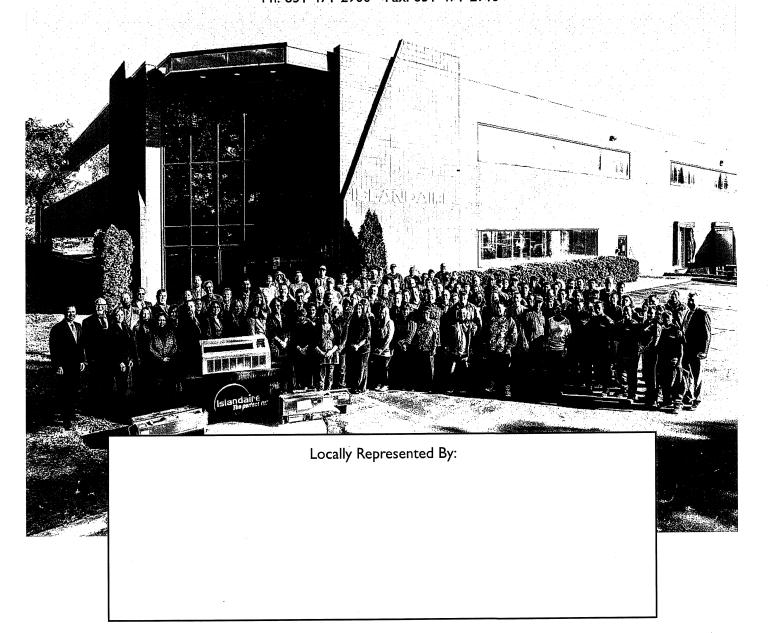








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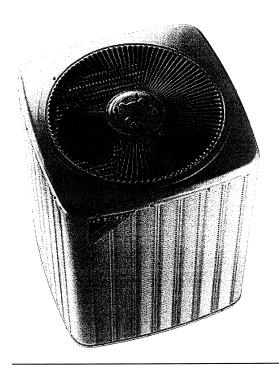




DX13S COMMERCIAL

3-, 4-, & 5-TON, THREE-PHASE SPLIT SYSTEM AIR CONDITIONER

COOLING CAPACITY: 36,000 - 60,000 BTU/H



Contents

Nomenclature	2
Product Specifications	3
Expanded Cooling Data	4
AHRI Ratings	16
Dimensions	18
Wiring Diagrams	19
Accessories .	21

■ Standard Features

- Energy-efficient compressor
- Factory-installed filter drier
- Copper tube/ enhanced aluminum fin coil
- Service valves with sweat connections and easy-access gauge ports
- Contactor with lug connection
- Ground lug connection
- Units meet the performance outlined in Table 6.8.1B of ASHRAE Standard 90.1-2010
- AHRI Certified
- ETL Listed

■ Cabinet Features

- Innovative louvered sound control top design
- Steel louver coil guard
- Heavy-gauge galvanized-steel cabinet
- Attractive Nickel Gray powder-paint finish
- Top and side maintenance access
- Single-panel access to controls with space provided for field-installed accessories
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)



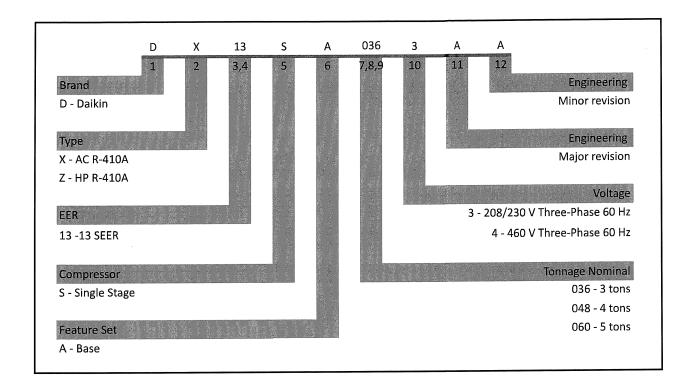








Complete warranty details available from your local distributor or manufacturer's representative or at www.daikincomfort.com.



2

	DX13SA 0363A*	DX13SA 0364A*	DX13SA 0483A*	DX13SA 0484A*	DX13SA 0603A*	DX13SA 0604A*
COOLING CAPACITIES			•			
Nominal Cooling (BTU/h)	36,000	36,000	48,000	48,000	60,000	60,000
SEER	13	13	13	13	13	13
Decibels	74	74	76	76	72	72
COMPRESSOR						
RLA / LRA	10.4/73	5.8/38.0	13.1/83.1	6.1/41	16/110	7.8/52
Туре	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
CONDENSER FAN MOTOR						
Horsepower	1/6	1/6	1/4	1/4	1/4	1/4
FLA	1.1	0.6	1.2	0.8	1.3	0.8
REFRIGERATION SYSTEM						
Refrigerant Line Size						
Liquid Line Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line Size ("O.D.)	3/4"	3/4"	11/8"	1%"	11/8"	11/8"
Refrigerant Connection Size						
Liquid Valve Size ("O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Valve Size ("O.D.) ^{3 4}	3/411 3	3/4" 3	7∕8 ¹¹ 4	7⁄8″ ⁴	7∕8 ¹¹ 4	7∕8 ¹¹ 4
Valve Type	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat
Refrigerant Charge (oz.)	68	68	97	97	130	111
Piston Size	0.07	0.07	0.08	0.08	0.086	0.086
ELECTRICAL DATA						
AC Volts/ Hz/ Phase	208-230/60/3	460/60/3	208-230/60/3	460/60/3	208-230/60/3	460/60/3
Min. Circuit Ampacity ¹	14.1	7.9	17.6	8.4	21.3	10.6
Max. Overcurrent Device ²	20	15	30	15	35	15
Min / Max Volts	197/253	197/253 ·	197/253	414/506	197/253	414/506
Electrical Conduit Size	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"
SHIP WEIGHT (LBS)	196	196	190	189	301	301

Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes

Notes

- Always check the S&R plate for electrical data on the unit being installed.
- Unit is charged with refrigerant for 15' of %" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.

 $^{^{\}rm 2}$ $\,$ Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

 $^{^{\}rm 3}$ $\,$ $\,$ Installer will need to supply %'' to %'' adapters for suction line connections.

 $^{^4}$ $\,\,$ Installer will need to supply %'' to 1%'' adapters for suction line connections.

												ľ	UTDOOR	AMBIE	OUTDOOR AMBIENT TEMPERATURE	ERATUR	ш									
				9	65				75			8	85			95	2			105				115		
												ENTER	ING IND	OOR WE	ENTERING INDOOR WET BULB TEMPERATURE	EMPER	ATURE									
IDB	AIRF	AIRFLOW	29	63	29	71	59	63	29	71	59	63	29	7.1	59	63	29	71	29	63	29	71	59	63	29	7.1
		MBh	31.1	32.2	35.3	1	30.4	31.5	34.5	1	29.6	30.7	33.7		28.9	30.0	32.8	1	27.5	28.5	31.2	,	25.4	26.4	28.9	
		S/T	0.70	0.58	0.40	1	0.72	09.0	0.42	1	0.74	0.62	0.43	,	92.0	0.64	0.44	,	0.79	99.0	0.46	,	0.80	0.67 (0.46	,
		ΔT	19	16	12	1	19	17	13	,	19	17	13	ı	19	17	13	,	19	16	13	-	18	15	12	
	1050	×		2.47	2.54	,	2.60	2.65	2.73	1	2.75	2.81	2.89	ı	2.88	2.94	3.04	,	3.00	3.06	3.16	,	3.10	3.16	3.26	
		Amps		6.3	6.5	1	9.9	6.7	7.0	1	7.1	7.3	7.5	ı	9.7	7.8	8.0	,	8.1	8.3	8.5	-	8.5	8.7	9.0	1
		HI PR		242	255	1	252	271	286	1	286	308	326	ı	326	351	371	ı	367	395	417	ı	406	436	461	1
		LO PR		109	120	1	109	116	126	-	113	120	131		119	126	138	,	124	132	144		129	137	149	,
		MBh		34.9	38.2	-	32.9	34.1	37.4	-	32.1	33.3	36.5		31.3	32.5	35.6		29.8	30.8	33.8	ı	27.6	28.6	31.3	ļ .
		S/T		09.0	0.42	,	0.75	0.62	0.43	1	0.77	0.64	0.44	ı	0.79	99.0	0.46	,	0.82	69.0	0.48	,	0.83	0.69	0.48	,
		ΔT	19	16	12	,	19	16	12	1	19	16	12	,	19	16	12	,	19	16	12	,	17	15	11	,
20	1200	Χ×		2.53	2.60	1	2.66	2.71	2.79	,	2.81	2.87	2.96	,	2.95	3.02	3.11	,	3.07	3.14	3.24	,	3.17	3.24	3.34	1
		Amps		6.4	9.9	1	6.8	6.9	7.1	1	7.3	7.5	7.7	,	7.8	8.0	8.3	1	8.3	8.5	8.8	,	8.8	9.0	9.3	,
		HI PR		249	263	ı	260	279	295	1	295	318	336	,	336	362	382	ı	378	407	430	,	418	450	475	,
		LO PR	106	113	123	'	112	119	130	1	116	124	135	1	122	130	142	1	128	136	149	_	133	141	154	,
		MBh		36.0	39.4	1	33.9	35.1	38.5		33.1	34.3	37.6	1	32.3	33.4	36.6	,	30.7	31.8	34.8		28.4	29.4	32.2	
		S/T		0.63	0.44	1	0.78	0.65	0.45	1	08.0	0.67	0.47	,	0.83	0.69	0.48	,	98.0	0.72	0.50	,	0.87	0.73 (0.50	
		ΔT		15	12	1	18	16	12	1	18	16	12	,	18	16	12	ı	18	16	12	ı	17	15	11	,
	1350	×		2.55	2.62	1	2.68	2.73	2.81	1	2.84	2.90	2.98	1	2.98	3.04	3.13	ı	3.10	3.16	3.26	ı	3.20	3.27	3.37	,
		Amps		6.5	6.7	1	8.9	7.0	7.2	,	7.4	7.6	7.8	1	7.9	8.1	8.3	,	8.4	8.6	8.9	,	8.9	9.1	9.4	,
		HI PR		252	566	ı	762	282	298	1	298	321	339	1	340	366	386	ı	382	411	434	1	422	454	480	,
		LO PR	107	114	124	1	113	120	131	1	118	125	137	-	124	131	144	1	130	138	150	-	134	143	156	,

	T/ 2					!			_					t.07	20.0	22.0	7.7.7	7 (.17)						77.0
	-	0.79	0.71	0.54	0.34	0.82	0.73	0.55 (98.0	0.84	0.75	0.57	0.37	0.87		0.59 0	0.38 (0.90	0.81	0.61 0	0.39 0	0.91	0.81 ().61 (0.40
_	ΔT	22	20	17	11	22	20	17	12	22	20	17	12	22	21	17	12	22	20	17	11	21	19	16	11
1050	××	2.44	2.49	2.56	2.64	2.62	2.67	2.75	2.83	2.77	2.83	2.91	3.01	2.91		3.06	3.16	3.02	3.09	3.18 3	3.29	3.12	3.19	3.29	3.40
∀	Amps	6.2	6.3	6.5	6.7	9.9	8.9	7.0	7.3	7.2	7.4	7.6	7.9	7.7	7.9	8.1 8	8.4	8.2	8.3	8.6	8.9	9.8	8.8	9.1	9.5
	HI PR	227	244	258	269	254	274	289	302	289	311	329	343	330	355	375 3	391	371	399	421 4	439 '	410 ,	441	466	486
ח	LO PR	104	111	121	129	110	117	128	136	114	121	133	141	120	128	139 1	148	126	134	146	155	130	138	151	161
	MBh	34.2	35.3	38.2	41.0	33.5	34.4	37.3	40.0	32.7	33.6	36.4	39.1	31.9		35.5 3	38.1	30.3	31.2	33.7 3	36.2	28.0	28.9	31.2	33.5
	S/T	0.82	0.73	0.56	98.0	0.85	92.0	0.58	0.37	0.87	0.78	0.59	0.38	06.0		0.61 0	0.39	0.93	0.83 (0.63 C	0.41 (0.94 (0.84 (0.64	0.41
	ΔT	22	20	16	11	22	20	16	11	22	20	16	11		20		11	22	20	16	11	20	19	15	11
75 1200	ΚW	2.50	2.55	2.62	2.70	2.68	2.73	2.82		2.84	2.90	2.98	3.08	2.98		3.13 3	3.23	3.10	3.16	3.26 3	3.37	3.20	3.27	3.37	3.48
⋖	Amps	6.3	6.5	6.7	6.9	8.9	7.0	7.2	7.5	7.4	7.6	7.8	8.1	7.9	8.1		9.8	8.4	8.6	8.9	9.2	8.9	9.1	9.4	9.7
	HI PR	234	252	266	277	262	282	298	311	298	321	339	354		366	386 4	403	382	411	434 4	453	422	454	480	501
	LO PR	107	114	124	133	113	120	131	140	118	125	137	146	124	131	144 1	153	130	138	150	160	134	143	156	166
	MBh	35.3	36.3	39.3	42.2	34.5	35.5	38.4	41.2	33.6	34.6	37.5	40.2	32.8	33.8		39.3	31.2	32.1	34.7 3	37.3	28.9	29.7	32.2	34.5
	S/T	98.0	0.77	0.58	0.37	0.89	0.80	0.60	0.39	0.91	0.82	0.62	0.40				_	0.98	0.88	0.66 0	0.43 (0.99	0.88	0.67	0.43
	ΔT	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16			19		11	19	18	15	10
1350	Š	2.52	2.57	2.64	2.72	2.70	2.75	2.84	2.92	2.86	2.92	3.01	3.10	3.00	3.06		3.26	3.12		3.29	3.39	3.23	3.29	3.40	3.51
◀	Amps	6.4	6.5	6.7	7.0	6.9	7.0	7.3	7.5	7.5	7.6	7.9	8.2	8.0	8.1		8.7	8.5	8.7	8.9	9.3	8.9	9.2	9.5	8.6
	HI PR	236	254	268	280	265	285	301	314	301	324	342	357	343	369	390 2	407	386	415	439 4	458	427	459	485	206
	LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145 1	154	131	139	152	162	135	144	157	167
IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	r Dry Bul res are r	b Tempei neasurec	rature 1 at the lic	quid and	suction se	ervice val	ves.						Shader	darea is A	CCA (TVA	Shaded area is ACCA (TVA) conditions.	ns.				Amps	KW=Total system power Amps = outdoor unit amps (comp.+fan)	KW=Tota	KW=Total system power r unit amps (comp.+fan)	power p.+fan)

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

												ĮÕ	UTDOOR	AMBIER	OUTDOOR AMBIENT TEMPERATURE	RATURE										
				65	ارا				75			85		П		95				105				115		
												ENTERING	NG IND	INDOOR WET	BULB	TEMPERATUR	TURE									
IDB	AIRFL	MO	59	63	29	7.1	59	63	29	7.1	59	63	29	7.1	59	63	29	7.1	59	63	29	7.1	59	63	29	7.1
		MBh	32.2	32.9	35.1	37.5	31.4	32.1	34.3	36.7	30.7	31.3	33.5	35.8	29.9	30.6	32.7	34.9	28.4	29.1	31.0	33.2	26.3	56.9	28.8	30.7
		S/T	0.87	0.81	99.0	0.49	06.0	0.84	69.0	0.51	0.92	98.0	0.70	0.53	0.95	0.89	0.73	0.54	0.99	0.93	0.75 (95.0	1.00	0.93	92.0	0.57
		ΔT	24	23	20	16	25	24	21	16	25	24	21	16	25	24	21	17	25	24	20	16	23	22	19	15
-	1050	ΚW	2.46	2.51	2.58	2.66	2.64	2.69	2.77	2.86	2.79	2.85	2.94	3.03	2.93	2.99	3.08	3.18	3.05	3.11	3.21	3.31	3.15	3.21	3.32	3.42
		Amps	6.2	6.4	9.9	8.9	6.7	6.9	7.1	7.3	7.3	7.4	7.7	8.0	7.7	7.9	8.2	8.5	8.2	8.4	8.7	0.6	8.7	8.9	9.2	9.5
		HI PR	229	246	260	271	257	277	292	305	292	315	332	346	333	358	378	395	375	403	426	444	414	445	470	490
		LO PR	105	112	122	130	111	118	129	137	115	123	134	143	121	129	141	150	127	135	147	157	131	140	152	162
I		MBh	34.9	35.6	38.1	40.7	34.0	34.8	37.2	39.7	33.2	34.0	36.3	38.8	32.4	33.1	35.4	37.8	30.8	31.5	33.6	36.0	28.5	29.2	31.2	33.3
		S/T	06.0	0.84	0.69	0.51	0.93	0.87	0.71	0.53	96'0	06.0	0.73	0.55	0.99	0.93	0.75	95.0	1.00	96.0	0.78	0.58	1.00	0.97	0.79	0.59
		ΔT	24	23	20	16	24	23	20	16	24	23	20	16	25	23	20	16	24	23	20	16	22	22	19	15
80	1200	ΚW	2.52	2.57	2.64	2.72	2.70	2.75	2.84	2.93	2.86	2.92	3.01	3.10	3.00	3.06	3.16	3.26	3.12	3.19	3.29	3.39	3.23	3.29	3.40	3.51
		Amps	6.4	6.5	6.7	7.0	6.9	7.0	7.3	7.5	7.5	9.7	7.9	8.2	8.0	8.1	8.4	8.7	8.5	8.7	8.9	9.3	8.9	9.2	9.5	9.8
		HI PR	236	254	268	280	265	285	301	314	301	324	342	357	343	369	390	407	386	415	439	458	427	459	485	909
		LO PR	108	115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135	144	157	167
I		MBh 35.	35.9	36.7	39.5	41.9	35.1	35.8	38.3	40.9	34.2	35.0	37.4	40.0	33.4	34.1	36.5	39.0	31.7	32.4	34.6	37.0	29.4	30.0	32.1	34.3
		S/T	0.94	0.88	0.72	0.54	1.00	0.92	0.75	0.56	1.00	0.94	0.76	0.57	1.00	0.97	0.79	0.59	1.00	1.00	0.82	0.61	1.00	1.00	0.83	0.62
		ΔT	23	22	19	15	24	22	19	16	23	22	19	16	23	23	20	16	22	22	19	15	20	20	18	14
. •	1350	ΚW	2.54	2.59	2.66	2.74	2.72	2.77	2.86	2.95	2.88	2.94	3.03	3.13	3.02	3.09	3.19	3.29	3.15	3.21	3.32	3.42	3.25	3.32	3.43	3.54
		Amps	6.4	9.9	8.9	7.0	6.9	7.1	7.3	7.6	7.5	7.7	8.0	8.2	8.0	8.2	8.5	8.8	8.5	8.7	0.6	9.4	9.0	9.5	9.5	6.6
		HI PR	238	257	271	283	268	288	304	317	304	328	346	361	347	373	394	411	390	420	443	462	431	464	490	511
		LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169

		MBh	32.7	33.4	34.9	37.3	32.0	32.6	34.1	36.4	31.2	31.8	33.3	35.6	30.5	31.0	32.5	34.7	28.9	29.5	30.9	33.0	26.8	27.3	28.6	30.5
		S/T	0.91	0.88	0.79	0.64	0.94	0.91	0.82	0.67	0.97	0.93	0.84	0.68	1.00	96.0	0.87	0.70	1.00	1.00	06.0	0.73	1.00	1.00 (0.91	0.74
		ΔT	56	56	24	21	56	56	25	21	56	56	25	21	27	56	25	21	25	56	24	21	23	24	23	20
	1050	Š	2.48	2.53	2.60	2.68	2.66	2.71	2.79	2.88	2.81	2.87	2.96	3.05	2.95	3.01	3.11	3.21	3.07	3.14	3.23	3.34	3.17	3.24	3.34	3.45
		Amps	6.3	6.4	9.9	6.9	8.9	6.9	7.1	7.4	7.3	7.5	7.7	8.0	7.8	8.0	8.3	9.8	8.3	8.5	8.8	9.1	8.8	0.6	9.3	9.6
		HI PR	231	249	263	274	260	279	295	308	295	318	335	350	336	362	382	399	378	407	430	448	418	450	475	495
		LO PR	106	113	123	131	112	119	130	139	116	124	135	144	122	130	142	151	128	136	149	159	133	141	154	164
		MBh	35.5	36.2	37.9	40.4	34.6	35.3	37.0	39.5	33.8	34.5	36.1	38.5	33.0	33.6	35.2	37.6	31.3	31.9	33.5	35.7	29.0	29.6	31.0	33.1
		S/T	0.94	0.91	0.82	0.67	0.98	0.94	0.85	69.0	1.00	0.97	0.87	0.71	1.00	1.00	06.0	0.73	1.00	1.00	~	92.0	1.00	_	0.94	92.0
		ΔT	56	25	24	21	56	56	24	21	56	56	24	21	25	26	24			24		21	22	23	22	19
82	1200	Š	2.54	2.59	2.66	2.74	2.72	2.77	2.86	2.95	2.88	2.94	3.03	3.13	3.02	3.09	3.19	3.29	3.15	3.21	3.32	3.42	3.25	3.32	3.43	3.54
		Amps	6.4	9.9	8.9	7.0	6.9	7.1	7.3	7.6	7.5	7.7	8.0	8.2	8.0	8.2	8.5	8.8	8.5	8.7	0.6	9.4	0.6	9.2	9.5	6.6
		HI PR	238	257	271	283	268	288	304	317	304	328	346	361	347	373	394	411	390	420	443	462	431	464	490	511
		LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169
L		MBh	36.5	37.2	39.0	41.6	35.7	36.4	38.1	40.6	34.8	35.5	37.2	39.7	34.0	34.6	36.3	38.7	32.3	32.9	34.5	36.8	29.9	30.5	31.9	34.1
		S/T	0.99	0.95	98.0	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.98	0.80	1.00	1.00	66.0	0.80
		ΔT	25	24	23	20	24	24	23	20	24	24	23	20	23	24	23	20	22	22	23	20	20	21	21	19
	1350	ΑW	2.55	2.61	2.68	2.76	2.74	2.80	2.88	2.97	2.90	2.96	3.06	3.15	3.05	3.11	3.21	3.31	3.17	3.24	3.34	3.45	3.28	3.35	3.46	3.57
		Amps	6.5	6.7	6.9	7.1	7.0	7.2	7.4	7.7	7.6	7.8	8.0	8.3	8.1	8.3	9.8	8.9	9.8	8.8	9.1	9.4	9.1	9.3	9.6	10.0
		HI PR	241	259	274	285	270	291	307	320	307	331	349	364	350	377	398	415	394	424	448	467	435	468	495	516
		LO PR	110	117	128	137	117	124	135	144	121	129	141	150	127	135	148	158	133	142	155	165	138	147	160	171
IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the	ring Indo low press	or Dry Bu	Jlb Tempe measure	erature d at the li	iquid and	suction s	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	lves.						Sh	Shaded area is AHRI conditions	is AHRI c	condition	ıó				Amp	KW=Total system power Amps = outdoor unit amps (comp.+fan)	KW=Tot or unit ar	KW=Total system power	n power np.+fan)
)	,																									

												ျ	UTDOOL	R AMBIE	NT TEME	OUTDOOR AMBIENT TEMPERATURI		ļ								
				65	2			7	ړي			8	Ñ			6				105				11		
												ENTER	ING IND	OOR WE	T BULB	TEMPER.	ATURE									
BGI	AIRF	NO1:	29	63	29	71	65	63	29	7.1	59	63	29	7.1	59	63	29	7.1	59		29	71	26	63	29	71
		MBh	31.1	32.2	35.3	1	30.4	31.5	34.5		29.6	30.7	33.7		28.9	30.0	32.8		27.5		31.2	ı	25.4	26.4	28.9	1
		S/T	0.70	0.58	0.40	ı	0.72	09.0	0.42	1	0.74	0.62	0.43		0.76	0.64	0.44	,	0.79		0.46	ı	0.80	0.67	0.46	ı
	1050		19	16	12		7,60	17 2 65	13		2 75	17	7 89		7 88	17	3.04	1 1	3,00	16 3.06	13 3.16		3 10	15 3.16	12 3.26	, ,
	2		6.1	6.3	6.5	1	6.6	6.7	7.0	1	7.1	7.3	7.5	,	7.6	7.8	8.0	,	8.1		8.5		8.5	8.7	9.0	1
		HI PR	224	242	255	-	252	271	286	1	286	308	326	,	326	351	371	,	367		417		406	436	461	-
		LO PR	103	109	120		109	116	126	-	113	120	131	-	119	126	138	•	124		144		129	137	149	ı
		MBh	33.7	34.9	38.2	1	32.9	34.1	37.4	1	32.1	33.3	36.5	1	31.3	32.5	35.6	,	29.8		33.8	,	27.6	28.6	31.3	
		S/T	0.72	09.0	0.42	1	0.75	0.62	0.43	1	0.77	0.64	0.44	1	0.79	99.0	0.46	1	0.82		0.48	1	0.83	69.0	0.48	1
		ΔT	19	16	12	-	19	16	12		19	16	12	,	19	16	12	1	19		12	1	17	15	11	ı
20	1200		2.48	2.53	2.60	1	2.66	2.71	2.79	,	2.81	2.87	2.96	1	2.95	3.02	3.11	,	3.07		3.24	,	3.17	3.24	3.34	1
			6.3	6.4	9.9	1	8.9	6.9	7.1	,	7.3	7.5	7.7	ı	7.8	8.0	8.3	ı	8.3		8.8	,	8. 8.	9.0	9.3	1
		HI PR	231	249	263	1	260	279	295		295	318	336		336	362	382	1	378		430	1	418	450	475	,
		LO PR	106	113	123	1	112	119	130	1	116	124	135	1	122	130	142	,	128		149	,	133	141	154	r
		MBh	34.7	36.0	39.4	-	33.9	35.1	38.5		33.1	34.3	37.6	,	32.3	33.4	36.6	,	30.7		34.8	,	28.4	29.4	32.2	,
		S/T	0.76	0.63	0.44	,	0.78	0.65	0.45	,	0.80	0.67	0.47	,	0.83	0.69	0.48	ı	98.0		0.50		0.87	0.73	0.50	,
		ΔT	18	15	12	1	18	16	12	,	18	16	12		18	16	12	1	18		12	,	17	15	11	,
	1350		2.50	2.55	2.62	1	2.68	2.73	2.81	,	2.84	2.90	2.98	,	2.98	3.04	3.13	,	3.10		3.26	1	3.20	3.27	3.37	,
			6.3	6.5	6.7	ı	6.8	7.0	7.2	1	7.4	7.6	7.8	1	7.9	8.1	8.3	1	8.4		8.9	ı	8.9	9.1	9.4	1
		H PR	234	252	266	ı	262	282	298	,	298	321	339	1	340	366	386	1	382		434	1	422	454	480	
		I O PR	107	114	174	ı	113	120	131	,	118	125	137	1	124	131	144	,	130		150	,	134	143	156	,
				1																ı						
		MBh		32.5	35.2	37.8	30.9	ı	34.4	36.9	30.1	31.0	33.6	36.1	29.4	30.3		35.2		28.8	31.1	33.4	25.9	26.6	28.8	31.0
		S/T		0.71	0.54	0.34	0.82		0.55	0.36	0.84	0.75	0.57	0.37	0.87	0.78		0.38		0.81	0.61	0.39	0.91	0.81	0.61	0.40
		ΔT		20	17	11	22		17	12	22	20	17	12	22	21		12		20	17	11	21	19	16	11
	1050			2.49	2.56	2.64	2.62		2.75	2.83	2.77	2.83	2.91	3.01	2.91	2.97		3.16		3.09	3.18	3.29	3.12	3.19	3.29	3.40
		Amps		6.3	6.5	6.7	9.9		7.0	7.3	7.2	7.4	7.6	7.9	7.7	7.9		8.4		8.3	9.8	8.9	9.8	∞ ∞.	9.1	9.5
		HI PR		244	258	269	254		289	302	289	311	329	343	330	355		391		399	421	439	410	441	466	486
		LO PR		111	121	129	110	-1	178	136	114	171	133	141	170	178		148		134	14b	155	130	138	151	161
		MBh		35.3	38.2	41.0	33.5		37.3	40.0	32.7	33.6	36.4	39.1	31.9	32.8		38.1		31.2	33.7	36.2	28.0	28.9	31.2	33.5
		S/T		0.73	0.56	0.36	0.85		0.58	0.37	0.87	0.78	0.59	0.38	0.90	0.80		0.39		0.83	0.63	0.41	0.94	0.84	0.64	0.41
1				20	16	II.	77		TP	TI	77	07	TP	11 2	77	3 5		11		716	TP	11.	7 20	LS TCC	15 777	11
۲۶	007T			2.55	79.7	2.70	2.68		7.87	2.30	7.4	2.50	2.30	0.00	2.30	9.0		5.23		3.10 9.6	07.5	2.57	02.50	0.27	0.57	0.40
		Amps		0.0	0.7	טיט נ	0.0		7.7	., <u>.</u>	4. 6	0. (0.7	0.T	J. 5	1.0		0.0		0.0	0.0	7.6	J. 5	T	1.0	
		H PK	107	114	266 124	133	113	120	131	311	298	321 125	137	354 146	340	131	380 144	153	302	138	150	160	134	143	156	166
		MBh		36.3	39.3	42.2	34.5		38.4	41.2	33.6	34.6	37.5	40.2	32.8	33.8		39.3		32.1	34.7	37.3	28.9	29.7	32.2	34.5
		S/T		0.77	0.58	0.37	0.89		0.60	0.39	0.91	0.82	0.62	0.40	0.94	0.84		0.41		0.88	99.0	0.43	0.99	0.88	0.67	0.43
		ΛΤ		19	16	11	21		16	11	21	19	16	11	21	19		11		19	16	11	19	18	15	10
	1350		2.52	2.57	2.64	2.72	2.70		2.84	2.92	2.86	2.92	3.01	3.10	3.00	3.06		3.26		3.19	3.29	3.39	3.23	3.29	3.40	3.51
		Amps		6.5	6.7	7.0	6.9		7.3	7.5	7.5	7.6	7.9	8.2	8.0	8.1		8.7		8.7	8.9	9.3	8.9	9.5	9.5	9.8
		HI PR	236	254	268	280	265		301	314	301	324	342	357	343	369		407		415	439	458	427	459	485	506
		LO PR	\dashv	115	126	134	114	1	133	141	119	126	138	147	125	133		154		139	152	162	135	144	157	167
IDB: Ent 'High and	ering Ind	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	Sulb Temp e measure	erature ed at the	liquid and	1 suction	service	valves.						Shad	led area i:	s ACCA (T	VA) condi	tions.				Amp	s = outdo	KW=To oor unit a	otal syster amps (cor	n power np.+fan)
D																										

												Õ	JTDOOR	AMBIEN	OUTDOOR AMBIENT TEMPERATURE	RATURE										Г
				65	2			75	2			82	٠			95				105				115		
												ENTER	ENTERING INDOOR	OOR WET	BULB	TEMPERATURI	rure									
BGI	AIRFLOW	wo	59	63	29	71	59	63	29	71	59	63	29	71	59	63	29	7.1	59	63		71	59 (63 (. 29	7.1
		MBh		32.9	35.1	37.5	31.4	32.1	34.3	36.7	30.7	31.3	33.5	35.8	29.9	30.6	32.7	34.9	28.4 2	29.1 3	31.0 3	33.2 2	26.3	26.9 28.	∞	30.7
		S/T		0.81	99.0	0.49	06.0	0.84	69.0	0.51	0.92	98.0	0.70	0.53	0.95	0.89	0.73	0.54 (0.99	0.93).75 G	0.56	1.00 0	.93 0	0.76 0	75.0
		ΔT		23	20	16	25	24	21	16	25	24	21	16	25	24	21	17	25	24	20	16	23	22	19	15
-	1050	×		2.51	2.58	2.66	2.64	5.69	2.77	2.86	2.79	2.85	2.94	3.03	2.93	2.99	3.08	3.18	3.05	3.11 3	3.21 3	3.31	3.15 3	3.21 3	.32 3	3.42
	•	Amps		6.4	9.9	8.9	6.7	6.9	7.1	7.3	7.3	7.4	7.7	8.0	7.7	7.9	8.2	8.5	8.2	8.4	8.7	9.0	8.7 8	8.9	9.2	9.5
		HI PR		246	260	271	257	277	292	305	292	315	332	346	333	358	378	395	375 4	403 4	426 4	444 7	414 4	445 4	470 4	490
		LO PR		112	122	130	111	118	129	137	115	123	134	143	121	129	141	150	127	135	147 1	157	131 1	140 1	152 1	162
		MBh		35.6	38.1	40.7	34.0	34.8	37.2	39.7	33.2	34.0	36.3	38.8	32.4	33.1	35.4	37.8	30.8	31.5	33.6 3	36.0 2	28.5 2	29.2	31.2 3	33.3
		S/T		0.84	69.0	0.51	0.93	0.87	0.71	0.53	96.0	06.0	0.73	0.55	0.99	0.93	0.75	95.0	1.00 (0.96	0.78	0.58	1.00 0	0 /6'	0.79 0	0.59
		ΔT		23	20	16	24	23	20	16	24	23	20	16	25	23	20	16	24	23	20	16	22	22	19	15
80	1200	Š		2.57	2.64	2.72	2.70	2.75	2.84	2.93	2.86	2.92	3.01	3.10	3.00	3.06	3.16	3.26	3.12	3.19	3.29 3	3.39	3.23 3	3.29 3	3.40 3	3.51
		Amps		6.5	6.7	7.0	6.9	7.0	7.3	7.5	7.5	7.6	7.9	8.2	8.0	8.1	8.4	8.7	8.5	8.7	8.9	9.3	8.9	9.2	9.5	9.8
		HI PR		254	268	280	265	285	301	314	301	324	342	357	343	369	390	407	386	415 4	439 4	458 4	427 4	459 4	485 5	909
		LO PR		115	126	134	114	122	133	141	119	126	138	147	125	133	145	154	131	139	152	162	135 1	144 1	157 1	167
		MBh	35.9	36.7	39.2	41.9	35.1	35.8	38.3	40.9	34.2	35.0	37.4	40.0	33.4	34.1	36.5	39.0	31.7 3	32.4 3	34.6 3	37.0 2	29.4 3	30.0	32.1 3	34.3
		S/T		0.88	0.72	0.54	1.00	0.92	0.75	0.56	1.00	0.94	0.76	0.57	1.00	0.97	0.79	0.59	1.00	1.00	0.82 0	0.61	1.00 1	0 00'1	0.83 0	0.62
		ΔT		22	19	15	24	22	19	16	23	22	19	16	23	23	20	16	22	22	19	15	20	20	18	14
	1350	κ		2.59	5.66	2.74	2.72	2.77	2.86	2.95	2.88	2.94	3.03	3.13	3.02	3.09	3.19	3.29	3.15	3.21 3	3.32 3	3.42	3.25 3	3.32 3	3.43 3	3.54
		Amps		9.9	8.9	7.0	6.9	7.1	7.3	9.7	7.5	7.7	8.0	8.2	8.0	8.2	8.5	8.8	8.5	8.7	0.6	9.4	9.0	9.2	9.5	6.6
		HI PR		257	271	283	268	288	304	317	304	328	346	361	347	373	394	411	390	420 4	443 4	462 4	431 4	464 4	490 5	511
		LO PR		116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137 1	145 1	159 1	69

		MBh	32.7	33.4	34.9	37.3	32.0	32.6	34.1	36.4	31.2	31.8	33.3	35.6	30.5	31.0	32.5	34.7	28.9	29.5	30.9	33.0	26.8	27.3	28.6	30.5
		S/T	0.91	0.88	0.79	0.64	0.94	0.91	0.82	0.67	0.97	0.93	0.84	0.68	1.00	96.0	0.87	0.70	1.00	1.00	0.90	0.73	1.00	1.00	0.91	0.74
		ΔT	56	56	24	21	56	56	25	21	56	56	25	21	27	56	25	21	25	56	24	21	23	24	23	20
	1050	Ϋ́	2.48	2.53	2.60	2.68	2.66	2.71	2.79	2.88	2.81	2.87	2.96	3.05	2.95	3.01	3.11	3.21	3.07	3.14	3.23	3.34	3.17	3.24	3.34	3.45
		Amps	6.3	6.4	9.9	6.9	8.9	6.9	7.1	7.4	7.3	7.5	7.7	8.0	7.8	8.0	8.3	9.8	8.3	8.5	8.8	9.1	8.8	9.0	9.3	9.6
		HI PR	231	249	263	274	260	279	295	308	295	318	335	350	336	362	382	399	378	407	430	448	418	450	475	495
		LO PR	106	113	123	131	112	119	130	139	116	124	135	144	122	130	142	151	128	136	149	159	133	141	154	164
		MBh	35.5	36.2	37.9	40.4	34.6	35.3	37.0	39.5	33.8	34.5	36.1	38.5	33.0	33.6	35.2	37.6	31.3	31.9	33.5	35.7	29.0	29.6	31.0	33.1
		S/T	0.94	0.91	0.82	0.67	0.98	0.94	0.85	69.0	1.00	0.97	0.87	0.71	1.00	1.00	06.0	0.73	1.00	1.00	0.93	92.0	1.00	1.00	0.94	92.0
		ΔT	56	25	24	21	56	56	24	21	56	56	24	21	25	56	24	21	24	24	24	21	22	23	22	19
85	1200	××	2.54	2.59	2.66	2.74	2.72	2.77	2.86	2.95	2.88	2.94	3.03	3.13	3.02	3.09	3.19	3.29	3.15	3.21	3.32	3.42	3.25	3.32	3.43	3.54
		Amps	6.4	9.9	8.9	7.0	6.9	7.1	7.3	7.6	7.5	7.7	8.0	8.2	8.0	8.2	8.5	8.8	8.5	8.7	9.0	9.4	9.0	9.5	9.5	6.6
		HI PR	238	257	271	283	268	288	304	317	304	328	346	361	347	373	394	411	390	420	443	462	431	464	490	511
		LO PR	109	116	127	135	116	123	134	143	120	128	139	148	126	134	146	156	132	141	153	163	137	145	159	169
		MBh	36.5	37.2	39.0	41.6	35.7	36.4	38.1	40.6	34.8	35.5	37.2	39.7	34.0	34.6	36.3	38.7	32.3	32.9	34.5	36.8	29.9	30.5	31.9	34.1
		S/T	0.99	0.95	98.0	0.70	1.00	0.99	0.89	0.72	1.00	1.00	0.91	0.74	1.00	1.00	0.94	0.77	1.00	1.00	0.98	0.80	1.00	1.00	0.99	0.80
		ΔT	22	24	23	20	24	24	23	20	24	24	23	20	23	24	23	20	22	22	23	20	20	21	21	19
	1350	¥	2.55	2.61	2.68	2.76	2.74	2.80	2.88	2.97	2.90	2.96	3.06	3.15	3.05	3.11	3.21	3.31	3.17	3.24	3.34	3.45	3.28	3.35	3.46	3.57
		Amps	6.5	6.7	6.9	7.1	7.0	7.2	7.4	7.7	9.7	7.8	8.0	8.3	8.1	8.3	9.8	8.9	9.8	8.8	9.1	9.4	9.1	9.3	9.6	10.0
		HI PR	241	259	274	285	270	291	307	320	307	331	349	364	350	377	398	415	394	424	448	467	435	468	495	516
		LO PR	110	117	128	137	117	124	135	144	121	129	141	150	127	135	148	158	133	142	155	165	138	147	160	171
IDB: Ente High and	ring Indo	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at th	ulb Temp	erature ed at the l	liquid and	Suction	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves	ılves.						Shi	Shaded area is AHRI conditions.	is AHRI (condition	s,				Amp	os = outde	KW=Total system powel Amps = outdoor unit amps (comp.+fan)	KW=Total system powe r unit amps (comp.+fan	n power np.+fan)

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

40.7 0.49 11 4.30

37.1 0.70

43.9

449 151

15 4.07 9.6 425 139

18 3.99 9.4 395 130

0.47 12 4.07 9.4 406 146

37.0 0.67 16 3.95 9.1 385 134

35.7 0.81 19 3.87 8.9 358 126

13 3.91 8.8 361 140 46.2

13 3.73 8.3 317 133 47.4

7.7 279 128

7.2 249 121 49.7 0.43

3.43 7.5 264 117

3.37 7.4 7.4 245 110

12 3.30

41.9 0.59 16 3.21 7.0 235 111

MBh S/T AT kW Amps HI PR LO PR

1400

3.15 6.9 219 104

48.5

0.64

0.61

MBh S/T AT kW

43.8 0.73

39.9 0.63 16 3.63 8.1 300 122

0.75 19 3.56 7.9 279 115

3.80 8.6 342 128

29

63

59

29

63

29

67 42.7

63

29

63

59

29

63

29

29

63

65

ENTERING INDOOR WET BULB TEMPERATURE

OUTDOOR AMBIENT TEMPERATURE

105

10.1

15 4.17 9.8 438 143

9.6 419

0.70 16 4.04 9.3 397 138

38.7 0.84 19 3.96 9.1 369 130

0.47 12 4.01 9.1 372

0.67

16 3.89 8.8 353

3.81 8.6 328 124

3.82 8.5 8.5 327 137

3.61 7.9 287 132 50.0

12 3.37 7.4 256 125 51.2 0.45 12 3.40

16 3.51 7.7 272 121

19 3.44 7.5 253 114

16 3.28 7.2 243 114

18 3.22 7.0 225 108

1600

2

Amps HI PR

LO PR

0.65 16 3.71 8.3 310 126

41.7 0.78 19 3.64 8.1 288 118

151

35.8 0.84 17 4.09 9.6 407 134

0.48 12 4.16

463 156

43.5 132

144

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---|--|--|---|---|--|--
--|---|--|---
--|
| | MBh | 45.1 | 46.7 | 51.2 | 1 | | | 50.0
 | 1 | 43.0 4 | 44.5 | 48.8

 | 7 -
 | | - | - 9.7 | 39. | 8 41.3 | 45.2
 | 1 | 36.9 | 38.2 | 41.9 | 1
 |
| | S/T | 0.77 | 0.64 | 0.45 | 1 | | | 0.46
 | - | | | 0.47

 | -
 | _ | | - 65 | 0.8 | | 0.51
 | ŧ | 0.88 | | 0.51 | 1
 |
| | ΔT | 18 | 15 | 12 | , | | 16 | 12
 | , | 18 | 16 | 12

 | ,
 | | | | 18 | 15 | 12
 | 1 | 17 | | 11 | ı
 |
| 1800 | × | 3.24 | 3.30 | 3.40 | 1 | | | 3.64
 | 1 | | | 3.85

 | 1
 | | | - 40 | 3.9 | | 4.20
 | 1 | 4.12 | | 4.33 | ı
 |
| | Amps | 7.1 | 7.2 | 7.5 | 1 | | 7.8 | 8.0
 | ı | 8.2 | 8.4 | 9.8

 | ,
 | | | .1 - | 9.2 | 9.4 | 9.7
 | 1 | 9.7 | 6.6 | 10.2 | 1
 |
| | HI PR | 228 | 245 | 259 | | | 275 | 290
 | 1 | 291 | 313 | 330

 | ,
 | | | - 9/ | 37. | 2 401 | 423
 | • | 411 | 443 | 468 | ,
 |
| | LO PR | 109 | 116 | 126 | ı | | 122 | 133
 | 1 | 119 | 127 | 139

 | 1
 | 125 1 | ` ' | 46 - | 13: | Ì | 152
 | ı | 136 | 144 | 158 | 1
 |
| | | | | | | | |
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 | | | | | |
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 |
| | MBh | 41.1 | 42.3 | 45.8 | 49.1 | | 41.3 | 44.7
 | 48.0 | 39.2 | 40.3 | -

 |
 | 38.2 | | ľ | | 3 37.4 | 40.5
 | 43.4 | 33.6 | 34.6 | 37.5 | 40.2
 |
| | S/T | 0.81 | 0.72 | 0.55 | 0.35 | | 0.75 | 0.56
 | 98.0 | 0.86 | 0.77 | 0.58 (

 | _
 | 0.88 0 | _ | _ | _ | | 2 0.62
 | 0.40 | 0.92 | 0.83 | 0.63 | 0.40
 |
| | ΔT | 22 | 20 | 16 | 11 | | 20 | 17
 | 11 | 22 | 20 | 17

 | 11
 | | | | | | 16
 | 11 | 20 | 19 | 15 | 11
 |
| 1400 | × | 3.17 | 3.23 | 3.32 | 3.42 | | 3.46 |
 | 3.66 | 3.58 | 3.65 | 3.76

 |
 | | | | | | 3 4.10
 | 4.23 | 4.02 | 4.11 | 4.23 | 4.36
 |
| | Amps | 6.9 | 7.1 | 7.3 | 7.5 | | 7.6 | 7.8
 | 8.1 | 8.0 | 8.2 | 8.4

 | 8.7
 | 8.5 | | | | | 9.4
 | 9.8 | 9.4 | 9.6 | 9.9 | 10.3
 |
| | H PR | 221 | 238 | 251 | 262 | | 267 | 282
 | 294 | 282 | 303 | 320

 | 334
 | 321 3 | | | | | 411
 | 428 | 399 | 430 | 454 | 473
 |
| | LO PR | 105 | 112 | 122 | 130 | | 118 | 129
 | 138 | 116 | 123 | 134

 | 143
 | 122 1 | | | _ | | 5 148
 | | 132 | 140 | 153 | 163
 |
| | MBh | 44.5 | 45.8 | 49.6 | 53.2 | | 44.8 | 48.4
 | 52.0 | 42.4 | 43.7 | 47.3

 | 50.8
 | 41.4 4 | | | | |
 | | | 37.5 | 40.6 | 43.6
 |
| | S/T | 0.84 | 0.75 | 0.57 | 0.36 | | 0.77 | 0.59
 | 0.38 | 0.89 | 0.79 | 09.0

 |
 | 0.92 | | | | |
 | 0.41 | 0.96 | 0.86 | 0.65 | 0.42
 |
| | ΔT | 21 | 20 | 16 | 11 | | 20 | 16
 | 11 | | | 16

 | 11
 | | | | | |
 | | | 18 | 15 | 10
 |
| 1600 | Ŋ | 3.24 | 3.30 | 3.40 | 3.50 | | 3.53 | 3.64
 | 3.75 | 3.67 | 3.74 | 3.85

 |
 | | | | | |
 | | | | 4.33 | 4.47
 |
| | Amps | 7.1 | 7.2 | 7.5 | 7.7 | | 7.8 | 8.0
 | 8.3 | 8.2 | 8.4 | 9.8

 | 8.9
 | 8.7 | | | | | 9.7
 | 10.0 | 9.7 | 9.9 | 10.2 | 10.6
 |
| | H PR | 228 | 245 | 259 | 270 | | 275 | 290
 | 303 | 291 | 313 | 330

 | 345
 | 331 3 | | | | | •
 | 441 | 412 | | 468 | 488
 |
| | LO PR | 109 | 116 | 126 | 134 | | 122 | 133
 | 142 | 119 | 127 | 139

 | 148
 | 125 | | | - | |
 | 162 | \dashv | | 158 | 168
 |
| | MBh | 45.8 | 47.2 | 51.1 | 54.8 | | 46.1 | 49.9
 | 53.6 | 43.7 | 45.0 | 48.7

 | 52.3
 | 42.6 4 | | | | | 7 45.1
 | | | 38.6 | 41.8 | 44.9
 |
| | S/T | 0.88 | 0.78 | 0.59 | 0.38 | | 0.81 | 0.61
 | 0.40 | 0.93 | 0.83 |

 | 0.41
 | | | | | |
 | | | | 0.68 | 0.44
 |
| | ΔT | 21 | 19 | 15 | 11 | | 19 | 16
 | 11 | 21 | 19 | 16

 | 11
 | 21 | 19 | | | |
 | | | | 15 | 10
 |
| 1800 | Š | 3.27 | 3.33 | 3.42 | 3.52 | | 3.56 | 3.67
 | 3.78 | 3.69 | 3.77 | 3.88

 | 4.00
 | 3.87 3 | | | | |
 | | | | 4.37 | 4.51
 |
| | Amps | 7.2 | 7.3 | 7.5 | 7.8 | | 7.8 | 8.1
 | 8.3 | 8.2 | 8.4 | 8.7

 | 0.6
 | 8.8 | 6.8 | | | |
 | | | | 10.3 | 10.7
 |
| | HI PR | 230 | 248 | 261 | 273 | | 278 | 293
 | 306 | 294 | 316 | 334

 | 348
 | 334 | | | | |
 | - | | | 472 | 493
 |
| | LO PR | 110 | 117 | 127 | 136 | | 123 | 135
 | 143 | 120 | 128 | 140

 | 149
 | 127 | | | _ | |
 | | | - | 159 | 170
 |
| ering Inde | oor Dry Bu
ssures are | lb Tempe
measure | grature
d at the li | quid and | suction s | ervice val | ves. |
 | | | |

 | Shaded
 | area is AC | CA (TVA) | conditions | | |
 | ٩ | no = sdw | KW=
stdoor uni | Total syste
t amps (α | em power
omp.+fan)
 |
| | 1800
1600
1800
1800 | MBh S/T AT 1800 kW Amps HI PR S/T AT 1400 kW Amps HI PR LO PR HI PR HI PR LO PR HI P | MBh 45.1
S/T 0.77
ΔT 18
Amps 7.1
HI PR 228
1.00 PR 109
ΛΤ 22
1400 kW 3.17
Amps 6.9
HI PR 221
LO PR 105
Amps 6.9
HI PR 221
LO PR 105
ΛΤ 21
100 PR 109
ΛΤ 21
HI PR 228
ΓΙ 0.84
ΔΤ 221
LO PR 109
ΛΠ 3.24
ΔΤ 21
1.00 PR 109
ΛΠ 3.24
ΔΤ 22
ΛΠ 3.24
ΔΤ 21
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		_										FNITEDI	Ne Inne	Tal Maccount Siniagram	9118	TEMBEDATIE	1000			COT				TTS		
IDB	AIR	AIRFLOW	59	63	29	7.1	59	63	29	7.1	59	28 28 28 28	67 67	71	26 26 26 26 26 26 26 26 26 26 26 26 26 2	63	10NE	7.1	59	63	22	7.1	9	63	22	7.1
		MBh	41.8	42.7	45.6	48.8	40.8	41.7	44.6	47.7	39.9	40.7	43.5	46.5	38.9	39.7	2	45.4		00	3	3	2	0	4	39.9
		S/T		0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.01	0.94	0.77 0	1.57	1.01	0.95 0	0 77.	0.58
		ΔT		23	20	16	25	24	20	16	25	24	20	16	25	24	21	16	24	23	20	16	23	22	19	15
	1400	×		3.26	3.35	3.45	3.42	3.48	3.58	3.69	3.61	3.68	3.79	3.91	3.78	3.86	3.97	4.10	3.93	4.01	4.13 4	4.26 4	1.05 4	4.14 4	4.26 4	4.40
		Amps		7.1	7.3	9.7	7.5	7.6	7.9	8.1	8.0	8.2	8.5	8.7	8.5	8.7	9.0	9.3	9.0	9.2	9.5	9.8	9.5	9.7 1	10.0	10.4
		H PR		240	254	265	250	269	285	297	285	306	324	338	324	349	369	384	365	393	415 4	433 6	403 4	434 4	458 4	478
		LO PR		113	124	132	112	120	131	139	117	124	136	145	123	131	143	152	129	137	149	159 1	133	142 1	155 1	165
		MBh	ш	46.3	49.5	52.9	44.2	45.2	48.3	51.6	43.2	44.1	47.2	50.4	42.1	43.1	46.0	49.2	40.0	40.9	43.7 4	46.7	37.1 3	37.9 4	40.5 4	43.3
		S/T		0.86	0.70	0.52	0.95	0.89	0.72	0.54	0.97	0.91	0.74	0.56	1.00	0.94	0.77	0.57	1.00	96.0	0.80	0.60	1.00 0	0 66.0	0.80	09.0
		ΔT		23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	23	23	20	16	21	21	19	15
80	1600	×		3.33	3.42	3.52	3.49	3.56	3.67	3.78	3.69	3.77	3.88	4.00	3.87	3.95	4.07	4.20	4.02	4.10	4.23 4	1.36 4	1.15 4	4.24 4	.37 4	4.51
		Amps		7.3	7.5	7.8	7.7	7.8	8.1	8.3	8.2	8.4	8.7	0.6	8.8	8.9	9.5	9.5	9.3	9.5	9.8	10.1	9.8	10.0	10.3	10.7
		HI PR		248	261	273	258	278	293	306	294	316	334	348	334	360	380	396	376	405	428 ,	446 4	416 4	447 4	472 4	493
		LO PR		117	127	136	116	123	135	143	120	128	140	149	127	135	147	157	133	141	154	164	137	146 1	159	170
		MBh		47.7	50.9	54.4	45.6	46.6	49.7	53.2	44.5	45.5	48.6	51.9	43.4	44.3	47.4	50.6	41.2	42.1	45.0 4	48.1 3	38.2 3	39.0 4	41.7 4	44.6
		S/T		06.0	0.73	0.55	1.00	0.93	0.76	0.57	1.00	96'0	0.78	0.58	1.00	1.00	0.80	09.0	1.00	1.00	0.83	0.62	1.00 1	0 00.	0.84 0	0.63
		T∆.		22	19	15	23	22	19	15	23	22	19	15	22	23	19	16	21	22	19	15	20	20	18	14
	1800			3.35	3.45	3.55	3.52	3.59	3.69	3.80	3.72	3.80	3.91	4.03	3.90	3.98	4.10	4.23	4.05	4.14	4.26 4	4.40 4	1.18 4	.27 4	4.40 4	4.54
		Amps		7.4	7.6	7.8	7.7	7.9	8.1	8.4	8.3	8.5	8.8	9.0	8.8	0.6	9.3	9.6	9.3	9.6	9.8	10.2	9.8	10.1	10.4	10.7
		HI PR		250	264	275	261	281	296	309	297	319	337	351	338	363	384	400	380	409	432 4	450 2	420 4		477 4	498
		LO PR		118	129	137	117	125	136	145	122	129	141	151	128	136	148	158	134	143	156	166	139	147 1	161 1	171
		MBh	42.5		45.4	48.5	41.5	42.4	44.4	47.3	40.6	41.3	43.3	46.2	39.6	40.3	42.2	45.1	37.6	38.3	40.1 4	42.8	34.8 3	35.5 3	37.2 3	39.7
		S/T	0.93	0.89	0.81	0.65	96.0	0.93	0.84	0.68	0.98	0.95	98.0	0.70	1.00	0.98	0.88	0.72	1.00	1.00	0.92 (0.74	1.00 1	1.00 0	0.93	0.75

		MBh	42.5	43.4	45.4	48.5	41.5	42.4	44.4	47.3	40.6	41.3	43.3	46.2	39.6	40.3	42.2	45.1	37.6	38.3	40.1	42.8	34.8	35.5	37.2	39.7
		S/T	0.93	0.89	0.81	0.65	96.0	0.93	0.84	0.68	0.98	0.95	98.0	0.70	1.00	0.98	0.88	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.93	0.75
		ΔT	56	25	24	21	56	56	24	21	56	56	24	21	56	56	25	21	25	25	24	21	23	23	23	20
	1400	Κ	3.22	3.28	3.37	3.47	3.44	3.51	3.61	3.72	3.64	3.71	3.82	3.94	3.81	3.89	4.01	4.13	3.96	4.04	4.16	4.29	4.09	4.17	4.30	4.43
		Amps	7.0	7.2	7.4	7.6	7.5	7.7	7.9	8.2	8.1	8.3	8.5	8.8	9.8	8.8	9.1	9.4	9.1	9.3	9.6	6.6	9.6	8.6	10.1	10.5
		HI PR	225	243	256	267	253	272	287	300	288	310	327	341	328	353	372	388	369	397	419	437	407	438	463	483
		LO PR	108	114	125	133	114	121	132	140	118	126	137	146	124	132	144	153	130	138	151	161	134	143	156	166
		MBh	46.1	47.0	49.2	52.5	45.0	45.9	48.1	51.3	43.9	44.8	46.9	50.1	42.9	43.7	45.8	48.8	40.7	41.5	43.5	46.4	37.7	38.5	40.3	43.0
		S/T	96.0	0.93	0.84	0.68	1.00	96.0	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	96.0	0.78
		ΔΤ	25	25	24	20	56	25	24	21	25	25	24	21	25	25	24	21	23	24	24	21	22	22	22	19
82	1600	×	3.29	3.35	3.45	3.55	3.52	3.59	3.69	3.80	3.72	3.80	3.91	4.03	3.90	3.98	4.10	4.23	4.05	4.14	4.26	4.40	4.18	4.27	4.40	4.54
		Amps	7.2	7.4	7.6	7.8	7.7	7.9	8.1	8.4	8.3	8.5	8.8	9.0	8.8	0.6	9.3	9.6	9.3	9.6	8.6	10.2	8.6	10.1	10.4	10.7
		H PR	232	250	264	275	261	281	296	309	297	319	337	351	338	363	384	400	380	409	432	450	420	452	477	498
		LO PR	111	118	129	137	117	125	136	145	122	129	141	151	128	136	148	158	134	143	156	166	139	147	161	171
		MBh	47.5	48.4	50.7	54.1	46.4	47.3	49.5	52.8	45.3	46.1	48.3	51.6	44.2	45.0	47.1	50.3	42.0	42.8	44.8	47.8	38.9	9.68	41.5	44.3
		S/T	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.93	92.0	1.00	1.00	96.0	0.78	1.00	1.00	1.00	0.81	1.00	1.00	1.00	0.82
		ΔT	24	24	23	20	24	24	23	20	23	24	23	20	23	23	23	20	21	22	23	20	20	20	21	18
	1800	Κ¥	3.31	3.38	3.47	3.58	3.54	3.61	3.72	3.83	3.75	3.82	3.94	4.06	3.93	4.01	4.13	4.26	4.08	4.17	4.30	4.43	4.22	4.30	4.44	4.58
		Amps	7.3	7.4	7.6	7.9	7.8	8.0	8.2	8.5	8.4	9.8	8.8	9.1	8.9	9.1	9.4	9.7	9.4	9.6	6.6	10.3	6.6	10.2	10.5	10.8
		HI PR	235	253	267	278	263	283	562	312	300	322	340	355	341	367	388	404	384	413	436	455	424	456	482	503
		LO PR	112	119	130	138	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	167	140	149	163	173
IDB: Ent High and	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	oor Dry Bi	ulb Tempe measure	erature d at the li	iquid and	suctions	service val	lves.						Sh	aded area	is AHRI,	Shaded area is AHRI conditions	νi				Amp	KW=Total system power Amps = outdoor unit amps (comp.+fan,	KW=To	KW=Total system power r unit amps (comp.+fan)	n power np.+fan)

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

59 0.4 7.7 19 1.15 3.7	63 41.9 0.59 16	65 67 45.9			75				20				90		_		105				115	
59 40.4 0.71 19 3.15 3.7		67 45.9			:				3				2				1					
40.4 0.71 19 3.15 3.7		67 45.9							ENTERI	NG INDO	OR WE	ENTERING INDOOR WET BULB TEMPERATURI	EMPERA	TURE								
		45.9	71	59	63	29	7.1	29	63	29	71	26	63	29	7.1	29	63		71 5	9 65	63 67	71
			1	39.5	40.9	44.8	1	38.5	39.9	43.7	-	37.6	38.9	42.7	1	35.7 3	37.0 4	40.5	- 33	33.1 34	34.3 37.5	
ΔT 19 kW 3.15 Amps 3.7		0.41	,	0.73	0.61	0.42	,	0.75	0.63	0.44	,	0.78	0.65	0.45	1	0.81	0.67 (0.47	- 0	0.81 0.	0.68 0.47	
		12	,	19	16	12	1	19	16	13	1	19	17	13	ı	19	16	12	-	18 1	15 12	1
		3.30	1	3.36	3.43	3.53	ı	3.56	3.63	3.73	,	3.72	3.80	3.91	,	3.87 3	3.95	4.07	ا س	3.99 4.	4.07 4.20	- 0
		3.9	,	4.0	4.1	4.2	ı	4.3	4.4	4.5	1	4.6	4.7	8.8	,	4.8	4.9	5.1	- 2	5.1 5	5.2 5.4	
		249	1	245	264	279	1	279	300	317	ı	318	342	361	ı	358	385	406		395 4.	425 449	-
		121		110	117	128	ı	115	122	133	,	120	128	140		126	134	146	- 1	130 13	139 151	-
	l	49.7	-	42.7	44.3	48.5	1	41.7	43.2	47.4	-	40.7	42.2	46.2	1	38.7 4	40.1	43.9	- 3	35.8 37	37.1 40.7	- /
		0.43		92.0	0.64	0.44		0.78	0.65	0.45	,	0.81	0.67	0.47	1	0.84 0	0.70	0.48	-	0.84 0.	0.70 0.49	-
		12		19	16	12	1	19	16	12	,	19	16	12	,	19	16	12	-	17 1	15 11	ı
		3.37	1	3.44	3.51	3.61	,	3.64	3.71	3.82	,	3.81	3.89	4.01	,	3.96	4.04	4.16	- 4	4.09 4.	4.17 4.30	- 0
		4.0	,	4.1	4.2	4.3	,	4.4	4.5	4.6	1	4.7	4.8	4.9	1	4.9	5.1	5.2	-		5.3 5.5	1
		256	,	253	272	287	1	288	310	327	,	328	353	372	1	369	397	419	- 4	407 4.	438 463	
		125	1	114	121	132	,	118	126	137	1	124	132	144	,	130	138	151	- 1	134 1	143 156	5
	ŀ	51.2	,	44.0	45.6	50.0		43.0	44.5	48.8	-	41.9	43.5	47.6	-	39.8	41.3	45.2	- 3	36.9	38.2 41.9	- 6
		0.45	,	0.80	0.67	0.46	,	0.82	0.68	0.47	1	0.85	0.71	0.49	,	0.88	0.73 (0.51	- 0	0.88 0.	0.74 0.51	
		12	ı	18	16	12	,	18	16	12	ı	18	16	12	,	18	15	12	1	17 1	14 11	1
		3.40	,	3.47	3.53	3.64	1	3.66	3.74	3.85	1	3.84	3.92	4.04	1	3.99	4.07	4.20	- 4	4.12 4.	4.20 4.33	
		4.0	ı	4.1	4.2	4.3	,	4.4	4.5	4.7	1	4.7	4.8	5.0	1	5.0	5.1	5.3	I (T)	5.3 5	5.4 5.5	1
		259	,	256	275	290	,	291	313	330	,	331	356	376	1	372 ,	401	423	- 4	411 4	443 468	
		126	1	115	122	133	ı	119	127	139		125	133	146	,	131	140	152	- 1	136 1	144 158	3

0.81 (22 3.17 3.8 3.8 221 105 44.5 0.84 (21 3.24 3.9 3.9 3.9 3.9 228					-		33.7	0.0	40.7	40.0	38.7	39.3 4	42.6 45	45.7 36.	.3 37.4	.4 40.5	.5 43.4	4 33.0	34.6	37.5	40.2
1400 kW 3.17 Amps 3.8 HI PR 221 LO PR 105 NBh 44.5 S/T 0.84 AT 21 1600 kW 3.24 Amps 3.9 HI PR 228	72 0.55	6 0.35	0.83	0.75	0.56	0.36	0.86) 77.0	0.58	0.37	0.88	0.79	0.60	0.38 0.92	92 0.82	32 0.62	52 0.40	0 0.92	2 0.83	0.63	0.40
1400 kW 3.17 Amps 3.8 HI PR 221 LO PR 105 NBh 44.5 S/T 0.84 AT 21 1600 kW 3.24 Amps 3.9 HI PR 228	0 16	11	22	20	17	11	22	20	17	11	22	20	17 1	12 2	22 20		16 11	. 20	19	15	11
Amps 3.8 HI PR 221 LO PR 105 NBh 44.5 S/T 0.84 AT 21 1600 KW 3.24 Amps 3.9 HI PR 228	23 3.32	3.42	3.39	3.46	3.56	3.66	3.58	3.65	3.76 3	3.88	3.75	3.83 3	3.94 4.1	4.06 3.9	3.90 3.98	38 4.10	10 4.23	3 4.02	2 4.11	4.23	4.36
HI PR 221 LO PR 105 NBh 44.5 S/T 0.84 AT 21 1600 KW 3.24 Amps 3.9 HI PR 228	.8 3.9	4.1	4.0	4.1	4.2	4.4	4.3	4.4	4.6	4.7	4.6		4.8 5	5.0	4.9 5.0	0 5.1	1 5.3	3 5.1	5.2	5.4	5.6
10 PR 105 MBh 44.5 \$/T 0.84 ΔΤ 21 1600 kW 3.24 Amps 3.9 HI PR 228	38 251	797	248	267	282	294	282	303	320	334	321	346	365 38	381 36	361 389	9 411	.1 428	8 399	9 430	454	473
MBh 44.5 5/T 0.84 AT 21 1600 kW 3.24 Amps 3.9 HI PR 228	12 122	130	111	118	129	138	116	123	134	143	122 1	129	141 1	150 12	127 136		148 158	8 132	2 140	153	163
5/T 0.84 ΔT 21 1600 kW 3.24 Amps 3.9 HI PR 228	3.8 49.6	5 53.2	43.5	44.8	48.4	52.0	42.4	43.7	47.3 5	50.8	41.4 4	42.6	46.1 49	49.5 39	39.3 40.5		43.8 47.0	.0 36.4	4 37.5	40.6	43.6
AT 21 1600 kW 3.24 Amps 3.9 HIPR 228	75 0.57	7 0.36	0.87	0.77	0.59	0.38	0.89	0.79	0.60	0.39	0.92 C	0.82	0.62 0.	0.40 0.	0.95 0.85		0.64 0.41	.1 0.96	98.0 9	0.65	0.42
1600 kW 3.24 Amps 3.9 HI PR 228	0 16	11	22	20	16	11	22	20	16	11	22			11 2	21 20		16 11	20	18	15	10
3.9	30 3.40	3.50	3.47	3.53	3.64	3.75	3.67	3.74		3.97	3.84	3.92	4.04 4.	4.16	3.99 4.07		4.20 4.33	3 4.12	2 4.20	4.33	4.47
228	9 4.0	4.2	4.1	4.2	4.3	4.5	4.4	4.5		4.8				5.1 5	5.0 5.1			1 5.3	5.4	5.5	5.7
	15 259	270	256	275	290	303	291	313	330	345	331	356	376 39	392 3.	372 401		423 441	1 412	2 443	468	488
LO PR 109 11	116 126	134	115	122	133	142	119	127	139	148	125	133	146 1	155 13	131 12	140 1	153 162	2 136	5 145	158	168
MBh 45.8 47.2	7.2 51.1	1 54.8	44.8	46.1	49.9	53.6	43.7	45.0	48.7	52.3	42.6 4			51.0 40	40.5 41.7	.7 45.1	.1 48.5	.5 37.5	5 38.6	41.8	44.9
S/T 0.88 0.78	78 0.59	9 0.38	0.91	0.81	0.61	0.40	0.93	0.83		0.41	96.0	0.86	0.65 0.	0.42 1.	1.00 0.89		0.67 0.43	1.00	06'0 0	0.68	0.44
AT 21 19	19 15	11	21	19	16	11		19		11		19					16 11	1 19	18	15	
1800 kW 3.26 3.33	33 3.42	2 3.52	3.49	3.56	3.66	3.77	3.69	3.77	3.88	4.00	3.87		4.07 4.	_	4.02 4.	4.10 4.	4.23 4.36	16 4.15	5 4.24	4.37	4.51
Amps 3.9 4.0	.0 4.1	4.2	4.2	4.2	4.4	4.5	4.5	4.6	4.7	6.9	4.8	4.9	5.0 5	5.2 5	5.0 5	5.1 5	5.3 5.5	5 5.3	3 5.4	5.6	5.8
HI PR 230 24	248 261	1 273	258	278	293	306	294	316	334	348	334	360	380 3	396	376 40	405 4	427 446	6 416	6 447	472	493
LO PR 110 11	117 127	7 136	116	123	135	143	120	128	140	149	127	135	147 1	157 1	133 14	141 1	154 164	4 137	7 146	159	170
IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	ure the liquid a	and suction	service va	lves.						Shaded	area is A(CCA (TVA)	Shaded area is ACCA (TVA) conditions.	νί				Amps = c	KW=Total system power Amps = outdoor unit amps (comp.+fan)	KW=Total system power r unit amps (comp.+fan	em powe omp.+fan

												ľ	UTDOOR	AMBIE	OUTDOOR AMBIENT TEMPERATURE	ERATUR	ш									
				9	65				75			8	85			95	2			105				115		
												ENTER	ING IND	OOR WE	ENTERING INDOOR WET BULB TEMPERATURE	TEMPER	ATURE									
IDB	AIRFLOW	MOT	59	63	29	71	29	63	29	71	59	63	29	71	59	63	29	7.1	29	63	29	71	59	63	29	71
		MBh	41.8	42.7	45.6	48.8	40.8	41.7	44.6	47.7	39.9	40.7	43.5	46.5	38.9	39.7	42.5	45.4	36.9	37.8	40.3	43.1	34.2	35.0	37.4	39.9
		S/T	0.88	0.83	0.67	0.50	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.01	0.94	0.77	0.57	1.01	0.95	0.77	0.58
		ΔT	24	23	20	16	25	24	20	16	25	24	20	16	25	24	21	16	24	23	20	16	23	22	19	15
	1400	×	3.19	3.25	3.35	3.44	3.41	3.48	3.58	3.69	3.61	3.68	3.79	3.91	3.78	3.86	3.97	4.10	3.93	4.01	4.13	4.26	4.05	4.14	4.27	4.40
		Amps	3.8	3.9	4.0	4.1	4.1	4.1	4.3	4.4	4.4	4.5	4.6	4.8	4.6	4.7	4.9	5.1	4.9	5.0	5.2	5.3	5.2	5.3	5.5	5.6
		HI PR	223	240	254	265	250	269	285	297	285	306	324	338	324	349	369	384	365	393	415	433	403	434	458	478
		LO PR	106	113	124	132	112	120	131	139	117	124	136	145	123	131	143	152	129	137	149	159	133	142	155	165
		MBh	45.3	46.3	49.5	52.9	44.2	45.2	48.3	51.6	43.2	44.1	47.2	50.4	42.1	43.1	46.0	49.2	40.0	40.9	43.7	46.7	37.1	37.9	40.5	43.3
		S/T	0.92	0.86	0.70	0.52	0.95	0.89	0.72	0.54	0.97	0.91	0.74	0.56	1.00	0.94	0.77	0.57	1.00	0.98	0.80	09.0	1.00	66.0	08.0	09.0
		ΔT	24	23	20	16	24	23	20	16	24	23	20	16	24	23	20	16	23	23	20	16	21	21	19	15
80	1600	Š	3.26	3.33	3.42	3.52	3.49	3.56	3.67	3.78	3.69	3.77	3.88	4.00	3.87	3.95	4.07	4.20	4.02	4.10	4.23	4.36	4.15	4.24	4.37	4.51
		Amps	3.9	4.0	4.1	4.2	4.2	4.2	4.4	4.5	4.5	4.6	4.7	4.9	4.8	4.9	2.0	5.2	2.0	5.1	5.3	5.5	5.3	5.4	5.6	5.8
		HI PR	230	248	261	273	258	278	293	306	294	316	334	348	334	360	380	396	376	405	428	446	416	447	472	493
		LO PR	110	117	127	136	116	123	135	143	120	128	140	149	127	135	147	157	133	141.	154	164	137	146	159	170
		MBh	46.7	47.7	50.9	54.4	45.6	46.6	49.7	53.2	44.5	45.5	48.6	51.9	43.4	44.3	47.4	50.6	41.2	42.1	45.0	48.1	38.2	39.0	41.7	44.6
		S/T	96.0	0.90	0.73	0.55	1.00	0.93	0.76	0.57	1.00	96.0	0.78	0.58	1.00	1.00	0.80	09.0	1.00	1.00	0.83	0.62	1.00	1.00	0.84	0.63
		ΔT	23	22	19	15	23	22	19	15	23	22	19	15	22	23	19	16	21	22	19	15	20	20	18	14
	1800	Š	3.29	3.35	3.45	3.55	3.52	3.59	3.69	3.80	3.72	3.80	3.91	4.03	3.90	3.98	4.10	4.23	4.05	4.14	4.26	4.40	4.18	4.27	4.40	4.54
		Amps	3.9	4.0	4.1	4.2	4.2	4.3	4.4	4.6	4.5	4.6	4.8	4.9	4.8	4.9	5.1	5.2	5.1	5.2	5.3	5.5	5.4	5.5	5.6	5.8
		HI PR	232	250	264	275	261	281	296	309	297	319	337	351	338	363	384	400	380	409	432	450	420	452	477	498
		LO PR	111	118	129	137	117	125	136	145	122	129	141	151	128	136	148	158	134	143	156	166	139	147	161	171

		MBh	42.5	43.4	45.4	48.5	41.5	42.4	44.4	47.3	40.6	41.3	43.3	46.2	39.6	40.3	42.2	45.1	37.6	38.3	40.1	42.8	34.8	35.5	37.2	39.7
		S/T	0.93	0.89	0.81	0.65	96.0	0.93	0.84	0.68	0.98	0.95	0.86	0.70	1.00	0.98	0.88	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.93	0.75
		ΔT	56	25	24	21	56	56	24	21	56	56	24	21	56	56	25	21	25	25	24	21	23	23	23	20
	1400	Š	3.22	3.28	3.37	3.47	3.44	3.51	3.61	3.72	3.64	3.71	3.82	3.94	3.81	3.89	4.00	4.13	3.96	4.04	4.16	4.29	4.09	4.17	4.30	4.43
	ঝ	Amps	3.8	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.4	4.5	4.6	4.8	4.7	4.8	4.9	5.1	4.9	5.1	5.2	5.4	5.2	5.3	5.5	5.7
	_	HI PR	225	243	256	267	253	272	287	300	288	310	327	341	328	353	372	388	369	397	419	437	407	438	463	483
	_	LO PR	108	114	125	133	114	121	132	140	118	126	137	146	124	132	144	153	130	138	151	161	134	143	156	166
		MBh	46.1	47.0	49.2	52.5	45.0	45.9	48.1	51.3	43.9	44.8	46.9	50.1	42.9	43.7	45.8	48.8	40.7	41.5	43.5	46.4	37.7	38.5	40.3	43.0
		S/T	96.0	0.93	0.84	0.68	1.00	96.0	0.87	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.74	1.00	1.00	0.95	0.77	1.00	1.00	96.0	0.78
		ΔT	25	25	24	20	56	25	24	21	25	25	24	21	25	25	24	21	23	24	24	21	22	22	22	19
85	1600	× ×	3.29	3.35	3.45	3.55	3.52	3.59	3.69	3.80	3.72	3.80	3.91	4.03	3.90	3.98	4.10	4.23	4.05	4.14	4.26	4.40	4.18	4.27	4.40	4.54
	∢	Amps	3.9	4.0	4.1	4.2	4.2	4.3	4.4	4.6	4.5	4.6	4.8	4.9	4.8	4.9	5.1	5.2	5.1	5.2	5.3	5.5	5.4	5.5	5.6	5.8
		HI PR	232	250	264	275	261	281	596	309	297	319	337	351	338	363	384	400	380	409	432	450	420	452	477	498
		LO PR	111	118	129	137	117	125	136	145	122	129	141	151	128	136	148	158	134	143	156	166	139	147	161	171
L		MBh	47.5	48.4	50.7	54.1	46.4	47.3	49.5	52.8	45.3	46.1	48.3	51.6	44.2	45.0	47.1	50.3	42.0	42.8	44.8	47.8	38.9	39.6	41.5	44.3
		S/T	1.00	0.97	0.88	0.71	1.00	1.00	0.91	0.74	1.00	1.00	0.93	0.76	1.00	1.00	96.0	0.78	1.00	1.00	1.00	0.81	1.00	1.00	1.00	0.82
		ΔT	24	24	23	20	24	24	23	20	23	24	23	20	23	23	23	20	21	22	23	20	20	20	21	18
	1800	×	3.31	3.38	3.47	3.57	3.54	3.61	3.72	3.83	3.75	3.82	3.94	4.06	3.93	4.01	4.13	4.26	4.08	4.17	4.30	4.43	4.22	4.30	4.44	4.58
	7	Amps	3.9	4.0	4.1	4.3	4.2	4.3	4.4	4.6	4.6	4.7	4.8	5.0	4.8	4.9	5.1	5.3	5.1	5.2	5.4	5.6	5.4	5.5	5.7	5.9
		HI PR	235	253	267	278	263	283	299	312	300	322	340	355	341	367	388	404	384	413	436	455	424	456	482	503
		LO PR	112	119	130	138	118	126	137	146	123	131	143	152	129	137	150	160	135	144	157	167	140	149	163	173
IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves	ng Indoor w pressu	r Dry Bu Ires are	lb Tempe measure	erature d at the l	iquid and	1 suction	service va	alves.						Sh	Shaded area is AHRI conditions	a is AHRI	condition	s,				Amp	s = outdo	KW=Total system power Amps = outdoor unit amps (comp.+fan)	KW=Total system power r unit amps (comp.+fan)	n power np.+fan)

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

63 75 85 95 95 95 105 105 63 67 71 89 63 67 71 89 63 67 71 89 70 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90 90														JUTDOOL	R AMBIE	OUTDOOR AMBIENT TEMPERATURE	ERATU	ı,									
MR 53 57 610 . 2 54 54 59 63 67 71 59 63 67 71 59 63 67 71 59 63 67 71 59 63 67 71 59 63 67 71 59 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 63 67 71 71 71 71 71 71 71			لـــا		9	ا ا				75			8	35			"	15			10.	2			115		
MBH 53.8 55.7 61.0 5.25 544 596 6. 7. 1 59 65 67 71 59 65 67 71 59 65 67 71 59 65 67 71 59 65 67 71 6. 6. 6. 6. 6. 6. 6. 6			!										ENTER	ING IND	OOR W	ET BULB	TEMPER	ATURE									
450. 53.5 54.0 55.5 54.4 59.6 51.3 53.1 58.2 50.0 51.8 56.8 47.5 49.2 51.9 41.4 52.2 19.1 14 2 2 19.0 14 2 2 19.0 14 2 2 19.0 0.07 0.58 0.40 0.70 0.88 0.40 0.70 0.88 0.40 0.70 0.89 0.40 0.70 0.80 0.40 0.70 0.80 0.40 0.70 0.80 0.40 0.70 0.80 0.40 0.70 0.80 0.40 0.70 0.80 0.70 0.70 0.80 0.40 0.70		AIRFLO	×	59	63	29	71	59	63	29	71	65	63	29	71	59	63	29	7.1	59	63	67	71	59	63	29	7.1
Mail		É	MBh	53.8	55.7	61.0		52.5	54.4		,	51.3	53.1	58.2	1	50.0	51.8	56.8	,	47.5	49.2	53.9	7 -	44.0 4	45.6	50.0	
Main State Mai		-	S/T	99.0	0.55	0.38		0.68	0.57	0.39	ı	0.70	0.58	0.40	1	0.72	09.0	0.42	1	0.75	0.62	0.43	,	0.75 (0.63 (0.44	
1500 KW 3.97 4.05 4.18 - 4.27 4.51 - 4.54 4.64 4.80 - 4.78 5.97 4.99 5.05 - 4.99 5.05 - 4.99 5.10 HIPR 228 445 15.8 16.3 - 16.7 17.1 17.6 - 18.1 18.6 19.2 - 19.4 19.9 5.05 - 4.99 5.10 20.7 21.2 20.7 19.2 - 19.4 19.9 5.06 - 5.07 20.7 20.2 20.7 20.1 18.1 18.6 19.2 - 19.4 19.2 - 19.4 19.2 - 19.4 19.2 - 19.2 19.2 - 19.2			ΔT	22	19	14	,	22	19	14	ı	22	19	14	•	22	19	14	,	22	19	14	1	20	18	13	,
Amps 15.4 15.8 16.3 1 17.1 17.6 - 18.1 18.6 19.2 - 19.4 19.9 20.6 - 20.7 21.2 HIPR 228 245 259 - 256 275 291 - 133 - 133 357 377 - 20.7 21.2 LOPR 98 104 114 - 103 110 120 - 133 357 377 - 20.7 21.2 MBh 55.4 67.9 6.29 - 56.1 61.4 - 52.8 54.7 59.9 - 133 20.7 138 13 - 17.0 17.0 0.0 0.41 - 0.73 0.61 0.42 - 18.8 18.8 18.8 18.8 18.9 - 18.9 - 18.9 - 18.9 - 18.9 - 18.9 - 18.9 -	15	_	× ×	3.97	4.05	4.18	,	4.27	4.37	4.51	1	4.54	4.64	4.80	1	4.78	4.89	5.05	,	4.99	5.10	5.27	,	5.16	5.28	5.45	,
HIPR 228 245 259 256 275 291 291 313 331 313 357 377 373 401 LOPR 98 104 114 103 110 120 107 114 125 113 120 131 118 126 MBh 55.4 57.4 62.9 54.1 56.1 61.4 52.8 54.7 59.9 51.5 53.4 58.5 68.9 50.7 ATT 20 17 13 20 18 13 20 18 13 20 18 13 20 18 13 20 18 13 20 18 HIPR 230 248 262 258 278 294 183 188 19.4 19.6 20.1 20.8 20.9 21.4 HIPR 230 248 262 258 278 294 294 316 334 335 360 380 319 127 MBh 55.6 57.7 63.2 104 111 121 108 115 126 114 121 132 119 127 AMB 55.7 63.2 184 4.4 4.58 194 11 121 108 115 126 114 121 132 119 127 AMB 55.6 57.7 63.2 144 4.58 144 4.58 145 148 144 148 148 148 148 149 149 149 149 149 149 149 149 149 149		⋖	\mps	15.4	15.8	16.3		16.7	17.1	17.6	ı	18.1	18.6	19.2	1	19.4	19.9	20.6	1	20.7	21.2	21.9	,	22.0	22.5	23.3	,
MBh 55.4 57.4 62.9 -2 54.1 56.1 61.4 -2 52.8 54.7 59.9 -2 51.5 53.4 58.5 -2 48.9 50.7 MBh 55.4 57.4 62.9 -2 54.1 56.1 61.4 -2 52.8 54.7 59.9 -2 51.5 53.4 58.5 -2 48.9 50.7 AT 20 17 13 -2 20 18 13 -2 20 14 -2 20 20 -2 20 20 -2 20 20		Т.	4I PR	228	245	259	,	256	275	291	ı	291	313	331	1	331	357	377	ı	373	401	424	,	412 ,	443	468	
MBh 55.4 57.4 62.9 - 54.1 56.1 - 52.8 54.7 59.9 - 51.5 53.4 58.5 - 48.9 50.7 5/T 0.69 0.57 0.40 - 0.71 0.60 0.41 - 0.73 0.61 0.42 - 0.75 0.63 0.44 - 0.78 0.65 AT 20 17 13 - 20 18 13 - 20 18 13 - 20 18 0.75 0.63 0.44 - 0.78 0.61 0.72 0.75 0.61 0.75 0.62 0.75 0.63 0.44 - 0.78 0.79 0.75 0.78 0.79 0.79 0.78 0.79 0.79 0.78 0.79 0.78 0.79 0.78 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79			O PR	98	104	114	ı	103	110	120	,	107	114	125	1	113	120	131	-	118	126	137	-	122	130	142	-
477 6.69 0.57 0.40 - 0.71 0.60 0.41 - 0.73 0.61 0.42 - 0.75 0.63 0.44 - 0.78 0.63 475 kW 4.00 4.09 4.21 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13	<u> </u>	_	MBh	55.4	57.4	67.9	,	54.1	56.1	61.4	,	52.8	54.7	59.9	ı	51.5	53.4	58.5	ı	48.9	50.7	55.6	7	45.3 4	47.0	51.5	
4T 20 17 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 18 13 - 20 17 3 - 4.54 - 4.58 4.84 - 4.82 4.93 5.09 - 5.03 5.14 HIPR 4.00 4.00 4.21 - 16.4 - 16.8 17.2 17.8 - 18.3 18.8 19.4 - 19.6 5.01 20.9 - 5.09 - 5.09 5.03 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14 40.5 5.14			S/T	69.0	0.57	0.40	1	0.71	09.0	0.41	1	0.73	0.61	0.42	•	0.75	0.63	0.44	ı	0.78	0.65	0.45		0.79 (0.66 (0.46	
4.750 kW 4.00 4.09 4.21 - 4.34 4.54 - 4.58 4.84 - 4.82 4.83 5.09 - 5.03 5.14 Amps 15.5 15.9 16.4 - 16.8 17.2 17.8 - 18.3 18.8 19.4 - 19.6 20.1 20.8 - 20.9 17.4 40.5 20.1 20.8 - 20.9 17.4 40.5 21.4 40.5 20.1 20.8 20.9 - 50.9 - 50.9 20.0 20.9 20.0			ΔT	20	17	13	,	20	18	13	1	20	18	13	•	20	18	13	1	20	17	13	1	19	16	12	1
Amps 15.5 15.9 16.4 - 16.8 17.2 17.8 - 18.3 18.8 19.4 - 19.6 20.1 20.8 - 20.9 21.4 HI PR 230 248 262 - 258 278 294 - 294 316 334 - 385 360 380 - 20.9 21.4 405 LO PR 99 105 111 121 - 108 115 - 114 121 132 - 199 377 405 MBh 55.6 57.7 63.2 - 54.3 56.3 61.7 - 55.0 60.2 - 51.8 53.6 58.8 - 49.2 51.0 AT 18 15 12 - 18 16 12 - 18 16 12 - 18 16 10.7 0.64 0.77 0.64 0.74 0.77			××	4.00	4.09	4.21	ı	4.31	4.40	4.54	1	4.58	4.68	4.84	1	4.82	4.93	5.09	,	5.03	5.14	5.31	,	5.20	5.32	5.50	,
HIPR 230 248 262 - 258 278 294 - 294 316 334 - 355 360 380 - 377 405 10 PPR 556 57.7 63.2 - 104 111 121 - 108 115 126 - 114 121 132 - 119 127		∢	\mps	15.5	15.9	16.4	1	16.8	17.2	17.8	ı	18.3	18.8	19.4	1	19.6	20.1	20.8	,	20.9	21.4	22.2	1	22.2	22.7	23.5	,
MBh 556 577 63.2 - 104 111 121 - 108 115 126 - 114 121 132 - 119 127 MBh 556 577 63.2 - 54.3 56.3 61.7 - 53.0 55.0 60.2 - 51.8 53.6 58.8 - 49.2 51.0 S/T 0.70 0.58 0.40 - 0.72 0.60 0.42 - 0.74 0.62 0.43 - 0.77 0.64 0.44 - 0.79 0.66 AT 18 15 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 KW 4.03 4.12 4.25 - 4.34 4.44 4.58 - 4.62 4.72 4.88 - 4.86 4.97 5.13 - 5.07 5.18 Amps 15.7 16.0 16.6 - 17.0 17.4 18.0 - 18.5 18.9 19.6 - 19.8 20.3 21.0 - 21.1 21.6 HER 233 250 264 - 261 281 297 - 297 318 317 - 318 318 - 318 318 - 318 318 - HER 240 240 240 240 240 240 240 240 240 240 240 HER 250 264 - 261 281 297 - 297 247 248 - 247 2			4I PR	230	248	262	1	258	278	294	1	294	316	334	1	335	360	380	1	377	405	428	1	416	448	473	,
MBh 55.6 57.7 63.2 - 54.3 56.3 61.7 - 53.0 55.0 60.2 - 51.8 53.6 58.8 - 49.2 51.0 51.0 55.0 60.2 - 51.8 51.8 51.8 51.8 51.8 51.0 51.0 51.0 51.0 51.0 51.0 51.0 51.0			O PR	66	105	115		104	111	121	1	108	115	126	1	114	121	132	_	119	127	139	-	124	131	143	
S/T 0.70 0.58 0.40 - 0.74 0.62 0.43 - 0.77 0.64 0.44 - 0.79 0.60 AT 18 15 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 16 17 - 18 19 19 19 10 10 10 10 10 10 10 10 10 10 10 10 1		_	MBh	55.6	57.7	63.2	,	54.3	56.3	61.7	ı	53.0	55.0	60.2	1	51.8	53.6	58.8	1	49.2	51.0	55.8		45.5	47.2	51.7	
AT 18 15 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 12 - 18 16 18 16 18 16 18 16 18 16 18 16 18 16 18 19 19 19 19 19 19 19 19 19 19 19 19 19			S/T	0.70	0.58	0.40	ı	0.72	09.0	0.42	1	0.74	0.62	0.43	1	0.77	0.64	0.44	1	0.79	99.0	0.46	<u> </u>	0.80	0.67	0.46	,
kW 4.03 4.12 4.25 - 4.44 4.58 - 4.62 4.72 4.88 - 4.86 4.97 5.13 - 5.07 5.18 Amps 15.7 16.0 16.6 - 17.0 17.4 18.0 - 18.5 18.9 19.6 - 19.8 20.3 21.0 - 21.1 21.6 HIPR 233 250 264 - 261 281 297 - 297 337 - 384 - 380 409 10.0 20.0			ΔT	18	15	12	ı	18	16	12	ı	18	16	12	•	18	16	12	1	18	16	12	1	17	15	11	,
15.7 16.0 16.6 - 17.0 17.4 18.0 - 18.5 18.9 19.6 - 19.8 20.3 21.0 - 21.1 21.6 233 250 264 - 261 281 297 - 297 319 337 - 338 364 384 - 380 409 203 264 - 261 281 297 - 297 319 337 - 338 364 380 409	7		Š	4.03	4.12	4.25	ı	4.34	4.44	4.58	1	4.62	4.72	4.88	1	4.86	4.97	5.13	į	5.07	5.18	5.36	<u></u>	5.25	5.37	5.55	1
233 250 264 - 261 281 297 - 297 319 337 - 338 364 384 - 380 409		∢	\mps	15.7	16.0	16.6	,	17.0	17.4	18.0	1	18.5	18.9	19.6	1	19.8	20.3	21.0	1	21.1	21.6	22.4	,	22.4	22.9	23.7	,
OCT 101 101 101 101 101 101 101 101 101 10		_	H PR	233	250	264	1	261	281	297	1	297	319	337	1	338	364	384	,	380	409	432	ı	420	452	477	
100 106 116 - 105 112 122 - 110 11/ 12/ - 115 122 134 - 121 128		_	O PR	100	106	116	I	105	112	122		110	117	127	ı	115	122	134	_	121	128	140	-	125	133	145	-

	F	MBh	54.7	56.3	6.09	65.4	53.4	55.0	59.5	63.9	52.1	53.7	58.1	62.3	50.9	52.4	26.7	8.09	48.3	49.7	53.8	57.8	44.7	46.1	49.9	53.5
		S/T	0.75	0.67	0.50	0.32	0.77	69.0	0.52	0.34	0.79	0.71	0.54	0.35	0.82	0.73	0.55	98.0	0.85	0.76	0.57	0.37	98.0	0.77	0.58	0.37
		ΔT	25	23	19	13	25	23	19	13	25	23	19	13	56	23	19	13	25	23	19	13	23	22	18	12
	1500	×	4.00	4.09	4.22	4.35	4.31	4.40	4.55	4.69	4.58	4.68	4.84	5.00	4.82	4.93	5.09	5.26	5.03	5.14	5.31	5.49	5.20	5.32	5.50	5.69
	_	Amps	15.5	15.9	16.4	17.1	16.8	17.2	17.8	18.5	18.3	18.8	19.4	20.2	19.6	20.1	20.8	21.6	20.9	21.4	22.2	23.0	22.2	22.7	23.5	24.4
		HI PR	230	248	262	273	258	278	294	306	294	316	334	348	335	360	380	397	377	405	428	446	416	448	473	493
		LO PR	66	105	115	122	104	111	121	129	108	115	126	134	114	121	132	141	119	127	139	148	124	131	143	153
<u> </u>		MBh	56.3	58.0	62.7	67.3	55.0	56.6	61.3	8.59	53.7	55.3	59.8	64.2	52.4	53.9	58.4	62.6	49.8	51.2	55.5	59.5	46.1	47.5	51.4	55.1
		S/T	0.78	0.70	0.53	0.34	0.81	0.72	0.55	0.35	0.83	0.74	0.56	0.36	98.0	0.77	0.58	0.37	0.89	0.80	09.0	0.39	0.90	0.80	0.61	0.39
		ΔT	23	21	17	12	23	22	18	12	23	22	18	12	24	22	18	12	23	21	18	12	22	20	16	11
75 1	1750	××	4.03	4.12	4.25	4.39	4.34	4.44	4.58	4.73	4.62	4.72	4.88	5.04	4.86	4.97	5.14	5.31	5.07	5.18	5.36	5.54	5.25	5.37	5.55	5.74
	_	Amps	15.7	16.1	16.6	17.2	17.0	17.4	18.0	18.7	18.5	18.9	19.6	20.3	19.8	20.3	21.0	21.8	21.1	21.6	22.4	23.2	22.4	22.9	23.7	24.7
		HI PR	233	250	264	276	261	281	297	309	297	320	337	352	338	364	384	401	380	409	432	451	420	452	478	498
		LO PR	100	106	116	123	105	112	122	130	110	117	127	136	115	122	134	142	121	128	140	149	125	133	145	154
<u> </u>		MBh	56.6	58.3	63.1	67.7	55.3	56.9	61.6	66.1	53.9	55.5	60.1	64.5	52.6	54.2	58.7	63.0	50.0	51.5	55.7	59.8	46.3	47.7	51.6	55.4
		S/T	0.79	0.71	0.54	0.35	0.82	0.73	0.56	0.36	0.84	0.75	0.57	0.37	0.87	0.78	0.59	0.38	0.90	0.81	0.61	0.39	0.91	0.81	0.62	0.40
		ΔT	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10
-7	2000	Š	4.06	4.15	4.28	4.42	4.38	4.48	4.62	4.77	4.66	4.76	4.92	5.08	4.90	5.01	5.18	5.35	5.11	5.23	5.40	5.59	5.29	5.41	5.59	5.78
	_	Amps	15.8	16.2	16.7	17.4	17.1	17.6	18.1	18.8	18.7	19.1	19.8	20.5	20.0	20.5	21.2	22.0	21.3	21.8	22.6	23.5	22.6	23.2	24.0	24.9
		HI PR	235	253	267	278	264	284	300	312	300	323	341	355	341	367	388	405	384	413	437	455	424	457	482	503
		LO PR	101	107	117	125	106	113	124	132	111	118	129	137	116	124	135	144	122	130	141	151	126	134	146	156
108: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves	ng Indoo w pressu	r Dry Bu rres are	lb Tempe measure	rature d at the li	iquid and	suction	service va	alves.						Shade	Shaded area is ACCA (TVA) conditions.	ACCA (T	/A) condit	ions.				Amp	s = outdc	KW=Total system power Amps = outdoor unit amps (comp.+fan)	KW=Total system power r unit amps (comp.+fan)	n power np.+fan)

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

			L									ő	JTDOOR	OUTDOOR AMBIENT TEMPERATURE	IT TEMP	ERATURI	μ									
				9	65				75			85				95	ا ِ ا			105				115		
												ENTERI	NG INDO	ENTERING INDOOR WET		BULB TEMPERATURE	TURE									
IDB	AIRFLOW	TOW	59	63	29	7.1	65	63	29	7.1	29	63	29	7.1	59	63	29	71	59	63	29	7.1	59	63	29	7.1
		MBh		56.9	60.7	64.9	54.3	55.5	59.3	63.4	53.0	54.2	57.9	61.9	51.8	52.9	56.5	60.4	49.2	50.2	53.7	57.4	45.5	46.5 4	49.7	53.2
		S/T		0.77	0.62	0.47	0.85	0.80	0.65	0.48	0.87	0.82	99.0	0.50	06.0	0.84	69.0	0.51	0.93	0.87	0.71	0.53	0.94 ().88	.72 (0.54
		ΔT		27	23	19	28	27	24	19	28	27	24	19	28	27	54	19	28	27	23	19	26	25	22	17
	1500	×		4.12	4.25	4.39	4.35	4.44	4.58	4.73	4.62	4.72	4.88	5.04	4.86	4.97	5.14	5.31	5.07	5.18	5.36	5.54	5.25	5.37	5.55	5.74
		Amps		16.1	16.6	17.2	17.0	17.4	18.0	18.7	18.5	18.9	19.6	20.3	19.8	20.3	21.0	21.8	21.1	21.6	22.4	23.2	22.4	22.9	23.7	24.7
		HI PR		250	264	276	261	281	297	309	297	320	337	352	338	364	384	401	380	409	432	451	420	452	478	498
		LO PR		106	116	123	105	112	122	130	110	117	127	136	115	122	134	142	121	128	140	149	125	133	145	154
		MBh		58.6	62.6	6.99	56.0	57.2	61.1	65.3	54.6	55.8	59.6	63.8	53.3	54.5	58.2	62.2	50.6	51.7	55.3	59.1	46.9	47.9	51.2	54.7
		S/T		0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.91	0.85	0.70	0.52	0.94	0.88	0.72	0.54	1.00	0.92	0.75	95.0	1.00 (0.92	0.75	95.0
		ΔT		25	22	17	26	25	22	17	56	25	22	17	56	25	22	18	27	25	22	17	25	23	70	16
80	1750	χ		4.15	4.28	4.42	4.38	4.48	4.62	4.77	4.66	4.76	4.92	5.08	4.90	5.01	5.18	5.35	5.11	5.23	5.40	5.59	5.29	5.41	5.59	5.79
		Amps		16.2	16.7	17.4	17.1	17.6	18.2	18.9	18.7	19.1	19.8	20.5	20.0	20.5	21.2	22.0	21.3	21.8	22.6	23.5	22.6	23.2	24.0	24.9
		HI PR		253	267	279	264	284	300	313	300	323	341	355	342	368	388	405	384	414	437	455	425	457	482	503
		LO PR		107	117	125	107	113	124	132	111	118	129	137	116	124	135	144	122	130	142	151	126	134	146	156
		MBh	57.6	58.8	67.9	67.2	2.95	57.5	61.4	9:59	54.9	56.1	6.65	64.1	53.6	54.7	58.5	62.5	50.9	52.0	55.6	59.4	47.1	48.2	51.5	55.0
		S/T		0.82	99.0	0.50	06.0	0.85	69.0	0.51	0.92	0.87	0.71	0.53	0.95	0.89	0.73	0.54	1.00	0.93	0.76	0.56	1.00 (0.94 (0.76 (0.57
		ΔT		22	19	15	23	22	19	16	23	22	19	16	23	23	20	16	23	22	19	15	22	21	18	14
	2000	×		4.19	4.32	4.46	4.42	4.51	4.66	4.81	4.70	4.80	4.96	5.12	4.94	5.06	5.22	5.40	5.16	5.27	5.45	5.63	5.34	5.46	5.64	5.84
		Amps		16.4	16.9	17.6	17.3	17.7	18.3	19.0	18.8	19.3	20.0	20.7	20.2	20.7	21.4	22.2	21.5	22.0	22.8	23.7	22.8	23.4		25.1
		HI PR		255	270	281	566	287	303	316	303	326	344	329	345	371	392	409	388	418	441	460	429	461	487	208
		LO PR		108	118	126	108	114	125	133	112	119	130	138	117	125	136	145	123	131	143	152	127	135	148	157

power	system power	KW=Total system	~						ons.	(I conditi	ea is AHR	Shaded area is AHRI conditions	S										erature	IDB: Entering Indoor Dry Bulb Temperature	oor Dry B	ering Indo	IDB: Fute
59	149 1	137 14	129 1	.54 1.		2 144	132	124	147	138	126	119	140	131	120	113	134	126	116	109	127	119	109	103	LO PR		
513	492 5	466 49	433 4		5 465	2 445	422	392	413	396	375	348	363	348	329	306	319	306	289	569	284	272	258	240	HI PR		
25.4	24.4 25	23.6 24	23.0 23		.0 23.9	2 23.0	7 22.2	21.7	22.4	21.6	20.9	20.4	20.9	20.1	19.5	19.0	19.2	18.5	17.9	17.5	17.7	17.1	16.5	16.1	Amps		
5.89	5.69 5.	.50 5.	.38 5.	S	.9 5.68	2 5.49	5.32	5.20	5.45	5.27	5.10	4.99	5.17	5.00	4.84	4.74	4.85	4.70	4.55	4.45	4.50	4.35	4.22	4.13	××	2000	
19	21 1	22 2	22 2		3 20	. 23		24	20	23	25	25	20	23	24	25	20	23	24	25	20	23	24	25	ΔT		
0.74	0.91 0.	1.00 0.5	1.00 1.		0 0.73	06.0	0 1.00	1.00	0.71	0.87	0.96	1.00	0.68	0.84	0.93	0.97	0.67	0.82	0.91	0.94	0.64	0.79	0.88	0.91	S/T		
54.6	51.2 54	48.9 51	48.0 48		3 59.0	8 55.3	3 52.8	51.8	62.1	58.2	55.6	54.5	9.69	59.6	56.9	55.9	65.2	61.1	58.3	57.2	66.7	62.5	59.7	58.6	MBh		
157	148 1	135 14	127 13	_	3 152	143	131	123	145	136	125	117	138	130	119	112	133	125	114	108	126	118	108		LO PR		
208	487 50	461 48	429 46		1 460	3 441	418	388	409	392	371	345	359	344	326	303	316	303	287	566	281	270	255		H PR		
25.1	24.2 25	23.4 24	22.8 23		8 23.7	22.8	5 22.0	21.5	22.2	21.4	20.7	20.2	20.7	20.0	19.3	18.8	19.0	18.3	17.7	17.3	17.6	16.9	16.4		Amps		
5.84	5.64 5.	5.46 5.6	5.34 5.		5 5.63	7 5.45	5 5.27	5.16	5.40	5.22	5.06	4.95	5.12	4.96	4.80	4.70	4.81	4.66	4.51	4.45	4.46	4.32	4.19	4.10	¥	1750	82
21	24 2	25 2,	25 2		, 22	26	27	27	23	56	28	28	22	56	27	28	22	56	27	28	22	26	27	28	ΔT		
0.73	0.90 0.	1.00 0.9	1.00 1.		9 0.72	68.0	0.99	1.00	0.70	0.86	0.95	0.99	0.68	0.83	0.92	96.0	99.0	0.81	06.0	0.93	0.64	0.78	0.87	06.0	S/T		
54.4	51.0 54	48.7 51	47.7 48	_	0 58.	5 55.0	5 52.5	51.5	61.8	57.9	55.3	54.2	63.3	59.4	56.7	55.6	64.9	8.09	58.1	56.9	66.4	62.2	59.4	58.3	MBh		
156	146 1	134 14	126 13		2 151) 142	130	122	144	135	124	116	137	129	118	111	132	124	113	107	125	117	107	101	LO PR		
503	482 50	457 48	425 45		7 455	437	414	384	405	388	368	342	355	341	323	300	313	300	284	264	279	267	253	235	HI PR		
24.9	24.0 24	23.2 24	22.6 23		6 23.5	3 22.6	3 21.8	21.3	22.0	21.2	20.5	20.0	20.5	19.8	19.1	18.7	18.9	18.2	17.6	17.1	17.4	16.7	16.2	15.8	Amps		
.79	.59 5.	5.41 5.5	5.29 5.4		0 5.59	3 5.40	5.23	5.11	5.35	5.18	5.01	4.90	5.08	4.92	4.76	4.66	4.77	4.62	4.48	4.38	4.45	4.28	4.15	4.07	×	1500	
23	26 2	28 20	28 2		24	28	29	30	24	28	30	30	24	28	30	30	24	28	30	30	24	28	59	30	ΔT		
0.70	.0 98.0	3.95 0.8	0.98 0.9	_	5 0.69	1 0.85	3 0.94	0.98	0.66	0.82	0.91	0.94	0.64	0.79	0.88	0.91	0.63	0.77	98.0	0.89	0.61	0.75	0.83	0.86	S/T		
52.8		7.2 49.5	46.3 47.	Ė	4 57.0	53.4	51.0	50.0	60.0	56.2	53.7	52.7	61.5	57.6	55.0	54.0	63.0	59.0	56.4	55.3	64.5	60.4	57.7	56.6	MBh		

													UTDOOF	₹ AMBIE	OUTDOOR AMBIENT TEMPERATURE	ERATUE	<u> </u>									
				65	5				75			"	85			6	95			105	2	П		115		
												ENTER	ING IND	OOR WI	ENTERING INDOOR WET BULB TEMPERATURE	TEMPER	ATURE									
IDB	AIRFLOW	wo	29	63	29	71	65	63	29	71	65	63	29	71	65	63	29	71	59	63	29	7.1	59	63	29	7.1
		MBh	23.8	55.7	61.0	ı	52.5	54.4	59.6		51.3	53.1	58.2	-	50.0	51.8	56.8	-	47.5	49.2	53.9	,	44.0 4	45.6	50.0	
		S/T	99.0	0.55	0.38	1	0.68	0.57	0.39	ı	0.70	0.58	0.40	1	0.72	09.0	0.42	,	0.75	0.62	0.43	ı	0.75 (0.63	0.44	ı
		ΔT	22	19	14	ı	22	19	14	,	22	19	14	1	22	19	14	,	22	19	14	ı	20	18	13	,
	1500	Ϋ́	3.97	4.05	4.18	1	4.27	4.37	4.51	ı	4.54	4.64	4.80	,	4.78	4.89	5.05	1	4.99	5.10	5.27	1	5.16	5.28	5.45	1
		Amps	15.4	15.8	16.3	1	16.7	17.1	17.6	1	18.1	18.6	19.2	1	19.4	19.9	20.6	,	20.7	21.2	21.9	,	22.0	22.5	23.3	ı
		HI PR	228	245	259	ı	256	275	291	1	291	313	331	1	331	357	377	,	373	401	424	,	412	443	468	,
		LO PR	86	104	114	,	103	110	120	1	107	114	125	-	113	120	131	1	118	126	137	-	122	130	142	1
		MBh	55.4	57.4	67.9	1	54.1	56.1	61.4	1	52.8	54.7	59.9	1	51.5	53.4	58.5	ı	48.9	50.7	55.6	-	45.3 4	47.0	51.5	,
		Z/Z	69.0	0.57	0.40	1	0.71	09.0	0.41	1	0.73	0.61	0.42	1	0.75	0.63	0.44	,	0.78	0.65	0.45	1	0.79 (99.0	0.46	1
		ΔT	20	17	13	1	20	18	13	1	20	18	13	1	20	18	13	ı	20	17	13	1	19	16	12	,
20	1750	×	4.00	4.09	4.21	1	4.31	4.40	4.54	٠	4.58	4.68	4.84	1	4.82	4.93	5.09	,	5.03	5.14	5.31	1	5.20	5.32	5.50	,
		Amps	15.5	15.9	16.4	1	16.8	17.2	17.8	1	18.3	18.8	19.4	1	19.6	20.1	20.8	1	20.9	21.4	22.2	,	22.2	22.7	23.5	,
		HI PR	230	248	262	1	258	278	294	1	294	316	334	1	335	360	380	1	377	405	428	,	416	448	473	,
		LO PR	66	105	115	1	104	111	121	,	108	115	126	1	114	121	132	1	119	127	139	1	124	131	143	-
		MBh	55.6	57.7	63.2	ı	54.3	56.3	61.7		53.0	55.0	60.2	,	51.8	53.6	58.8		49.2	51.0	55.8	,	45.5 4	47.2	51.7	,
		S/T	0.70	0.58	0.40	1	0.72	0.60	0.42	1	0.74	0.62	0.43	1	0.77	0.64	0.44	1	0.79	99.0	0.46	,	0.80	0.67	0.46	,
		ΔT	18	15	12	1	18	16	12	1	18	16	12	,	18	16	12	ı	18	16	12	1	17	15	11	1
	2000	×	4.03	4.12	4.25	1	4.34	4.44	4.58	1	4.62	4.72	4.88	,	4.86	4.97	5.13	,	5.07	5.18	5.36	,	5.25	5.37	5.55	,
		Amps	15.7	16.0	16.6	1	17.0	17.4	18.0	1	18.5	18.9	19.6	1	19.8	20.3	21.0	,	21.1	21.6	22.4	1	22.4	22.9	23.7	1
		H PR	233	250	264	1	261	281	297	1	297	319	337	,	338	364	384	1	380	409	432	,	420	452	477	1
		LO PR	100	106	116	1	105	112	122	'	110	117	127	,	115	122	134		121	128	140	1	125	133	145	1

		MBh	54.7	56.3	6.09	65.4	53.4	55.0	59.5	63.9	52.1	53.7	58.1	62.3	50.9	52.4	26.7	8.09	48.3	49.7	53.8	57.8	44.7	46.1	49.9	53.5
		S/T	0.75	0.67	0.50	0.32	0.77	0.69	0.52	0.34	0.79	0.71	0.54	0.35	0.82	0.73	0.55	98.0	0.85	0.76	0.57	0.37	98.0	0.77	0.58	0.37
		ΔT	25	23	19	13	22	23	19	13	25	23	19	13	56	23	19	13	25	23	19	13	23	22	18	12
	1500	Κ	4.00	4.09	4.22	4.35	4.31	4.40	4.55	4.69	4.58	4.68	4.84	5.00	4.82	4.93	5.09	5.26	5.03	5.14	5.31	5.49	5.20	5.32	5.50	5.69
		Amps	15.5	15.9	16.4	17.1	16.8	17.2	17.8	18.5	18.3	18.8	19.4	20.2	19.6	20.1	20.8	21.6	20.9	21.4	22.2	23.0	22.2	22.7	23.5	24.4
		HI PR	230	248	262	273	258	278	294	306	294	316	334	348	335	360	380	397	377	405	428	446	416	448	473	493
		LO PR	66	105	115	122	104	111	121	129	108	115	126	134	114	121	132	141	119	127	139	148	124	131	143	153
		MBh	56.3	58.0	62.7	67.3	55.0	9.95	61.3	65.8	23.7	55.3	59.8	64.2	52.4	53.9	58.4	62.6	49.8	51.2	55.5	59.5	46.1	47.5	51.4	55.1
		S/T	0.78	0.70	0.53	0.34	0.81	0.72	0.55	0.35	0.83	0.74	0.56	0.36	98.0	0.77	0.58	0.37	0.89	0.80	09.0	0.39	06.0	08.0	0.61	0.39
		ΔT	23	21	17	12	23	22	18	12	23	22	18	12	24	22	18	12	23	21	18	12	22	20	16	11
75	1750	××	4.03	4.12	4.25	4.39	4.34	4.44	4.58	4.73	4.62	4.72	4.88	5.04	4.86	4.97	5.14	5.31	5.07	5.18	5.36	5.54	5.25	5.37	5.55	5.74
		Amps	15.7	16.1	16.6	17.2	17.0	17.4	18.0	18.7	18.5	18.9	19.6	20.3	19.8	20.3	21.0	21.8	21.1	21.6	22.4	23.2	22.4	22.9	23.7	24.7
		HI PR	233	250	264	276	261	281	297	309	297	320	337	352	338	364	384	401	380	409	432	451	420	452	478	498
		LO PR	100	106	116	123	105	112	122	130	110	117	127	136	115	122	134	142	121	128	140	149	125	133	145	154
		MBh	56.6	58.3	63.1	67.7	55.3	56.9	61.6	66.1	53.9	55.5	60.1	64.5	52.6	54.2	58.7	63.0	50.0	51.5	55.7	59.8	46.3	47.7	51.6	55.4
		S/T	0.79	0.71	0.54	0.35	0.82	0.73	0.56	0.36	0.84	0.75	0.57	0.37	0.87	0.78	0.59	0.38	0.90	0.81	0.61	0.39	0.91	0.81	0.62	0.40
		ΔT	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	21	19	16	11	19	18	15	10
	2000	Š	4.06	4.15	4.28	4.42	4.38	4.48	4.62	4.77	4.66	4.76	4.92	5.08	4.90	5.01	5.18	5.35	5.11	5.23	5.40	5.59	5.29	5.41	5.59	5.78
		Amps	15.8	16.2	16.7	17.4	17.1	17.6	18.1	18.8	18.7	19.1	19.8	20.5	20.0	20.5	21.2	22.0	21.3	21.8	22.6	23.5	22.6	23.2	24.0	24.9
		H PR	235	253	267	278	264	284	300	312	300	323	341	355	341	367	388	405	384	413	437	455	424	457	482	503
		LO PR	101	107	117	125	106	113	124	132	111	118	129	137	116	124	135	144	122	130	141	151	126	134	146	156
IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	ing Indo	oor Dry B	ulb Temp	erature ed at the	liquid anc	suction !	service va	alves.						Shade	d area is	ACCA (T)	Shaded area is ACCA (TVA) conditions.	ions.				Amps	s = outdo	KW=Total system power Amps = outdoor unit amps (comp.+fan)	(W=Total system power unit amps (comp.+fan	າ power າp.+fan)

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

Main Sign													ō	JTDOOR	AMBIEN	OUTDOOR AMBIENT TEMPERATURE	RATURE										
Mile Sig			L		65				75	ا ا			82				95		Н		105		Н		115		
MB 55.6 56.9 67 67 67 68 68 67 71 89 68 67 71 89 68 67 71 89 68 67 71 89 68 67 71 89 68 67 71 89 68 67 71 89 68 67 71 89 68 67 80 71			L										ENTERI	NG INDO	OR WET	BULB TE	EMPERA	TURE									
Mah 556 569 60.7 649 64.3 54.3 55.5 59.3 63.4 63.6 61.0 61.0 61.0 61.0 61.0 61.0 61.0 62.0 63.0 61.0	IDB	AIRFLOV	×	59	63	67	7.1	59	63	67	7.1	59	63	29	7.1	59	63	29	71	59	63	29	71	29	63	29	7.1
1500 571 682 677 682 674 685 686		2	∕1Bh	55.6	56.9	60.7	64.9	54.3	55.5	59.3	63.4	53.0	54.2	57.9	61.9	51.8	52.9				~!	53.7	57.4	2		7	53.2
401 ALTION ALTION <th></th> <th><i>U</i>1</th> <th>S/T</th> <th>0.82</th> <th>0.77</th> <th>0.62</th> <th>0.47</th> <th>0.85</th> <th>0.80</th> <th>0.65</th> <th>0.48</th> <th>0.87</th> <th>0.82</th> <th>99.0</th> <th>0.50</th> <th>06.0</th> <th>0.84</th> <th>69.0</th> <th>0.51</th> <th></th> <th>0.87</th> <th>_</th> <th></th> <th></th> <th>) 88'(</th> <th>.72 (</th> <th>0.54</th>		<i>U</i> 1	S/T	0.82	0.77	0.62	0.47	0.85	0.80	0.65	0.48	0.87	0.82	99.0	0.50	06.0	0.84	69.0	0.51		0.87	_) 88'(.72 (0.54
 4.03 4.03 4.04 4.05 <li< th=""><th></th><th>7</th><th>ΔT</th><th>28</th><th>27</th><th>23</th><th>19</th><th>28</th><th>27</th><th>24</th><th>19</th><th>28</th><th>27</th><th>24</th><th>19</th><th>28</th><th>27</th><th>24</th><th>19</th><th>28</th><th>27</th><th>23</th><th>19</th><th>56</th><th>25</th><th>22</th><th>17</th></li<>		7	ΔT	28	27	23	19	28	27	24	19	28	27	24	19	28	27	24	19	28	27	23	19	56	25	22	17
 Amps HIPR 233 260 160 110 111 111 111 112 112 112 113 113 114 115 115 116 117 117 118 118 118 119 119 110 110 110 111 112 113 115 114 115 115 115 116 116 117 118 119 110 110 111 110 111 110 110 111 110 110 111 110 110 110 110 110 111 110 110	Ä		× ×	4.03	4.12	4.25	4.39	4.35	4.44	4.58	4.73	4.62	4.72	4.88	5.04	4.86	4.97	5.14	5.31	5.07		5.36		5.25	5.37	555	5.74
H H P N S S S S S S S S S S S S S S S S S S		Ā	sdur	15.7	16.1	16.6	17.2	17.0	17.4	18.0	18.7	18.5	18.9	19.6	20.3	19.8	20.3	21.0	21.8		21.6		23.2	22.4	_	7	24.7
 MBH 57.3 58.6 6.0 6.0		I	II PR	233	250	264	276	261	281	297	309	297	320	337	352	338	364	384	401		409		451				498
MMBI 57.3 58.6 6.2.6 6.2.6 6.2.6 6.2.7 6.1.1 65.3 6.2.6 6.3.8 6.2.6 6.3.7 6.3.6 6.3.6 6.3.7 6.3.6 6.3.7 6.3.6 6.3.7 6.3.6 6.3.7 6.3.6 6.3.7 6.3.6 6.3.7 6.3.6 6.3.7 6.3.6 6.3		7	O PR	100	106	116	123	105	112	122	130	110	117	127	136	115	122	134	142	121	128	140	149			145	154
47 6.86 0.89 0.89 0.89 0.81 0.89 0		2	MBh	57.3	58.6	62.6	6.99	56.0	57.2	61.1	65.3	54.6	55.8	59.6	63.8	53.3	54.5	58.2	62.2		51.7					~	54.7
4 May 4.0 5.0 </th <th></th> <th></th> <th>S/T</th> <th>98.0</th> <th>0.80</th> <th>0.65</th> <th>0.49</th> <th>0.89</th> <th>0.83</th> <th>0.68</th> <th>0.51</th> <th>0.91</th> <th>0.85</th> <th>0.70</th> <th>0.52</th> <th>0.94</th> <th>0.88</th> <th>0.72</th> <th>0.54</th> <th>_</th> <th>0.92</th> <th></th> <th>95.0</th> <th></th> <th></th> <th></th> <th>0.56</th>			S/T	98.0	0.80	0.65	0.49	0.89	0.83	0.68	0.51	0.91	0.85	0.70	0.52	0.94	0.88	0.72	0.54	_	0.92		95.0				0.56
4750 KW 4.07 4.15 4.28 4.42 4.86 4.76 4.92 5.08 5.18 5.35 5.11 5.23 5.40 5.59 5.41 5.59 5.40 5.59 5.41 5.59 5.40 5.59 5.41 5.59 5.40 5.59 5.41 5.59 5.40 5.59 5.41 5.59 5.40 5.59 5.41 5.59 5.41 5.59 5.41 5.59 5.41 5.59 5.41 5.59 5.41 5.59 5.41 5.59 5.41 5.29 5.41 5.59 6.01 5.02 5.10 5			ΔT	26	25	22	17	56	25	22	17	56	25	22	17	56	25	22	18	27	25	22	17	25	23	20	16
Amps 15.8 16.2 16.7 17.4 17.1 17.6 18.2 18.9 18.9 20.5 20.5 21.2 21.8 41.4 43.7 45.5 45.7 48.2 18.8 40.8 48.8 40.8 41.4 43.7 45.5 45.7 48.2 18.8 40.8 48.8 40.8 41.4 43.7 45.5 45.7 48.2 18.8 40.8 <th< th=""><th></th><th></th><th>ΚW</th><th>4.07</th><th>4.15</th><th>4.28</th><th>4.42</th><th>4.38</th><th>4.48</th><th>4.62</th><th>4.77</th><th>4.66</th><th>4.76</th><th>4.92</th><th>5.08</th><th>4.90</th><th>5.01</th><th>5.18</th><th>5.35</th><th></th><th>5.23</th><th></th><th></th><th></th><th></th><th></th><th>5.79</th></th<>			ΚW	4.07	4.15	4.28	4.42	4.38	4.48	4.62	4.77	4.66	4.76	4.92	5.08	4.90	5.01	5.18	5.35		5.23						5.79
HIPPR 235 257 267 279 264 284 300 313 300 323 341 355 342 368 388 405 384 414 437 455 455 457 482 482 482 482 482 482 482 482 482 482		٩	\mps	15.8	16.2	16.7	17.4	17.1	17.6	18.2	18.9	18.7	19.1	19.8	20.5	20.0	20.5	21.2	22.0				23.5			_	24.9
OPM 57.6 58.8 62.9 67.2 57.5 61.4 65.6 58.7 64.1 134 134 136 134 136 134 136 134 136 134 136 134 136 134 136 134 136 134 136 134 136 134 146 136 134 146 136 136 134 146 136 136 136 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 138 137 138 137 138 137 138 137 138 137 138 137 138 137 138 137 138 137 138 137 138 138 138 139 138 138 138 138 139 <t< th=""><th></th><th>I</th><th>H PR</th><th>235</th><th>253</th><th>267</th><th>279</th><th>264</th><th>284</th><th>300</th><th>313</th><th>300</th><th>323</th><th>341</th><th>355</th><th>342</th><th>368</th><th>388</th><th>405</th><th>384</th><th></th><th></th><th>455</th><th></th><th>457</th><th>482</th><th>503</th></t<>		I	H PR	235	253	267	279	264	284	300	313	300	323	341	355	342	368	388	405	384			455		457	482	503
MBH 57.6 58.8 62.9 67.2 56.2 57.5 61.4 65.6 54.9 56.1 59.9 64.1 53.6 54.7 58.5 62.5 50.9 52.0 55.6 59.4 47.1 48.2 51.5 51.5 51.5 51.5 51.5 51.5 51.5 51			O PR	101	107	117	125	107	113	124	132	111	118	129	137	116	124	135	144	122	130	142	151	126	134	146	156
5/T 0.87 0.82 0.66 0.50 0.80 0.85 0.69 0.51 0.92 0.87 0.71 0.53 0.95 0.89 0.73 0.54 1.00 0.93 0.76 0.95 0.76 0.95 0.70 0.94 0.70 0.95 0.70 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.95 0.70 0.70 0.70 0.70 0.70 0.70 0.70 0.7		_	MBh	57.6	58.8	67.9	67.2	56.2	57.5	61.4	9.59	54.9	56.1	59.9	64.1	53.6	54.7	58.5	62.5		52.0						55.0
AT 23 22 19 15 23 22 19 16 23 22 19 16 6 23 23 10 16 23 23 20 16 10 10 10 10 10 10 10 10 10 10 10 10 10		-	S/T	0.87	0.82	99.0	0.50	06.0	0.85	69.0	0.51	0.92	0.87	0.71	0.53	0.95	0.89	0.73	0.54		0.93		95.0				0.57
kW 4.10 4.19 4.32 4.46 4.42 4.51 4.66 4.81 4.70 4.80 4.96 5.12 4.94 5.06 5.22 5.40 5.16 5.27 5.45 5.63 5.34 5.46 5.64 5.64 5.04 4.80 4.80 4.96 5.12 4.94 5.06 5.22 5.40 5.16 5.27 5.45 5.63 5.34 5.46 5.64 5.64 5.64 5.64 5.64 5.64 5.6		-	ΔŢ	23	22	19	15	23	22	19	16	23	22	19	16	23	23	20	16	23	22	19	15	22	21	18	14
16.0 16.4 16.9 17.6 17.3 17.7 18.3 19.0 18.8 19.3 20.0 20.7 20.2 20.7 21.4 22.2 22.0 22.8 23.7 22.8 23.7 24.2 24.2 23.7 25.5 27.0 22.8 23.7 25.8 23.4 24.2 24.2 23.7 25.5 27.0 28.1 26.2 28.7 30.3 316 30.3 326 34.4 35.9 34.5 37.1 39.2 40.9 38.8 41.8 44.1 460 42.9 46.1 487 487 487 487 487 487 487 487 487 487	2		××	4.10	4.19	4.32	4.46	4.42	4.51	4.66	4.81	4.70	4.80	4.96	5.12	4.94	90'5	5.22	5.40	5.16	5.27		5.63				5.84
237 255 270 281 266 287 303 316 303 326 344 359 345 371 392 409 388 418 441 460 429 461 487 487 102 108 118 126 108 114 125 133 112 119 130 138 117 125 136 145 123 131 143 152 127 135 148		∀	\mps	16.0	16.4	16.9	17.6	17.3	17.7	18.3	19.0	18.8	19.3	20.0	20.7	20.2	20.7	21.4	22.2	21.5	22.0		23.7			24.2	25.1
102 108 118 126 108 114 125 133 112 119 130 138 117 125 136 145 123 131 143 152 127 135 148		工	4I PR	237	255	270	281	566	287	303	316	303	326	344	359	345	371	392	409	388	418	441	460	429		487	208
		<u> </u>	O PR	102	108	118	126	108	114	125	133	112	119	130	138	117	125	136	145	123	131	143	152	127	135	148	157

		MBh	56.6	57.7	60.4	64.5	55.3	56.4	59.0	63.0	54.0	55.0	9.75	61.5	52.7	53.7	56.2	0.09	50.0	51.0	53.4					52.8
		S/T	98.0	0.83	0.75	0.61	0.89	98.0	0.77	0.63	0.91	0.88	0.79	0.64	0.94	0.91	0.82	99.0	0.98	0.94	0.85	0.69	0.98	0.95	98.0	0.70
		ΔT	30	29	28	24	30	30	28	24	30	30	28	24	30	30	28	24	30	29	28	24	28	28	56	23
	1500	Α×	4.07	4.15	4.28	4.42	4.38	4.48	4.62	4.77	4.66	4.76	4.92	5.08	4.90	5.01	5.18	5.35	5.11	5.23	5.40	5.59	5.29	5.41	5.59	5.79
		Amps		16.2	16.7	17.4	17.1	17.6	18.2	18.9	18.7	19.1	19.8	20.5	20.0	20.5	21.2	22.0	21.3	21.8	22.6	23.5	22.6	23.2	24.0	24.9
		HI PR	235	253	267	279	264	284	300	313	300	323	341	355	342	368	388	405	384	414	437	455		457	482	503
		LO PR	101	107	117	125	107	113	124	132	111	118	129	137	116	124	135	144	122	130	142	151	126	134	146	156
		MBh	58.3	59.4	62.2	66.4	56.9	58.1	8.09	64.9	55.6	26.7	59.4	63.3	54.2	55.3	57.9	61.8	51.5	52.5	55.0	58.7	47.7	48.7	51.0	54.4
		S/T	06.0	0.87	0.78	0.64	0.93	06.0	0.81	99.0	96.0	0.92	0.83	0.68	0.99	0.95	98.0	0.70	1.00	0.99	6	0.72	1.00	1.00	06.0	0.73
		ΔT	28	27	56	22	28	27	56	22	28	27	56	22	28	28	56	23	27	.27	26	22	25	25	24	21
82	1750	Κ	4.10	4.19	4.32	4.46	4.42	4.51	4.66	4.81	4.70	4.80	4.96	5.12	4.95	90.5	5.22	5.40	5.16	5.27			5.34	5.46	5.64	5.84
		Amps	16.0	16.4	16.9	17.6	17.3	17.7	18.3	19.0	18.8	19.3	20.0	20.7	20.2	20.7	21.4	22.2	21.5	22.0	22.8	23.7	22.8	23.4	24.2	25.1
		H PR		255	270	281	592	287	303	316	303	326	344	359	345	371	392	409	388	418	441	460	429	461	487	508
		LO PR		108	118	126	108	114	125	133	112	119	130	138	117	125	136	145	123	131	143	152	127	135	148	157
		MBh	58.6	59.7	62.5	66.7	57.2	58.3	61.1	65.2	55.9	56.9	59.6	9.89	54.5	55.6	58.2	62.1	51.8	52.8		29.0	48.0	48.9	51.2	54.6
		S/T	0.91	0.88	0.79	0.64	0.94	0.91	0.82	0.67	0.97	0.93	0.84	0.68	1.00	96.0	0.87	0.71	1.00	1.00	0.90	0.73	1.00	1.00	0.91	0.74
		ΔT	25	24	23	20	25	24	23	20	25	24	23	20	25	25	23	20	24	24	23	70	22	22	21	19
	2000	Š	4.13	4.22	4.35	4.50	4.45	4.55	4.70	4.85	4.74	4.84	5.00	5.17	4.99	5.10	5.27	5.45	5.20	5.32	5.49	5.68	5.38	5.50	5.69	5.89
		Amps	16.1	16.5	17.1	17.7	17.5	17.9	18.5	19.2	19.0	19.5	20.1	20.9	20.4	20.9	21.6	22.4	21.7	22.2	23.0	23.9	23.0	23.6	24.4	25.4
		HI PR	240	258	272	284	569	289	306	319	306	329	348	363	348	375	396	413	392	422	445	465	433	466	492	513
		LO PR	103	109	119	127	109	116	126	134	113	120	131	140	119	126	138	147	124	132	144	154	129	137	149	159
IDB: Enter High and	ring Indo	oor Dry B	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at th	erature ed at the	liquid ano	l suction s	IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.	alves.						Sh	Shaded area is AHRI conditions.	i is AHRI ı	conditions	ıń				Amps	KW=Total system power Amps = outdoor unit amps (comp.+fan)	KW=To	(W=Total system power) unit amps (comp.+fan)	n power np.+fan)
0																										

IDB: Entering Indoor Dry Bulb Temperature High and low pressures are measured at the liquid and suction service valves.

OUTDOOR	INDOOR UNITS	Co	OOLING RATIN	IGS	SCFM	AHRI#
UNIT	Coils/Air Handlers	TOTAL ¹	SEER ²	EER ³	SCFIVI	ARKI#
1 1 1111	ARUF37C14A*	34000	13.00	11.00	1050	7988968
i	ARUF37D14A*	34400	13.00	11.00	1070	8875402
	ASPT37C14A*	-35000	13.50	11.20	1100	8875380
	AWUF36XX16B*	33400	13.00	11.00	1150	6334383
	AWUF37XX16B*	34000	13.00	11.00	1200	6334382
	CA*F3636*6D*+EEP	35000	13.00	11.00	1200	6334383
	CA*F3642*6D*+MBVC1600**-1A*	35400	14.00	11.50	1200	633438
DX13SA	CA*F3743*6D*+EEP	34600	13.00	11.00	1200	633438
0363A*	CA*F3743*6D*+EEP+TXV	34600	13.50	11.00	1200	633438
	CA*F3743*6D*+MBVC1600**-1A*	35400	14.00	11.50	1200	633438
DX13SA O483A* C/OX13SA O484A*	CHPF3636B6C*+EEP	35400	13.00	11.00	1200	633438
	CHPF3642C6C*+EEP	35400	13.00	11.00	1200	633438
	CHPF3642C6C*+MBVC1600**-1A*	35400	14.00	11.50	1200	633439
	CSCF3036N6D*+EEP	35000	13.00	11.00	1200	633439
	CSCF3642N6D*+EEP	35400	13.00	11.00	1200	633439
	ARUF37C14A*	34000	13.00	11.00	1050	848281
	ARUF37D14A*	34400	13.00	11.00	1070	887540
DX13SA 0363A* DX13SA 0364A* DX13SA 0483A* DX13SA 0483A*	ASPT37C14A*	35000	13.5	11.2	1100	2044716
	ASP157C14A AWUF36XX16B*	33400	13.00	11.00	1150	848282
		34000	13.00	11.00	1200	848282
	AWUF37XX16B*	35000	13.00	11.00	1200	833822
	CA*F3636*6D*+EEP			11.50	1200	848282
DX13SA	CA*F3642*6D*+MBVC1600**-1A*	35400	14.00		1200	848282
0364A*	CA*F3743*6D*+EEP	34600	13.00	11.00		848282
*	CA*F3743*6D*+EEP+TXV	34600	13.50	11.00	1200	1
	CA*F3743*6D*+MBVC1600**-1A*	35400	14.00	11.50	1200	848282
	CHPF3636B6C*+EEP	35400	13.00	11.00	1200	848283
	CHPF3642C6C*+EEP	35400	13.00	11.00	1200	848283
	CHPF3642C6C*+MBVC1600**-1A*	35400	14.00	11.50	1200	848283
	CSCF3036N6D*+EEP	35000	13.00	11.00	1200	848283
	CSCF3642N6D*+EEP	35400	13.00	11.00	1200	837744
	ARUF49D14A*	45000	13.00	11.00	1455	817175
	ASPT49D14A*	46000	14.00	11.30	1550	2044716
DV1264	CA*F4860*6D*+EEP	46000	13.00	11.00	1600	633440
	CA*F4860*6D*+MBVC2000**-1A*	46000	14.00	11.30	1600	633440
	CHPF4860D6D*+EEP	46000	13.00	11.00	1600	633440
	CHPF4860D6D*+MBVC2000**-1A*	46000	14.00	11.30	1600	633440
	CSCF4860N6D*+EEP	46000	13.00	11.00	1600	633440
	DAT09043A*	88000	14.00	11.50	3000	750010
	ARUF49D14A*	45000	13.00	11.00	1450	887540
	ASPT49D14A*	46000	14.00	11.30	1550	2044716
	CA*F4860*6D*+EEP	46000	13.00	11.00	1600	633441
	CA*F4860*6D*+MBVC2000**-1A*	46000	14.00	11.30	1600	633443
0484A*	CHPF4860D6D*+EEP	46000	13.00	11.00	1600	633443
	CHPF4860D6D*+MBVC2000**-1A*	46000	14.00	11.30	1600	633442
	CSCF4860N6D*+EEP	46000	13.00	11.00	1600	633442
(2) DX13SA	DAT09044A*	88000	14.00	11.50	3000	750010

OUTDOOR	Indoor Units	Co	OOLING RATIN	SCFM	AHRI#	
UNIT	Coils/Air Handlers	TOTAL ¹	SEER ²	EER ³	SCFIVI	AUVI #
	ARUF61D14A*	55500	13.00	11.00	1520	8000271
	ASPT61D14A*	55500	13.50	11.50	1450	8875399
	CA*F4860*6D*+MBVC2000**-1A*+TXV	56000	14.00	11.50	1575	6334431
	CA*F4961*6D*+EEP	56500	13.00	11.00	1500	6334432
DX13SA	CA*F4961*6D*+MBVC2000**-1A*	57000	14.00	11.50	1575	6334433
0603A*	CA*F4961*6D*+MBVC2000**-1A*+TXV	57000	14.00	12.00	1575	6334434
	CAPT4961*4A*+MBVC2000**-1A*	57000	14.00	12.00	1575	6334436
	CHPF4860D6D*+MBVC2000**-1A*	57000	14.00	11.50	1575	6334438
	CHPF4860D6D*+MBVC2000**-1A*+TXV	57000	14.00	11.50	1575	6334439
	CSCF4860N6D*+MBVC2000**-1A*+TXV	56000	14.00	11.50	1575	6334442
(2) DX13SA 0603A*	DAT12043A*	114000	14.00	11.20	4000	7500106
	ARUF61D14A*	55500	13	11	1520	8875401
	ASPT61D14A*	55500	13.5	11.5	1450	8875400
	CA*F4860*6D*+MBVC2000**-1A*+TXV	56000	14.00	11.50	1575	6334450
	CA*F4961*6D*+MBVC2000**-1A*	57000	14.00	11.50	1575	6334452
DX13SA	CA*F4961*6D*+MBVC2000**-1A*+TXV	57000	14.00	12.00	1575	6334453
0604A*	CA*F4961*6D+EEP	56500	13.00	11.00	1500	6334451
	CAPT4961*4A*+MBVC2000**-1A*	57000	14.00	12.00	1575	6334455
	CHPF4860D6D*+MBVC2000**-1A*	57000	14.00	11.50	1575	6334457
	CHPF4860D6D*+MBVC2000**-1A*+TXV.	57000	14.00	11.50	1575	6334458
-	CSCF4860N6D*+MBVC2000**-1A*+TXV	56000	14.00	11.50	1575	6334461
(2) DX13SA 0604A*	DAT12044A*	114000	14.00	11.20	4000	7500107

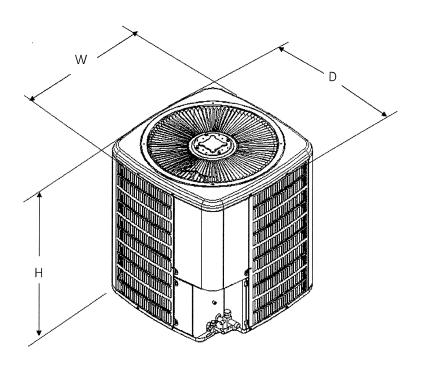
¹ BTU/h

Notes

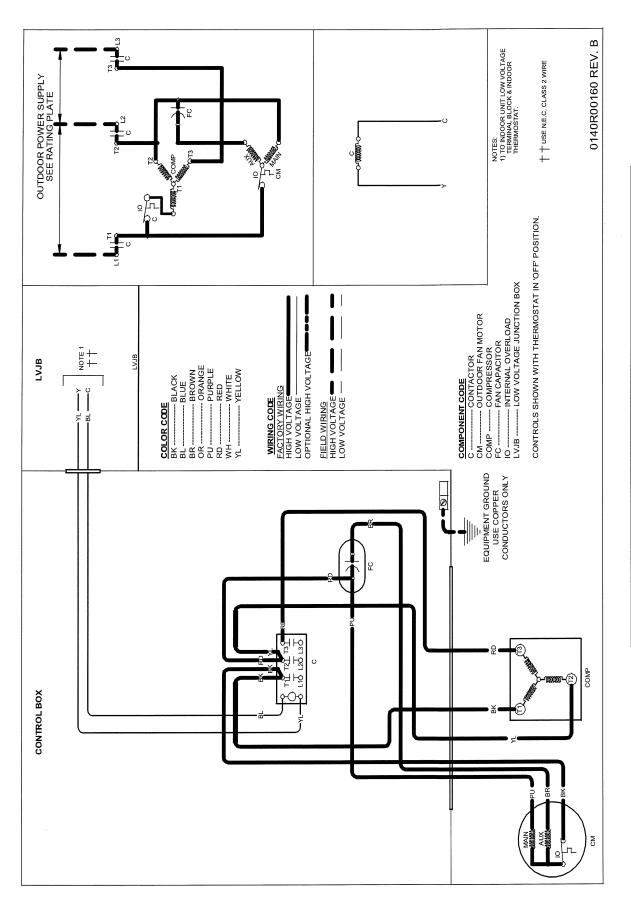
- Always check the S&R plate for electrical data on the unit being installed.
- When matching the outdoor unit to the indoor unit, use the piston supplied with the outdoor unit or that specified on the piston kit chart supplied with the indoor unit.
- EEP Order from Service Dept. Part No. B13707-38 or new Solid State Board B13707-35S. Part No. B13707-38 is not interchangeable with B13707-35S. The Daikin brand gas furnace contains the EEP cooling time delay

² Seasonal Energy Efficiency Ratio; Certified per AHRI 210/240 @ 80°F/ 67°F/ 95°F

³ Energy Efficiency Ratio @ 80°F/ 67°F/ 95°F



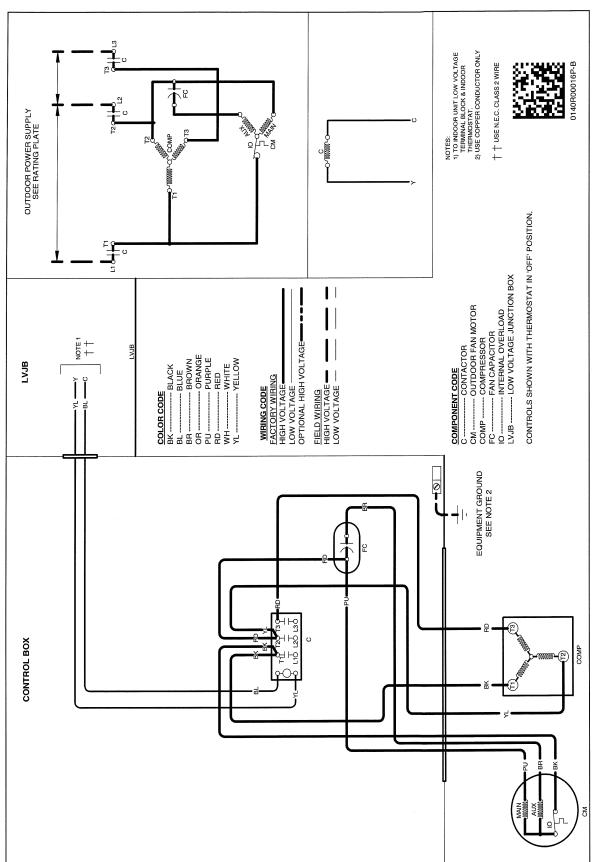
	DIMENSIONS					
Model	w	D	н			
DX13SA0363A*	29"	29"	28¾"			
DX13SA0364A*	29"	29"	28¾"			
DX13SA0483A*	29"	29"	36¼"			
DX13SA0484A*	29"	29"	36¼"			
DX13SA0603A*	35½"	35½"	38¼"			
DX13SA0604A*	35½"	35½"	38¼"			

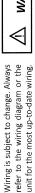




WARNING \triangleleft

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.





WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Model#	DESCRIPTION	DX13SA 0363**	DX13SA 0364**	DX13SA 0483**	DX13SA 0484*	DX13SA 0603**	DX13SA 0604**
ABK-20	Anchor Bracket Kit ^	X	х	х	Х	Х	X
ASC-01	Anti-Short Cycle Kit	Х	х	х	х	Х	X
FSK01A ¹	Freeze Protection Kit ²	X	х	Х	х	Х	X
LSK01A ²	Liquid Line Solenoid Kit	X	х	х	Х	X	х
LAKT01	Low Ambient Kit	×	x	х	Х	Х	Х
0163R00002	Crankcase heater	Х					
0163R00003	Crankcase heater			х		X	
0163R00004	Crankcase Heater				х		Х
0163R00031	Crankcase Heater		х				
OY18-60A	Outdoor Thermostat	X	х	Х	Х	х	Х
TX3N4 ²	TXV Kit	X	х				
TX5N4 ²	TXV Kit			х	х	x	Х

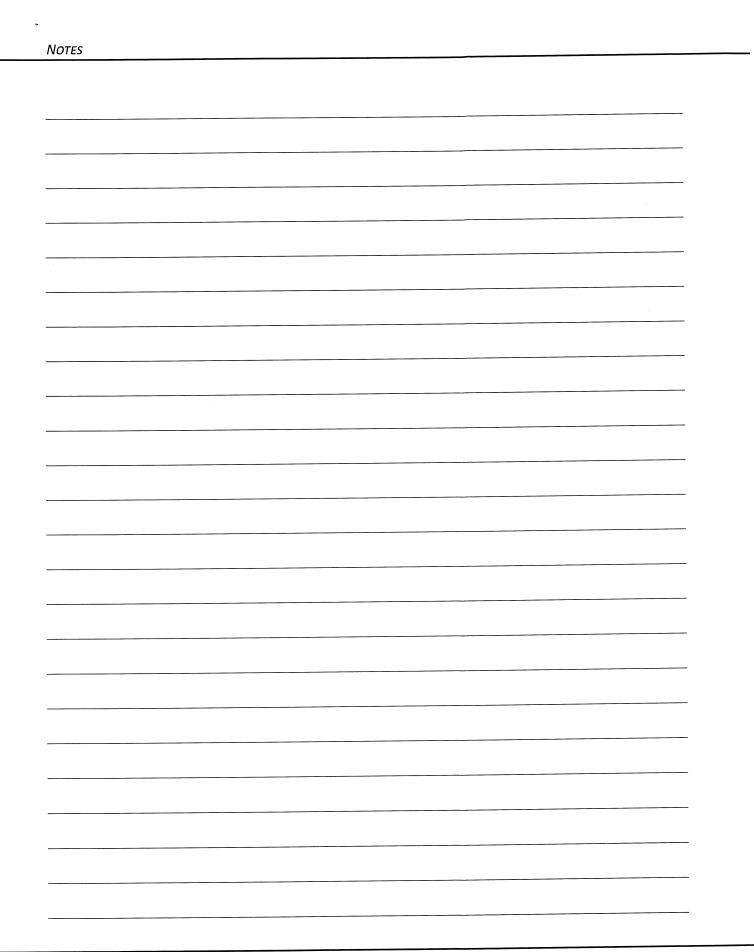
 $^{^{\}Lambda}$ $\,$ Contains 20 brackets; four brackets needed to anchor unit to pad

Installed on indoor coil

Field-installed, non-bleed, expansion valve kit — Condensing units and heat pumps with reciprocating compressors require the use of start-assist components when used in conjunction with an indoor coil using a non-bleed thermal expansion valve refrigerant metering device or liquid line solenoid kit. The TXV should always be sized based on the tonnage of the outdoor unit.

Notes	

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Our continuing commitment to quality products may mean a change in specifications without notice.

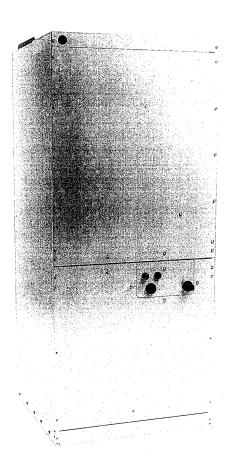
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SS-DX13SC



DAT COMMERCIAL

FOR 7½ & 10-TON SPLIT SYSTEMS



Contents

Nomenclature	.2
Product Specifications	.3
Airflow Data	.4
Heating Kit Data	.6
Dimensions	.7
Wiring Diagrams	.8

Standard Features

- Uplflow or horizontal (left side) installation positions in 7½ and 10-ton cooling only or heat pump applications
- Circuited for use with one (1) 7½-ton or one (1) 10-ton cooling-only or heat pump system.
 Also circuited for use with two (2) 4-ton or two (2) 5-ton cooling-only units
- TXV Control; Units have two (2) thermal expansion valves
- DAT units feature a 2-speed blower motor
- Draw-thru centrifugal blower is belt driven for quiet, efficient operation
- · Copper tube/aluminum fin coils
- Horizontal and vertical condensate pans
- · AHRI Certified; ETL Listed

Cabinet Features

- Heavy-gauge, reinforced, galvanized-steel cabinet
- Fully insulated with fiberglass blanket
- Horizontal and vertical condensate pans
- Built-in filter rack (2" filter included)
- · Entry on top of panel for both low and high voltage
- Removable access panels make servicing of unit faster and easier



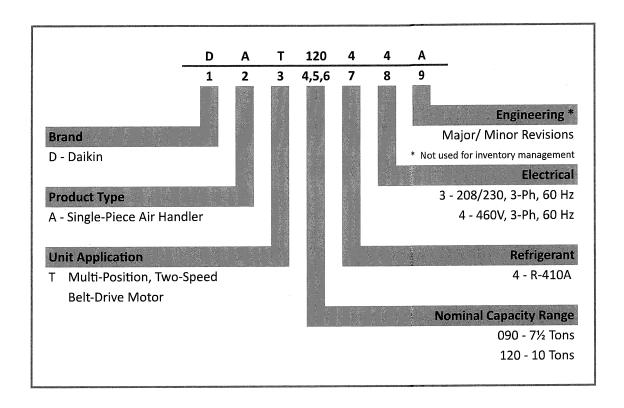








^{*} Complete warranty details available from your local dealer or at www.daikincomfort.com.



	DAT09043**	DAT09044**	DAT12043**	DAT12044**
TOTAL CAPACITIES				
Cooling (BTU/h)	90,000	90,000	120,000	120,000
Heating (kW)	15, 20, 30	15, 20, 30	15, 20, 30	15, 20, 30
CFM	3,000	3,000	4,000	4,000
ELECTRICAL DATA				
Voltage-Hz-Phase	208/240-60-3	460-60-3	208/240-60-3	460-60-3
Voltage Range	187 - 253	414-506	187 - 253	414-506
FLA (Total)	6.0	2.9	6.0	2.9
Minimum Circuit Ampacity	7.5	3.63	7.5	3.63
BLOWER MOTOR				
Туре	Belt Drive	Belt Drive	Belt Drive	Belt Drive
Horse Power	2	2	2	2
Voltage-Hz-Phase	208/240-60-3	460-60-3	208/240-60-3	460-60-3
FLA/ LRA	6.0/47.7	2.9/23.9	6.0/47.7	2.9/23.9
BLOWER & CONTROLS				
Wheel Dia. & Width (Qty.)	11 x 10 (2)	11 × 10 (2)	11 x 10 (2)	11 x 10 (2)
Pulley Pitch Dia.	6.5"	6.5"	6.5"	6.5″
Bore	1"	1"	1"	1"
Motor Pulley Pitch Dia.	1.9 to 2.9	1.9 to 2.9	2.8 to 3.8	2.8 to 3.8
Bore	7 ₈ "	% "	7∕8"	7∕8"
Belt Length & Width	41 x 1⁄2	41 x ½	41 x ½	41 x ½
Nominal Airflow (Ft./Min.)	3,000	3,000	4,000	4,000
Transformer	Standard	Standard	Standard	Standard
Blower Relay	Standard	Standard	Standard	Standard
FILTER, COIL & REFRIGERANT				
Disposable Filter Size / Qty	16"x20"x2"/ 2 20"x20"x2"/ 2	16"x20"x2"/ 2 20"x20"x2"/ 2	16"x20"x2"/ 2 20"x20"x2"/ 2	16"x20"x2"/ 2 20"x20"x2"/ 2
Coil Area (sq. ft.)	10	10	10	10
FPI - Rows	14 - 4	14 - 4	14 - 4	14 - 4
Expansion Valve Qty.	2	2	2	2
Refrigerant	R-410A	R-410A	R-410A	R-410A
Liquid Connection (Qty.)	³⁄s" (2) *	¾" (2) *	¾" (2) *	¾" (2) *
Suction Connection (Qty.)	11/8" (2)	1%" (2)	1%" (2) *	1%" (2) *
Condensate Drain	¾ FPT	¾ FPT	¾ FPT	¾ FPT
SHIP WEIGHT (LBS)	430	430	430	430

^{*} For two refrigerant lines

DAT0904** (HIGH SPEED)

STATIC	MOTOR SHEAVE TURNS OPEN							
Pressure	0	1	2	3	4			
0.1								
0.2					3246			
0.3				3194	2941			
0.4			3393	2871	2561			
0.5			3027	2482	2133			
0.6		3139	2710	2137				
0.7	3276	2757	2217					
0.8	2866	2255						
0.9	2458	1832						

DAT1204** (HIGH SPEED)

STATIC	MOTOR SHEAVE TURNS OPEN							
PRESSURE	0	1	2	3	4	5		
0.1					4472	4134		
0.2					4119	3776		
0.3				4322	3936	3561		
0.4			4406	3955	3683	3304		
0.5		4427	4026	3761	3402	2959		
0.6		4265	3845	3422	3094	2581		
0.7	4347	3899	3618	3100	2722			
0.8	3964	3594	3266	2742	2512			
0.9	3710	3233	2835	2470				

^{*} With dry coil and 2" air filter

NOTES:

- Any adjustment made to the blower should not cause the motor to draw more than the motors rated RLA.
- Applications that exceed the above could require a larger motor.

	HEAT KIT	0514	Supply Voltage				
Model	κW	CFM	208	240	480		
		2,800	14	19	19		
		2,900	14	18	18		
	15	3,000	13	18	18		
		3,100	13	17	17		
		3,200	12	17	17		
	20	2,800	19	25	25		
		2,900	18	24	24		
DAT0904**		3,000	18	24	24		
		3,100	17	23	23		
		3,200	17	22	22		
		2,800	28	38	38		
		2,900	27	37	37		
	30	3,000	27	35	35		
		3,100	26	34	34		
		3,200	25	33	33		

	HEAT KIT		SUPPLY VOLTAGE			
Model	кW	CFM	208	240	480	
		3,800	10	14	14	
		3,900	10	14	14	
	15	4,000	10	13	13	
		4,100	10	13	13	
		4,200	9	13	13	
	20	3,800	14	19	19	
		3,900	14	18	18	
DAT1204**		4,000	13	18	18	
		4,100	13	17	17	
		4,200	13	17	17	
		3,800	21	28	28	
		3,900	20	27	27	
	30	4,000	20	27	27	
		4,100	19	26	26	
		4,200	19	25	25	

^{*} Tables above are calculated with both stages of electric heat engaged (2-stage heat systems). Divide the temperature rise from the table by 2 for 1st stage operation for systems using staged electric heat.

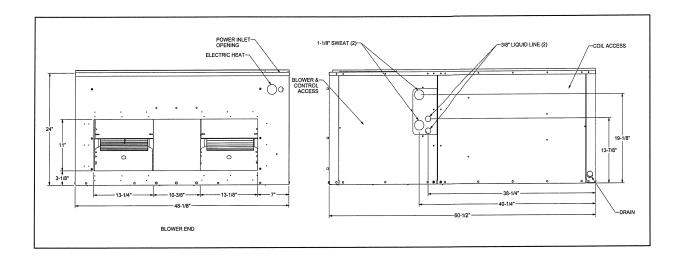
Air Handler	AHKD Model	Nominal kW	ELECTRICAL DATA	Stages	WEIGHT (LBS.)	MCA ¹	MOP ²
	None	N/A	208-230/3/60	N/A	N/A	7.5 / 7.5	15 / 15
	AHKD15-3	15	208-230/3/60	1	56	46.6 / 52.6	40 / 50
	AHKD20-3	20	208-230/3/60	2	59	59.6 / 67.6	60 / 70
DAT0904**	AHKD30-3	30	208-230/3/60	2	60	85.7 / 97.7	90 / 100
and DAT1204**	None	N/A	460/3/60	N/A	N/A	3.6	15
	AHKD15-4	15	460/3/60	1	55	26.2	25
	AHKD20-4	20	460/3/60	2	57	33.7	35
	AHKD30-4	30	460/3/60	2	58	48.7	50

¹ Minimum Circuit Ampacity

NOTES:

- These air handlers do not have factory-installed electric heat. The above-listed kits are the ONLY heater kits that can be used with this commercial series. They are available for purchase as field-installed accessories.
- The electrical characteristics of the air handler, electric heater kits, and building power supply must be compatible.

² Maximum Overcurrent Protection

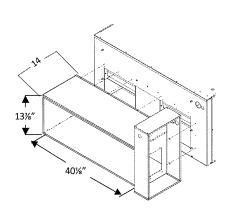


DUCT CONNECTION SIZING WITHOUT ELECTRIC HEATERS

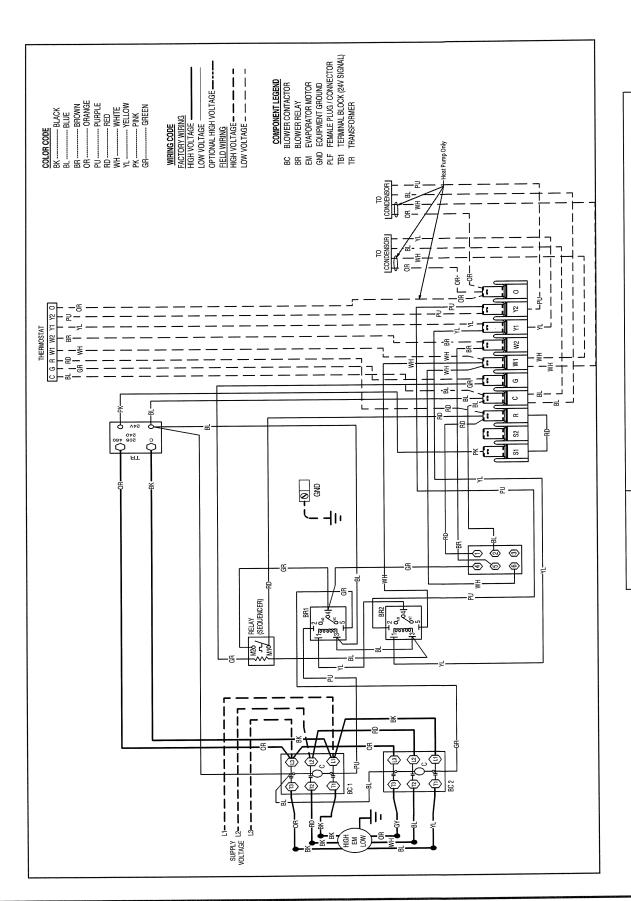
MINIMUM SUPPLY AND RETURN DUCT DIMENSIONS

DIMENSIONAL DATA FOR ELECTRIC HEATER KITS

- 15, 20, & 30 kW Heater Kits
- Supply opening is 13%" x 40%"



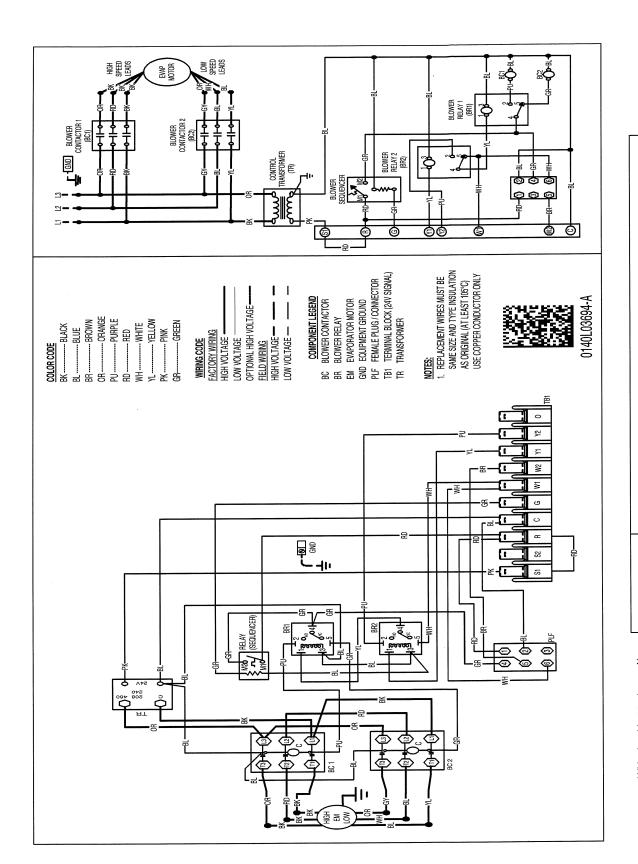
SUPPLY [
А
13%"
TAX

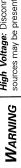


High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

MARNING MARNING

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.





High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

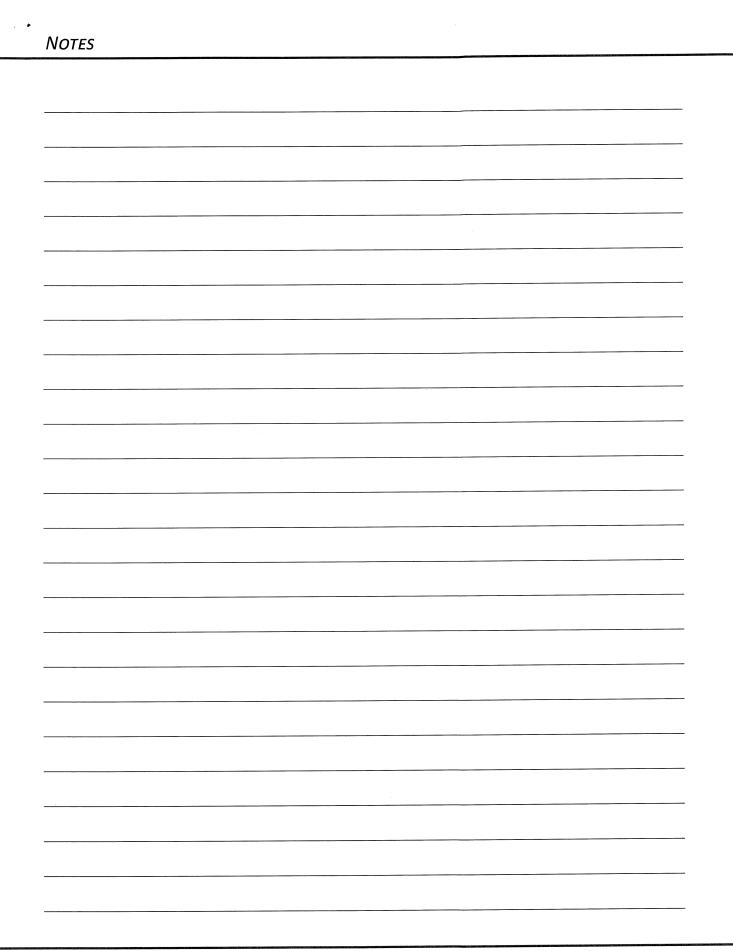
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Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

	e.

NOTES

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Our continuing commitment to quality products may mean a change in specifications without notice.

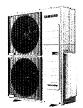
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Unit Designation

Job Name	
Purchaser	
Submitted to	

Location		
Engineer		
Reference	Approval 🔲	Construction
Schedule #		

	US Code		JXH48J5B
Model	Model Number		AJ048BXJ5CH/AA
	Capacity	Cooling (Btu/h)	6,500 / 47,000 / 48,500
	(min. / standard / max.		7,000 / 48,500 / 53,600
	SEER (Ducted / Mixed	I / Non-ducted) ¹	16.0 / 17.85 / 19.7
	EER (Ducted / Mixed /		8.6 / 9.55 / 10.5
Performance	HSPF (Ducted / Mixed		9.2 / 9.75 / 10.3
	SEER2 (Ducted / Mixe	ed / Non-ducted) ²	16.5 / 18.75 / 21.0
	EER2 (Ducted / Mixed	I / Non-ducted) ²	8.6 / 9.55 / 10.5
	HSPF2 (Ducted / Mixe	ed / Non-ducted) ²	8.3 / 8.65 / 9.0
	Voltage	(ø/V/Hz)	1 / 208-230 / 60
		Cooling (A)	21.4
Power	Nominal Current ³	Heating (A)	18.1
	Max, Breaker	Amps	40
	Minimum Circuit Ampa	city (A)	37.0
	WXHXD	Inches	37 X 47 5/8 X 13
Dimensions	Weight	lbs.	192.9
	Cooling (Max.)	dB (A)	52
Noise Level	Heating (Max.)	dB (A)	55
0 "			14 ~ 114.8°F (-10 ~ 46.0°C)
Operating Temperatures	Cooling		5 ~75°F (-15 ~ 24.0°C)
remperatures	Heating		
	High Side	1/4" X 5	
	Low Side (suction)	3/8" X 2 + 1/2" X 3	
Pipe	Maximum Individual Li	82 ft	
Connections	Maximum Line Set Ler	230 ft	
	Maximum Vertical	Outdoor to Indoor	49 ft
	Separation Highest to Lowest Indoor		25 ft
	Included Pipe Adapter		3 - 1/2" X 3/8", 2 - 1/2" X 5/8
	Motor		BLDC With Propeller Fan (2
Condenser Fan	Outrut	Watts / FLA	125 x 2 / 1.28 X 2
	Output	CFM	3,885
	Туре		Twin BLDC Rotary Inverter
Compressor	RLA	Amps	25.6
Heat Exchanger	Type		Aluminum Fin - Copper Tub
Tout Exertanger			
	Туре		R410A
	Control Method		Electronic Expansion Valve
Refrigerant	Factory Charge	-	134.44 oz
	Charged for	164 ft 0,11 oz/ft over 164 ft	
	Additional Refrigerant		0.11 02/It over 164 It
	Wall Bracket		CKN-250
Accessories	Wind Baffle	Front	WBF-1M2
	VVIIIU Dame	Back	WBB-2M-B



Page 1 of 5

General Information

- · Auto or manual addressing of indoor units
- The outdoor unit shall supply power individually to the indoor units via 14/3 AWG power wire
- · Auto-restart after power loss
- · Available maximum current setting option to reduce operating current
- System energy consumption can be viewed using Samsung SmartThings mobile app (not revenue grade, for reference only)
- Soft-start to reduce current demand during compressor start
- Optional snow accumulation prevention setting to prevent snow drifting against idle outdoor units

Construction

 The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

Heat Exchanger

 The heat exchanger shall be mechanically bonded fin to copper tube

Controls

- Control signal shall be a DDC type signal
- Interconnecting control wire between outdoor and indoor units shall be 16/2 AWG
- The system shall integrate with Samsung Controls Solution without the use of an interface module

Refrigerant System

- The refrigerant shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, Twin Rotary BLDC
- Refrigerant flow shall be controlled by 5 separate electronic expansion valves at outdoor unit

Compatibility

AR**TSFABWKNCV (RNS**ABT): 7,000 – 24,000 Btu/h models AR**BSFCMWKNCV (RNS**CMB): 7,000 - 24,000 Btu/h models AR**TSFYBWKNCV (RNS**YBT): 7,000 – 24,000 Btu/h models AC0**BNNDCH/AA (CNH**NDB): 9,000 - 18,000 Btu/h models AC0**BN1DCH/AA (CNH**1DB): 9,000 - 12,000 Btu/h models AC0**BNJDCH/AA (CNH**JDB): 9,000 – 18,000 Btu/h models AC0**BNLDCH/AA (CNH**LDB): 9,000 - 18,000 Btu/h models AC0**BNZDCH/AA (CNH**ZDB): 12,000 - 24,000 Btu/h models AJ0**BNHDCH/AA (JNH**HDB): 9,000 - 18,000 Btu/h models

Refer to the engineering Technical Data Book for allowed indoor unit combinations

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about updated energy metrics.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.





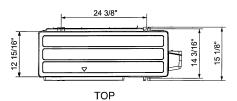
¹Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.

²Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

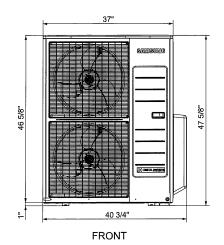
³Rated current based on highest combination ratio of non-ducted indoor units.

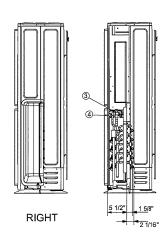
Samsung FJM, 5 Port Condensing Unit

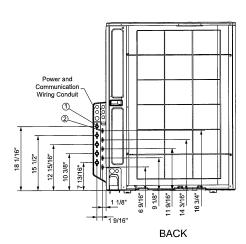
Dimensional drawing

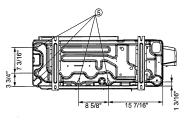












воттом

No.	Name	Description
1	Refrigerant suction pipes	ø3/8" x 2, ø1/2" x 3
2	Refrigerant liquid pipes	ø1/4" x 5
3	Service Valve (suction)	5/8"
4	Service Valve (liquid)	3/8"
5	Drain holes	Connection with provided drain fitting

SAMSUNG

SUBMITTAL AJ048BXJ5CH/AA (JXH48J5B)

Samsung FJM, 5 Port Condensing Unit

Indoor unit connection options

Indoor Unit Connection Options

ſ	Indoor Nominal					Duc	Connected	
Unit	c	Capacity (K Btu/h) MPAH Compatibility			Capacity			
Qty.	Α	В	C	D	E	Duct S	MPAH	(K Btu/h)
	7	7				Duci G	IVII /ALL	14
	7	9				•		16
	7	12				•	•	19
	7	15				•		22
	7	18		-		•	•	25
	7	24 9					•	31 18
	9	12				•	•	21
	-9	15					-	24
	9	18				•	•	27
2	9	24				•	•	33
	12	12				•	•	24
	12	15				•	•	27
	12	18				•	•	30
	12	24				•	•	36 30
	15 15	15 18				•	•	33
	15	24					•	39
	18	18					•	36
	18	24		_		•	•	42
	24	24					•	48
	7	7	7					21
	7	7	9			•		23
	7	7	12			•	•	26
	7_	7	15			•		29
	7	7	18			•	•	32 38
	7	7	24 9				•	25
	7	9	12				•	28
	7	9	15					31
	 7	9	18			•	•	34
	7	9	24			•	•	40
	7	12	12			•	•	31
	7	12	15			•	•	34
		12	18			•	•	37
	7	12	24			•	•	43
	7	15 15	15			•	•	37 40
	7	15	18 24			•		46
	7	18	18				•	43
	7	18	24					49
	7	24	24					55
	9	9	9			•		27
	9	9	12			•	•	30
	9	9	15			•		33
	9	9	18			•	•	36
3	9	9	24			•	•	42 33
	9	12 12	12 15			•		33
	9	12	18					39
	9	12	24			•	•	45
	9	15	15			•		39
	9	15	18			•	•	42
	9	15	24			•	•	48
	9	18	18			•	•	45
	9_	18	24					51
	9	24	24					57
	12	12	12			•	•	36
	12	12	15			•	•	39 42
	12 12	12 12	18 24			•	•	42
	12	15	15				•	42
	12	15	18				•	45
	12	15	24					51
	12	18	18			•		48
	12	18	24					54
	15	15	15			•		45
	15	15	18			•	•	48
	15	15	24					54
	15	18	18					51
	15	18	24					57
	18	18	18	L	L			54 AA) OR 1 X Duct

Unit Qty.		Indoor Nominal Duct S / Capacity (K Btu/h) MPAH Compatibility*		Connected Capacity (K Btu/h)				
	Α	В	С	D	Е	Duct S	MPAH	(K Btu/h)
	7	7	7	7				28
	7	7	7	9		•		30
	7	7	7	12		•	•	33
	7	7	7	15		•		36
	7	7	7	18		•	•	39
	7	7	7	24			•	45
	7	7	9	9		•		32
	7	7	9	12		•	•	35
	7	7	9	15		•		38
	7	7	9	18		•	•	41
	7	7	9	24		•	•	47
	7	7	12	12			•	38
	7	7	12	15			•	41
	7	7	12	18			•	44
	7	7	12	24				50
	7	7	15	15				44
	7	7	15	18				47
				24				53
	7	7	15 18				-	50
	7			18		-		56
	7	7	_18_	24				34
	7	9	9_	9		•		37
	7	9	9	12		•	•	40
	7	9	9	15		•		
	7	9	9_	18		•	•	43
	7	9	9	24				49
	7	9	12	12		•	•	40
	7	9	12	15		•	•	43
	7	9	12	18		•	•	46
	7	9	12	24				52
	7	9	15	15		•		46
	7	9	15	18				49
	7	9	15	24				55
	7	9	18	18				52
	7	12	12	12		•	•	43
	7	12	12	15		•	•	46
4	7	12	12	18				49
	7	12	12	24				55
	7	12	15	15				49
	7	12	15	18				52
	7	12	18	18				55
	7	15	15	15		_		52
	7	15	15	18				55
								36
	9	9	9	9				39
	9	9	9	12		•	•	
	9	9	9	15		•		42
	9	9	9	18		•	•	45
	9	9	9	24				51
	9	9	12	12		•	•	42
	9	9	12	15		•	•	45
	9	9	12	18		•	•	48
	9	9	12	24				54
	9	9	15	15		•		48
	9	9	15	18				51
	9	9	15	24				57
	9	9	18	18	-			54
	9	12	12	12	-	•	•	45
	9	12	12	15	_			48
	9	12	12	18	-	<u> </u>		51
			12	24		-		57
	9	12						51
	9	12	15	15	-			
	9	12	15	18				54
	9	12	18	18				57
	9	15	15	15				54
	9	15	15	18				57
	12	12	12	12		•	•	48
	12	12	12	15				51
	12	12	12	18				54
	12	12	15	15				54
	12	12	15	18				57
	12	15	15	15	-			57
	14	IJ	10	10	L			- 51

^{*} Combatable combination that includes 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit.

Notes

Noley 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit can be connected to a single FJM outdoor unit.
 Applies to outdoor units manufactured after 4/30/2022.
 Refer to supporting technical data book (TDB) for indoor unit compatibility available at www.SamsungHVAC.com.

SAMSUNG

SUBMITTAL AJ048BXJ5CH/AA (JXH48J5B)

Samsung FJM, 5 Port Condensing Unit

Indoor unit connection options

Indoor Unit Connection Options

Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*		Connected Capacity	
٠.,.	Α	В	С	D	Е	Duct S	MPAH	(K Btu/h)	
	7	7	7	7	7			35	
	7	7	7	7	9			37	
	7	7	7	7	12			40	
	7	7	7	7	15			43	
	7	7	7	7	18			46	
	7	7	7	7	24			52	
	7	7	7	9	9			39	
	7	7	7	9	12			42	
	7	7	7	9	15			45	
	7	7	7	9	18			48	
	7	7	7	9	24			54	
	7	7	7	12	12			45	
	7	7	7	12	15			48	
	7	7	7	12	18			51	
	7	7	7	12	24			57	
	7	7	7	15	15			51	
	7	7	7	15	18			54	
	7	7	7	18	18			57	
	7	7	9	9	9			41	
	7	7	9	9	12			44	
	7	7	9	9	15			47	
	7	7	9	9	18			50	
	7	7	9	9	24			56	
	7	7	9	12	12			47	
	7	7	9	12	15			50	
	7	7	9	12	18			53	
5	7	7	9	15	15			53	
5	7	7	9	15	18			56	
	7	7	12	12	12			50	
	7	7	12	12	15			53	
	7	7	12	12	18			56	
	7	7	12	15	15			56	
	7	9	9	9	9			43	
	7	9	9	9	12			46	
	7	9	9	9	15			49	
	7	9	9	9	18			52	
	7	9	9	12	12			49	
	7	9	9	12	15			52	
	7	9	9	12	18			55	
	7	9	9	15	15			55	
	7	9	12	12	12			52	
	7	9	12	12	15			55	
	7	12	12	12	12			55	
	9	9	9	9	9			45	
	9	9	9	9	12			48	
	9	9	9	9	15			51	
	9	9	9	9	18			54	
	9	9	9	12	12			51	
	9	9	9	12	15			54	
	9	9	9	12	18			57	
	9	9	9	15	15			57	
	9	9	12	12	12			54	
	9	9	12	12	15			57	
	9	12	12	12	12			57	

^{*} Combatable combination that includes 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit.

Notes

^{1.} Only 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit can be connected to a single FJM outdoor unit.

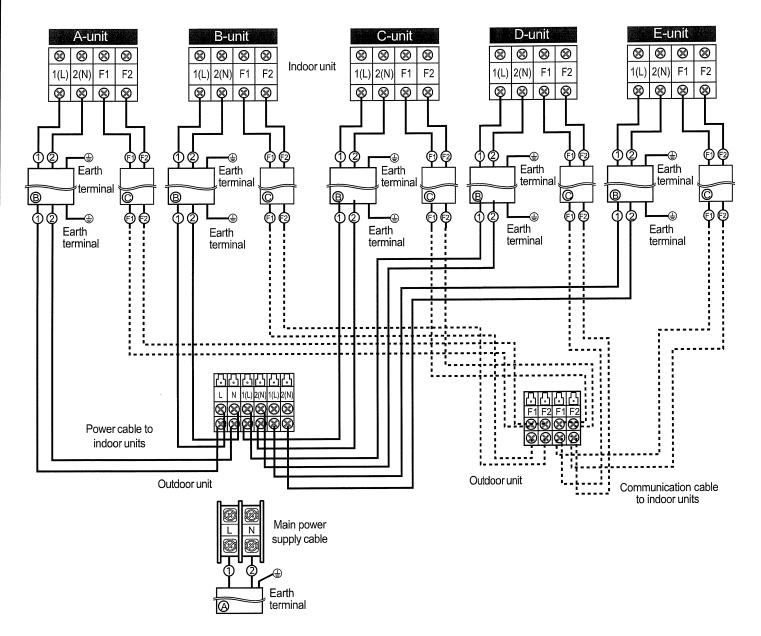
^{2.} Applies to outdoor units manufactured after 4/30/2022.

^{3.} Refer to supporting technical data book (TDB) for indoor unit compatibility available at www.SamsungHVAC.com.

Samsung FJM, 5 Port Condensing Unit

Wiring example

Basic Wire Connection Diagram



This simple wiring diagram is for reference only. Please refer to installation manuals for full details and requirements.

SUBMITTAL AR12TSFABWKNCV (RNS12ABT) For Multi-Zone Systems Page 1 of 2 Samsung "Wind-Free ™2.0", wall mounted evaporator

ADMVINCA	(KNO IZADI) FOI WILLEZONE	Systems	
m A C 1 ====	TMO OUII		40.0	

Job Name	Location
Purchaser	Engineer
Submitted to	Reference Approval Construction
Unit Designation	Schedule #

Specifications

		Specifications			
Model	US Code	·	RNS12ABT		
Model	Model Number		AR12TSFABWKNCV		
Performance		Cooling (Btu/h)	12,000		
	Nominal Capacity	Heating (Btu/h)	12,000		
	Voltage	Ø/V/Hz	1 / 208-230 / 60		
Power	Operating Current	Cooling (A)	0.4		
	(Max.)	Heating (A)	0.4		
	Туре		BLDC motor with cross-flow fan		
Evaporator Fan	Consumption	Watts	27 X 1		
	FLA	Amps	0.12		
A:	Air Volume	Cooling (CFM)	250 / 301 / 340 / 378		
Airflow	(L/M/H/Turbo)	Heating (CFM)	282 / 335 / 374 / 413		
	Туре		R410A		
Refrigerant	Control Method		Electronic Expansion Valve (at outdoor unit)		
Di O II	Indoor & Outdoor	High side (flare)	1/4"		
Pipe Connections		Low side (flare)	3/8"		
Dimensions	W X H X D (in.)	Indoor Unit	35 X 11 3/4 X 8 7/16		
	Weight (lbs.)	Indoor Unit	23.4		
	Condensate Connect	ion	11/16" OD		
Sound Pressure Level	Low / High	dB(A)	23 / 39		
Accessories	Wired	Advanced	MWR-WG00UN		
	Controllers 1	Simple Touch	MWR-SH11UN		
	Wired Controller Sub-	-PCB	MIM-A00UN		
	24VAC Thermostat A	dapter 1	MIM-A60UN		
	Condensate	Aspen Mini Orange	ASP-MO-UNIV 110-250		
	Pump	Blue Diamond	BD-BLUE-230		
	External Temperature	Sensor	MRW-TA		
	External Contact Con	trol Interface Module 2	MIM-B14		
•	Line sets - insulated a	and flared,	25' - ILS2506		
	interconnect cables included		50' - ILS5006		
Safety Certifications			ETL (UL 1995)		

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

- Sub-PCB model MIM-A00UN is required when connecting optional wired controllers or MIM-A60UN 24VAC thermostat adapter.
- ² When applying MIM-B14 external contact control interface module, MIM-A00UN wired controller sub-PCB is required.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.



General Information

- •The indoor unit shall feature "Wind-Free™" mode*. In cooling mode, as room temperature nears set temperature, the unit will close its louver and will disperse air into the space through thousands of micro-holes on the front of the indoor unit preventing cold air drafts on occupants.

 •The indoor unit shall have Wi-Fi capability as standard
- •The indoor unit shall be powerd by the outdoor unit

Construction

- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The indoor unit shall have easy-access to wire, pipe, and drain connections via access panel on the bottom of the unit for simple installation and service

Heat Exchanger

• The heat exchangers shall be mechanically bonded fin to copper tube

Indoor Fan

- The indoor fan shall be a single, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

- The system shall have a built in Wi-Fi adapter as standard to allow control
- and monitoring using the Samsung SmartThings app (Android, iOS) • Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller.
- The indoor unit shall have a simple connection for overflow detection.
- devices or any other normally closed contact for simple unit shutdown
- · The indoor unit shall ship with a wireless controller, holder, and batteries
- · Wired controller options available
- Interconnect control wire between outdoor and indoor unit shall be 16AWG X 2

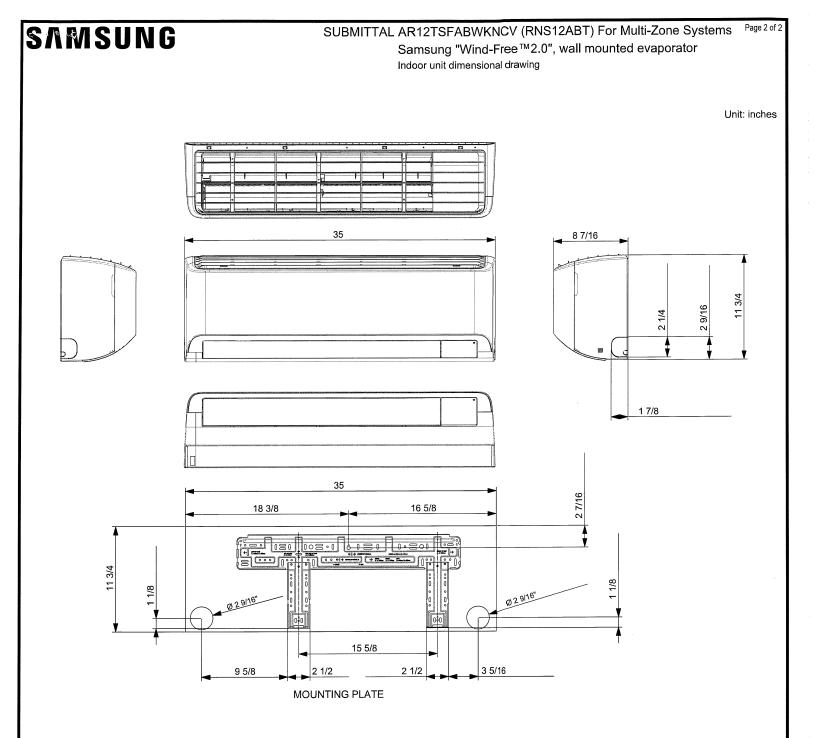
Convenience

- System energy consumption can be viewed using the Samsung SmartThings
- mobile app (not revenue grade, for reference only)
- Auto Clean Function
- •7-segment digital display on front of unit to display temperature and unit status
- · Auto changeover ·Good sleep mode
- Quiet mode
- Drv mode
- Simple ON/OFF time function Using the wireless controller specify the ON and/or OFF times
- · Electro-static, washable, main filter as standard accessible from the top of unit
- Filter cleaning reminder

Compatibility

Will only operate with Samsung outdoor unit model numbers: AR12TSFABWKXCV (RXS12ABT), AJ020TXJ2CH/AA (JXH20J2T), AJ024TXJ3CH/AA (JXH24J3T), AJ036TXJ4CH/AA (JXH36J4T), AJ048TXJ5CH/AA (JXH48J5T), AJ020TXS3CH/AA (JXH20S3T), AJ024TXS4CH/AA (JXH24S4T), AJ030TXS4CH/AA (JXH30S4T), AJ036TXS4CH/AA (JXH36S4T)





SVWS	UNG		SI				CV (RNS09ABT) For Multi-Zone Systems Page 1 o ee™2.0", wall mounted evaporator		
Job Name				Loc	Location				
Purchaser					gineer				
Submitted to			-		ference	一	Approval Construction		
					nedule#		/ (pprovar		
Unit Designa	ation				iedule #				
		Specifications							
US Code			RNS09ABT				6.1.49K8		
Model	Model Number		AR09TSFABWKNCV						
Performance		Cooling (Btu/h)		9,000			The state of the s		
	Nominal Capacity	Heating (Btu/h)	11,000			:			
	Voltage	Ø / V / Hz	1 / 208-230 / 60						
Power	Operating Current	Cooling (A)	0.4						
	(Max.) Heating (A)		0.4				ormation unit shall feature "Wind-Free™" mode*. In cooling mode, as room		
	Туре		BLDC motor with cross-flow fan		in tem	peratur	e nears set temperature, the unit will close its louver and will r into the space through thousands of micro-holes on the front of		
Evaporator Fan	Consumption	umption Watts		27 X 1		indoor	unit preventing cold air drafts on occupants.		
	FLA	Amps	0.12				unit shall have Wi-Fi capability as standard unit shall be powerd by the outdoor unit		
	Air Volume	Cooling (CFM)	258 / 298 / 337 / 364		Con	struction	on.		
Airflow	(L/M/H/Turbo)	Heating (CFM)	289 / 329 / 369 / 396			oor unit	chassis shall be UL94 V0 with a galvanized steel mounting		
	Туре		R410A		•The	cket e indoor	unit shall have easy-access to wire, pipe, and drain connections		
Refrigerant	Control Method		Electronic Expansion Valve (at outdoor unit)		-	access t Excha	panel on the bottom of the unit for simple installation and service		
		High side (flare)	1/4"				exchangers shall be mechanically bonded fin to copper tube		
Pipe Connections	Indoor & Outdoor	Low side (flare)	3/8"		Indo	or Fan			
Dimensions	WXHXD (in.)	Indoor Unit	35 X 11 3/4 X 8 7/16		• Thr	ree fan s	fan shall be a single, antibacterial cross-flow type speed settings and auto setting		
	Weight (lbs.)	Indoor Unit	23.4		• Aut	tomatic vers	(motorized) vertical swing (up/down) and horizontal swing (left/right)		
	Condensate Connection		11/16" OD						
Sound Pressure Level	Low / High	dB(A)	23 / 38		•The	d monite	n shall have a built in Wi-Fi adapter as standard to allow control oring using the Samsung SmartThings app (Android, iOS)		
Accessories	Wired	Advanced		MWR-WG00UN	• Dua	al set te	emperature support when connected to MWR-WG00UN Wired Controller.		
	Controllers ¹	Simple Touch		MWR-SH11UN	• The	e indooi	r unit shall have a simple connection for overflow detection		
	Wired Controller Sub-PCB		MIM-A00UN		dev • The	/ices or e indoo	any other normally closed contact for simple unit shutdown r unit shall ship with a wireless controller, holder, and batteries		
	24VAC Thermostat Adapter 1		<u> </u>	MIM-A60UN		Wired controller options available			
	Condensate Pump	Aspen Mini Orange	<u> </u>	ASP-MO-UNIV 110-2	· Inte	erconne	ect control wire between outdoor and indoor unit shall be 16AWG X		
	. Blue Blamona		BD-BLUE-230		Con	venien	ce		
	External Temperature Sensor External Contact Control Interface Module ²			MRW-TA MIM-B14		System energy consumption can be viewed using the Samsung SmartThings mobile app (not revenue grade, for reference only)			
	LACINAL CONTACT COL	ILLOI ILLECTIONE INFOUNDE		, D : 1	1 1110	חווכ מטו	(not revenue grade, for folerenee emy)		

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

Line sets - insulated and flared,

interconnect cables included

- ¹ Sub-PCB model MIM-A00UN is required when connecting optional wired controllers or MIM-A60UN 24VAC thermostat
- ² When applying MIM-B14 external contact control interface module, MIM-A00UN wired controller sub-PCB is required.

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- mobile app (not revenue grade, for reference only) Auto Clean Function
- •7-segment digital display on front of unit to display temperature and unit status
- Auto changeover Good sleep mode
- Quiet mode
- Dry mode
- •Simple ON/OFF time function Using the wireless controller specify the ON and/or OFF times
- Electro-static, washable, main filter as standard accessible from the top of unit
- Filter cleaning reminder

Compatibility

Will only operate with Samsung outdoor unit model numbers: AR09TSFABWKXCV (RXS09ABT), AJ020TXJ2CH/AA (JXH20J2T), AJ024TXJ3CH/AA (JXH24J3T), AJ036TXJ4CH/AA (JXH36J4T), AJ048TXJ5CH/AA (JXH48J5T), AJ020TXS3CH/AA (JXH20S3T), AJ024TXS4CH/AA (JXH24S4T), AJ030TXS4CH/AA (JXH30S4T), AJ036TXS4CH/AA (JXH36S4T)

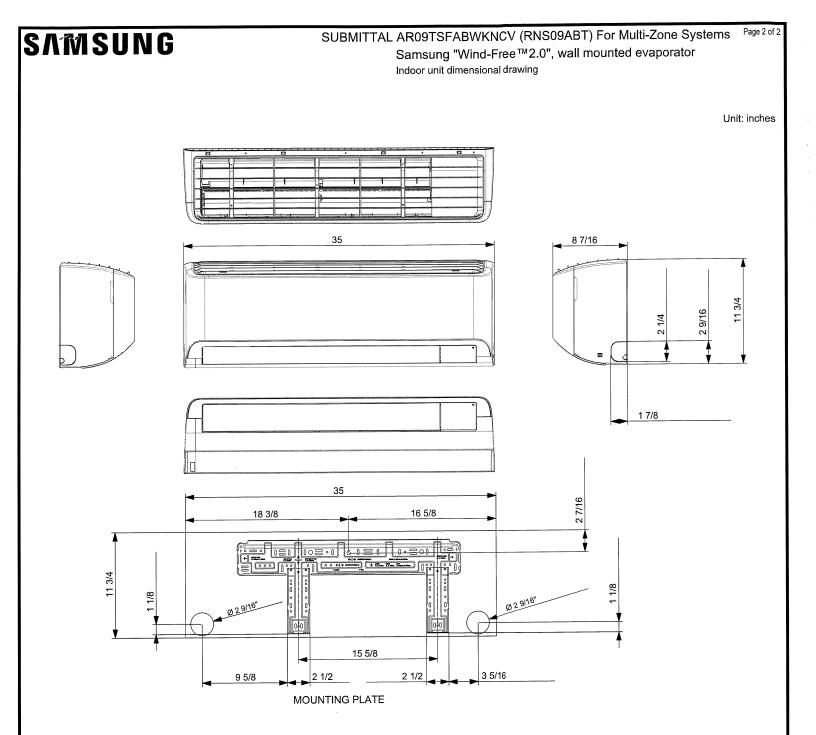


Safety Certifications

25' - ILS2506

50' - ILS5006

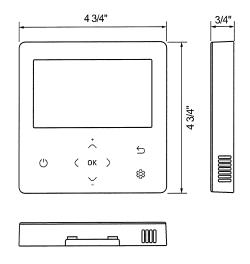
ETL (UL 1995)



SAMSUNG SUBMITTAL MWR-WG00UN Samsung Advanced Wired Remote Controller Job Name Location Purchaser Engineer Approval [Construction | Submitted to Reference [Unit Designation Schedule # SAMSUNG **Features** Easy indoor unit control 1 Indoor | Vent ON Air handler operation ON/OFF · Air handler operation mode, set temperature, air flow direction, fan speed • Discharge air temperature setting (with supported indoor unit models) 70.0° 75_{.0°} • Filter replacement alarm display and reset • Single indoor unit control or multiple unit control (maximum 16 units) Time synchronization with DMS2.5 gateways • Dual Set Temperature (indoor unit firmware upgrade may be required 2) Wind-Free · Advanced HP auto changeover control and configuration (indoor unit firmware upgrade may be required 2) Quiet and sleep modes \subseteq • Error display (up to 10 error codes with descriptions) OK **(** Energy saving operation 1 Upper/lower temperature restriction setting · Occupied/unoccupied settings Setback function · Energy saving operation mode Specifications* · Energy consumption monitoring and daily, weekly, monthly, and yearly energy Compatible with Samsung DVM S Systems (AM********AA, consumption trending (for supported systems) MCM-D211UN), and DVM Chiller FCU Kits (MIM-F00N), Maximum current control for DVM S 3Ø outdoor units (AM****XV****AA), and CAC single zone wall-mounted systems (AR**T****WKNCV, (AC0**BXADCH/AA) outdoor units. AR**B****WKNCV), multi-zone systems (AJ0**TN*DCH/AA, AJ0**BN*DCH/AA), and single zone cassette, wall-mounted, Weekly operating schedule setting and ducted systems (AC0***N****/AA) · Weekly operating schedule · Able to set desired A/C operation mode, setting temperature and fan speed to operate based on weekly schedules · Can connect and control up to 16 indoor units on a single · Able to apply schedule exception day system or across multiple systems • 2 Conductor connection Other features 1 · Color display screen

- · Different button permission levels
- · Supports multiple languages (English, Spanish, French, Portuguese)
- Partial button lock options (operation on/off, heat mode, cool mode, fan mode, dry mode, auto mode, set temperature, fan speed, scheduling, Wind-Free, Long-wind, quiet mode, and sleep mode buttons can be locked individually).
- · Daylight savings clock advance option
- Temperature limit setting option
- · Real-time clock function
- Built-in IR receiver for indoor unit control using a wireless controller and integral room temperature sensor
- Indoor unit operation state display
- · Indoor unit service mode support
- · Micro SD card slot for simple firmware updating
- · Independent louver control for 4-Way and Mini 4-Way cassette units
- Airflow direction control for 360 Cassette indoor units. DVM S 360 Cassette units manufactured before 7/1/2016 will require a firmware update to use MWR-WG00UN. Contact Samsung HVAC technical support to obtain the firmware upgrade files. Firmware updating can be done using MIM-C02N communication converter/service tool.
- · Adjustable heating temperature compensation values
- Wind-Free™ Control (applies to supported WindFree™ 1-Way, 4-Way, Mini 4-Way, and Wall-mounted indoor units).
- MDS (Motion Detection Sensor) Indirect/ Direct Control (applies to cassette units with optional MDS accessory (sold separately).
- Long Reach Function (for applicable indoor unit models)
- Automatic air volume enable and status viewing (for Duct S models AM0**MNMDCH/AA, AM0**MNHDCH/AA, AM0**RNMDCH/AA, and AC0***NHDCH/AA).
- ¹ Some features may not be available depending on the model of connected air handler(s)
- ² Firmware upgrade may be required for certain features. Refer to supporting technical bulletins at www.SamsungHVAC.com/downloads bulletins at www.SamsungHVAC.com/downloads

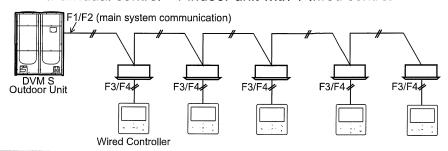
- DC 12V power supplied by indoor unit (consumption: 2W)
- PLC (power line communication) is done on F3/F4 terminals.
- Can sense temperature via internal sensor, temperature sensor inside indoor unit, or use the average temperature between controller and air handler temperature sensors



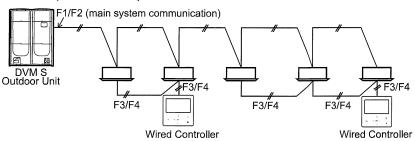
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Samsung Standard Wired Controller Common Controller Configurations/Options

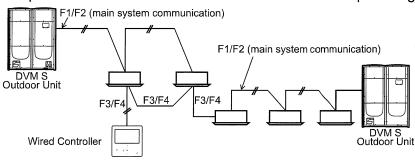
Individual control - 1 indoor unit with 1 wired control



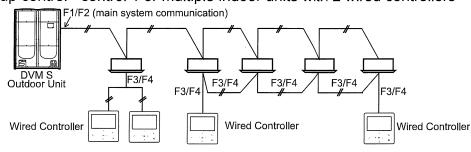
Group control - up to 16 indoor units on 1 wired controller



Group control - up to 16 indoor units on 1 wired controller on multiple refrigerant systems



Group control - control 1 or multiple indoor units with 2 wired controllers



Group control - up to 16 indoor units on multiple refrigerant systems with 2 wired controllers

