Islandaire
The perfect fit.™

EZ Series 42

42”W x 16”H PTAC/PTHP

Perfect fit for Replacing Existing 42”X16” Units and for New Construction Projects

AHRI CERTIFIED®
www.ahridirectory.org
Packaged Terminal AC
AHRI Standard 310/380

R410A
ENVIRONMENTALLY SOUND REFRIGERANT

c ETL US LISTED
Intertek

Engineering Manual

MANUFACTURER OF QUALITY AIR CONDITIONING AND HEATING PRODUCTS

6140207 Rev. 101817

Table of Contents

Islandaire reserves the right to make changes in design and construction at any time without notice.

Introduction

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 East Setauket, 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 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, comfort-controlled, 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 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.

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

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 75 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 75 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 EZ42 units provides 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.

Seacoast Construction

Application of air conditioning equipment in a corrosive environment requires special consideration. The corrosive nature of salt water vapor, chlorine and acid vapor, demands a unit that can withstand these environments. Any metal portion that is exposed to a corrosive vapor must be specially treated.

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

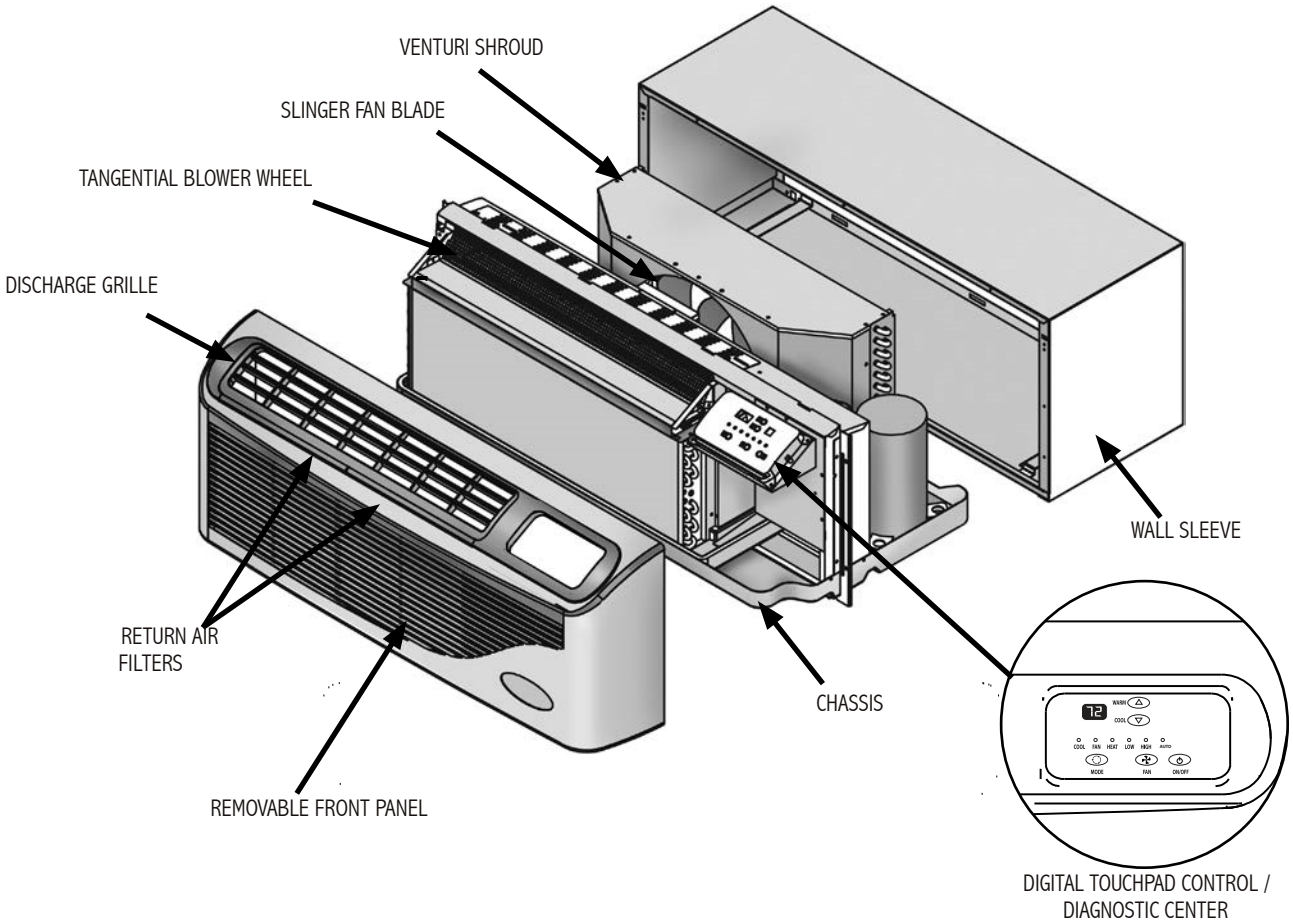
- **Wall Sleeve –** The entire wall sleeve is constructed of 18-gauge steel. Treated inside and outside with a baked-on based powder coat paint to protect it from the corrosive effects of salt spray.
- **Base Pan –** Base pan has a corrosion resistant coating to protect it from the elements.
- **Condenser Coil –** Protective coating applied to the coil to prevent corrosion and weathering.
- **Condenser Fan Blade –** Constructed of strong engineering plastic that has excellent flame resistance and dimensional stability over a wide range of service temperatures.
- **Condenser Fan Motor –** Specially coated by the manufacturer.
- **Compressor –** Protective coating applied by the manufacturer on the exterior to enhance equipment life and performance.
- **Outdoor Louver –** Made of aluminum, etched and anodized for maximum corrosion protection. Available in stamped or architectural styles. Can be painted in a wide choice of colors.

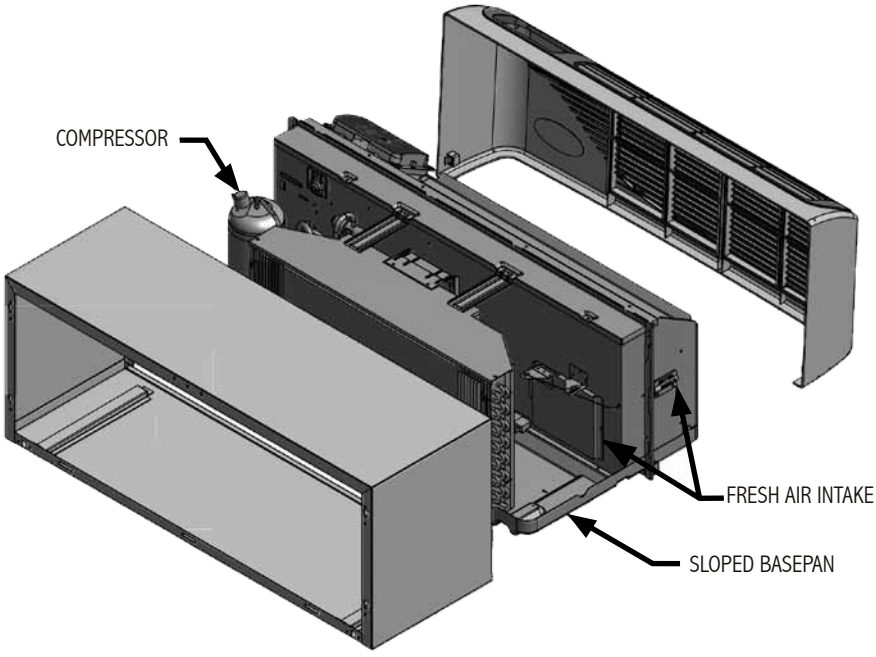
Standard on All Models:

Corrosion protection treatment shields the EZ42 unit from corrosive environments and extends the life of the unit especially in coastal locations.

PRODUCT OVERVIEW (*cont.*)

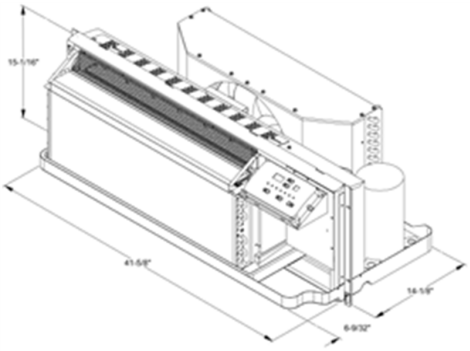
Islandaire manufactures the EZ42 loaded with standard features that other manufacturers often consider optional.





Chassis Features and Benefits

Slide Out Chassis

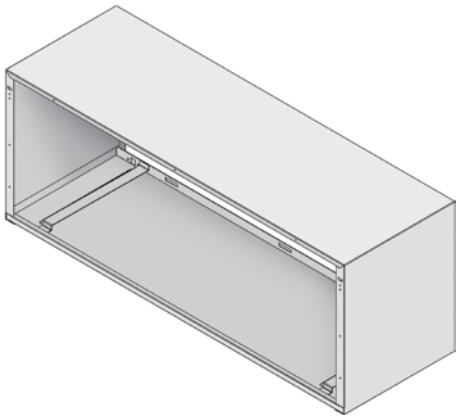


- Slide-out chassis makes installation simple
- All components are readily accessible to service personnel
- On-board diagnostic software and display help diagnose potential problems
- Designed to replace older units with minimal modification
- Isolated rotary compressor design for continuous efficient,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

See page 21 for chassis installation instructions

Wall Sleeve

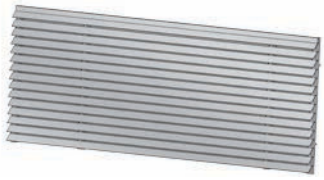
Part Number 2400450-00



- 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 17 for wall sleeve installation instructions

Exterior Louver/Grilles –

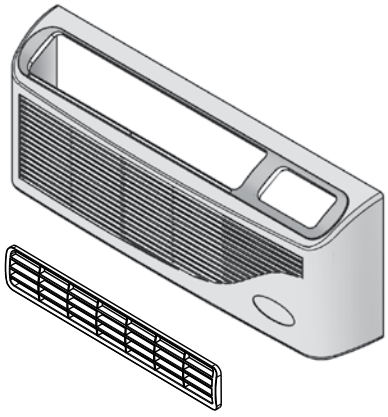


- Architectural extruded aluminum grille, *Part Number 6070422*
- Custom colors available (Ask for our color chart sheet)
- Stamped Grille, *Part Number 6070264*

See pages 21-24 for exterior grille installation instructions

Removable Front Panel

Part Number 6130102



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

Discharge Grille

Part Number 6130113

- Tough ABS plastic is durable, easy to clean and maintain

See page 30 for front cover installation instructions

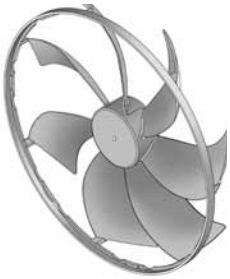
Chassis Features and Benefits (*cont.*)

Tangential Blower Wheel

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

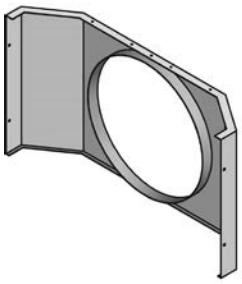
Slinger Fan

- 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

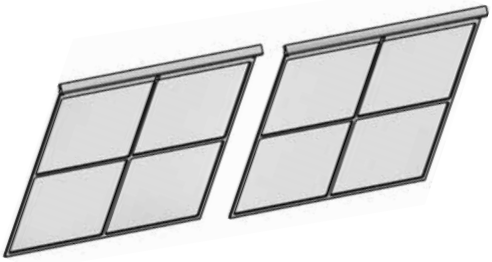


Return Air Filters

(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

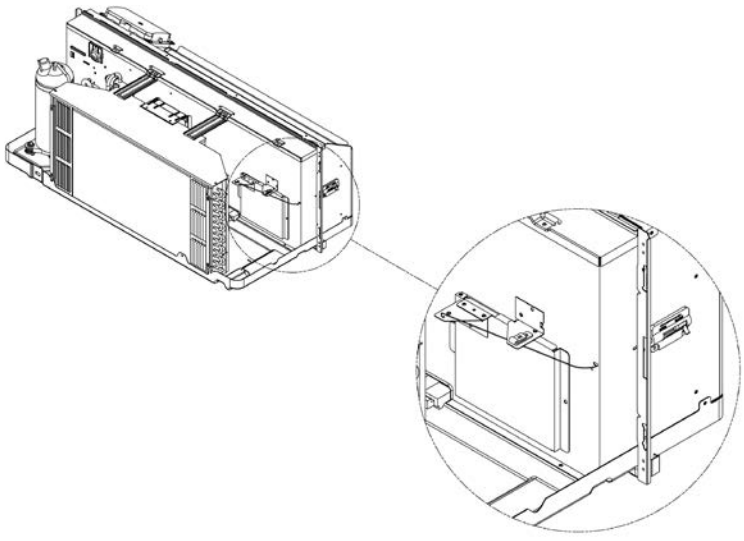
See page 30 for maintenance information



Fresh Air Vent

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

See page 29 for fresh air vent information



Ordering Data

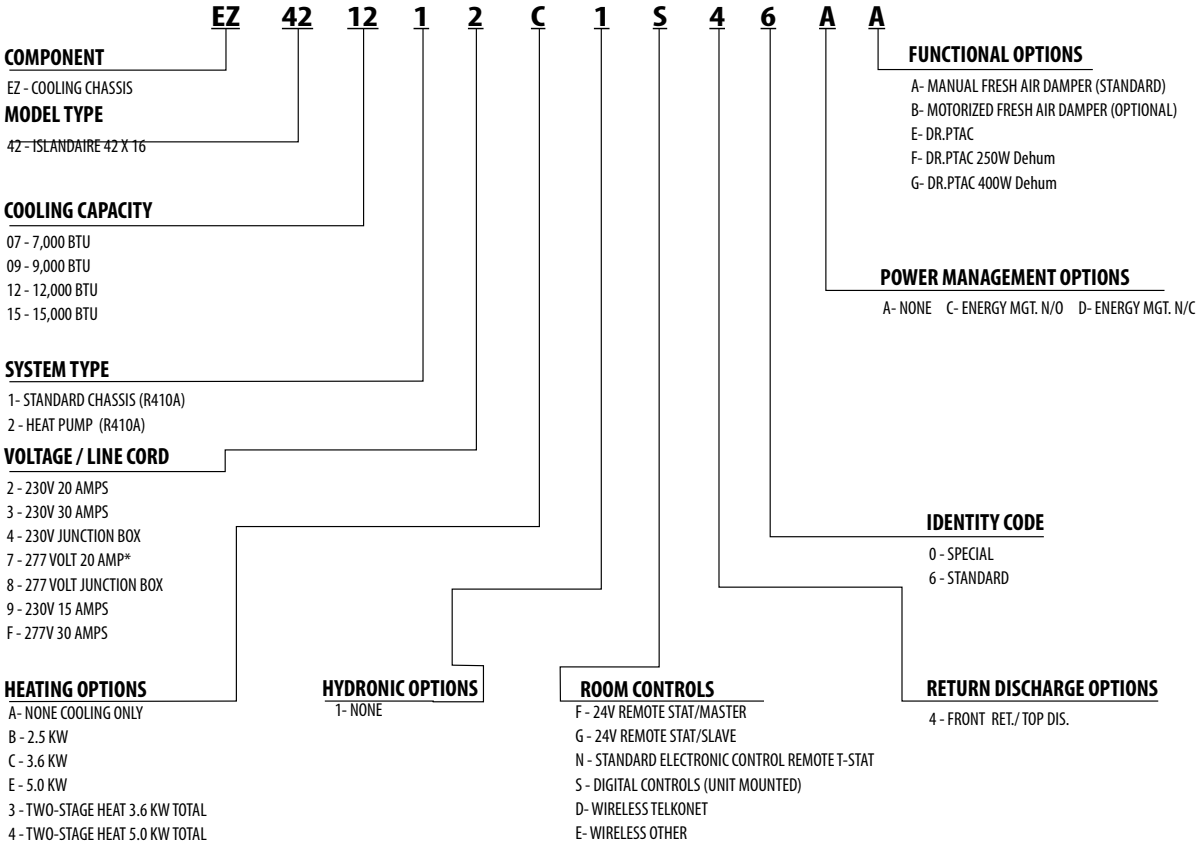
Model Nomenclature

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

Units are available in four cooling BTUH sizes:
7,500; 9,000; 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.



Replacement Guide

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

Performance Data

Performance Data for EZ42 Series

	MODELS											
	EZ07			EZ09			EZ12			EZ15		
VOLTS	230	208	277	230	208	277	230	208	277	230	208	277
BTUH COOLING	7200	6800	7000	9500	9300	9000	12000	11800	12000	14500	14300	15000
AMPS COOL	2.63	2.91	2.09	3.62	4.01	2.88	4.97	5.49	4.17	6.18	6.83	5.64
WATTS COOL	605	605	579	833	833	796	1143	1143	1154	1422	1422	1563
EER	11.9	11.9	11.9	11.7	11.7	11.7	10.7	10.7	10.7	10.2	10.2	10.2
CFM HIGH	375	340	360	375	340	360	375	340	360	375	340	360
CFM LOW/HEAT	260	240	260	260	240	260	260	240	260	260	240	260
HEAT PUMP CAPACITY (BTU/H)	6400	6100	6000	8500	8300	8000	11000	10800	11000	13600	13200	14000
HEATING PUMP (WATTS)	569	569	533	712	712	711	978	978	1041	1370	1370	1370
C.O.P	3.3	3.3	3.3	3.5	3.5	3.5	3.5	3.5	3.5	3.3	3.3	3.3
NOISE INDOOR/OUTDOOR (DBA)	45/69	45/70	45/71	45/72	45/73	45/74	45/75	45/76	45/77	45/78	45/79	45/80
REFRIGERANT (TYPE)	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
SHIPPING WEIGHT (LB)	132	132	132	132	132	132	132	132	132	132	132	132
STC (UNIT OFF)*	26	26	26	26	26	26	26	26	26	26	26	26
DEHUMIDIFIER 250W HEATER AMPS (OPT)	1.09	1.09	0.90	1.09	1.09	0.90	1.09	1.09	0.90	1.09	1.09	0.90
DEHUMIDIFIER 400W HEATER AMPS (OPT)	1.74	1.74	1.44	1.74	1.74	1.44	1.74	1.74	1.44	1.74	1.74	1.44
DEHUMIDIFIER AMPS	1.13	1.13	0.90	1.13	1.13	0.90	1.13	1.13	0.90	1.13	1.13	0.90
DEHUMIDIFIER WATTS	260	260	207	260	260	207	260	260	207	260	260	207
DEHUMIDIFIER LITERS/DAY*	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90
DEHUMIDIFIER CFM	55	55	55	55	55	55	55	55	55	55	55	55
DEHUMIDIFIER CONTROL	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC

Heating Options

HEATING OPTION	VOLTAGE (1)	WATTAGE	BTUS (2)	AMPS(3)
B	208	2,050	7,000	10.46
	230	2,500	8,535	11.47
	277	2,500	8,535	9.63
C	208	2,950	10,070	14.78
	230	3,600	12,290	16.25
	277	3,600	12,290	13.60
D	208	3,433	11,720	17.10
	230	4,200	14,330	18.86
	277	4,200	14,330	15.76
E	208	4,100	14,000	20.31
	230	5,000	17,070	22.34
	277	5,000	17,070	18.65
3: 2 STAGE HEAT 3.6K W TOTAL	208	2,950	10,070	14.78
	230	3,600	12,290	16.25
	277	3,600	12,290	9.63
4: 2 STAGE HEAT 5.0KW TOTAL	208	4,100	14,000	14.78
	230	5,000	17,070	16.25
	277	5,000	17,070	13.60

Dehumidifier Capabilities

Outdoor % RH	Outdoor Temp (F)	H2O 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

(1)Voltage is Single Phase, Alternating Current and R.M.S. (2) Heating Capacity (B.T.U./Hr.) based on indoor blower motor and heating elements. (3) Amp values are a combination of indoor blower motor and heating elements. (4) Minimum Circuit Ampacity ratings conform to the National Electric Code; however local codes should apply

ELECTRICAL	EZ42				
LINE VOLTAGE	208/230	208/230	208/230	277	277
MAXIMUM AMPERAGE	12	16	24	16	24
WALL SOCKET CONFIGURATION					
RECEPTACLE NUMBER	NEMA 6-15R	NEMA 6-20R	NEMA 6-30R	NEMA 7-20R	NEMA 7-30R
ELECTRICAL HEAT OPTIONS	N/A	2.5 - 3.6	4.2 - 5.0	2.5 - 4.2	2.5 - 5.0

Dr. PTAC Features

FEATURES:

- Up to 75 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
- Sub-base kit
- Electrical sub-base 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 75 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 75 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 75 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:

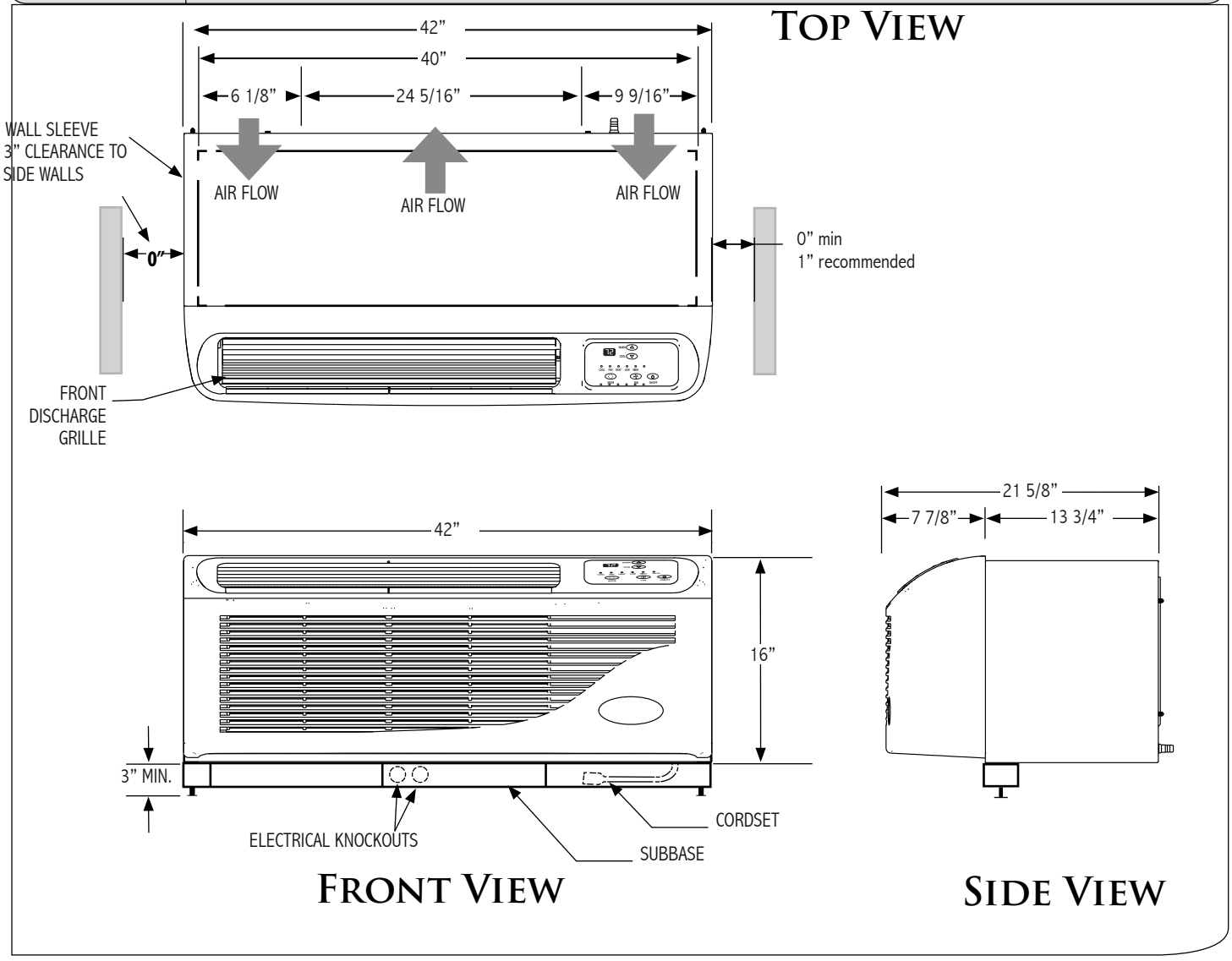
1. Lower installation/renovation costs than typical DOAS*
2. Decrease inconvenience to customer due to construction/installation of a DOAS* system
3. More humidity control in a room over use of a simple PTAC vent or Power vent system
4. Allows fresh make up air to travel entirely across sleeping and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

*DOAS = Dedicated Outdoor Air System

Dimensional drawings

Units 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, bed, bedspread, furniture, etc., DO NOT block either return or discharge air openings.

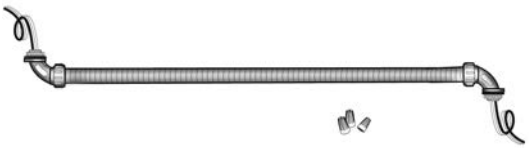
Figure 1 Dimensional Drawings



Options and Accessories

Hard Wire Kit

Part Number 6040756

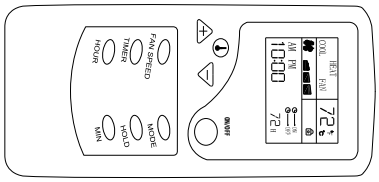


- Used in place of a plug-in power cord
- All 265V units require either a hard wire kit or electric subbase

See page 30 for electrical information

Remote Control

Part Number 6040694



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

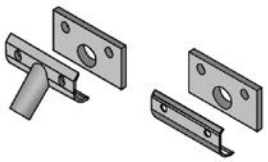
Optional 2 Stage Heater

AVAILABLE ON 208/230 VOLT UNITS WITH REMOTE THERMOSTATS

- Reduces energy cost during the heating season
- Maximizes year-round comfort
- Available in 3.6 kW and 5.0 kW only

Condensate Drain Kit

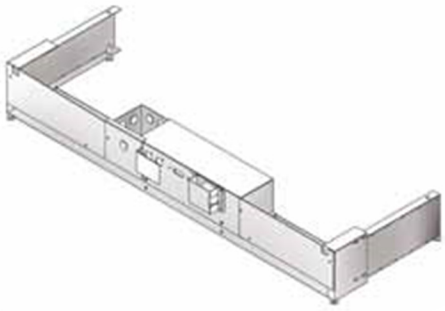
Part Number 4090661



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

See pages 19-20 for drain kit installation instructions

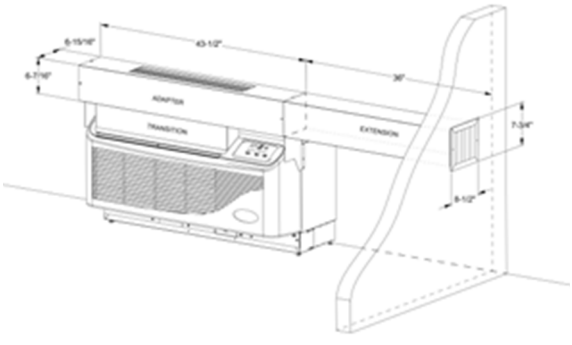
Subbase



- 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 pages 25-26 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

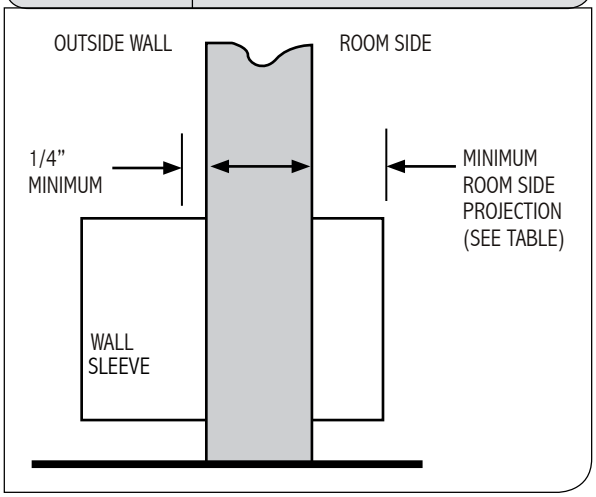
Clearances and Projections

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)

Figure 2 Minimum Projection Into Room



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.

OPTION	MINIMUM CLEARANCES	
	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

Figure 3 Minimum Clearance From Floor

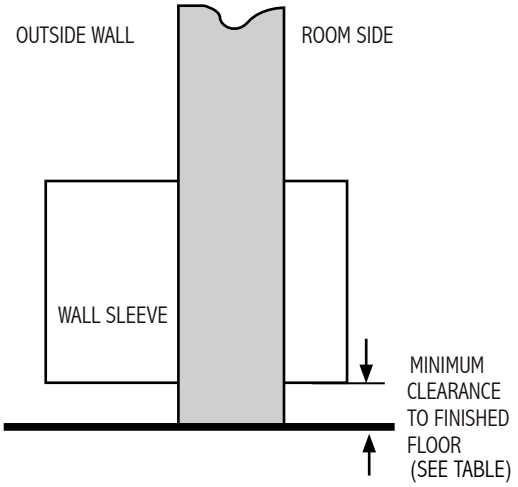
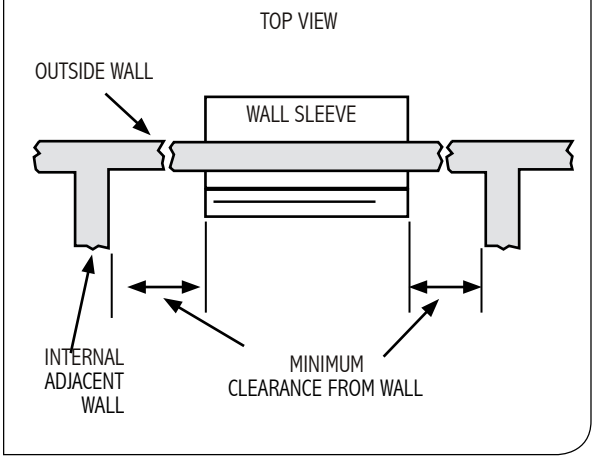


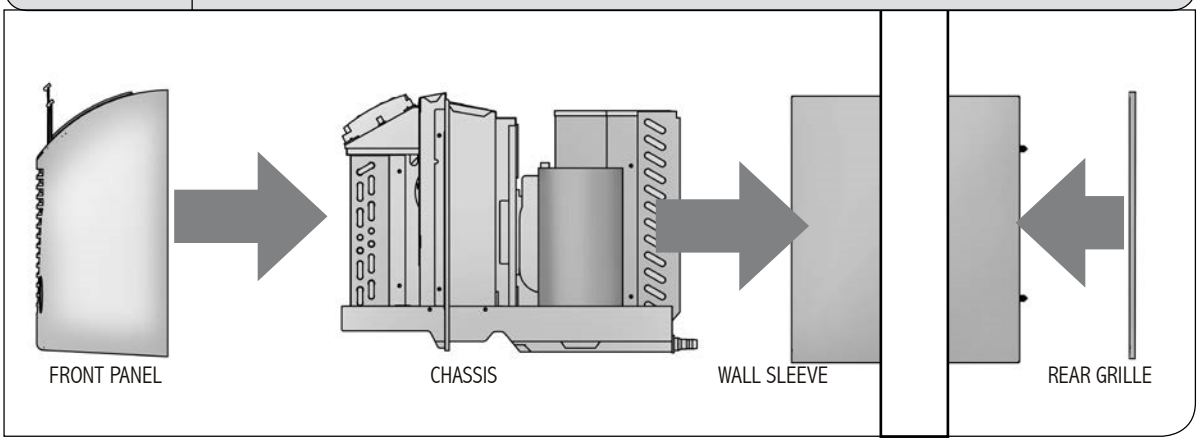
Figure 4 Minimum Clearance From Walls



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.

Figure 5 | Main Installation Components



Installation Notes

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.
- 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 unenclosed space and exposure to construction environment may result in permanent damage.
- 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 1/2" high x 42 1/2" 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 sub-base is used, the opening must start above the finished floor to match the height of the sub-base 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 unit.
- 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.

Figure 6 Framing and Minimum Wall Opening

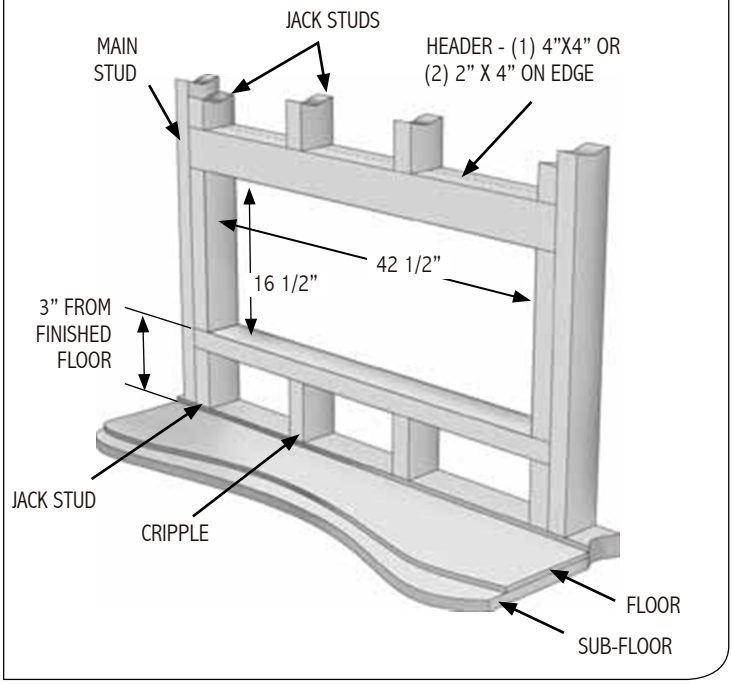
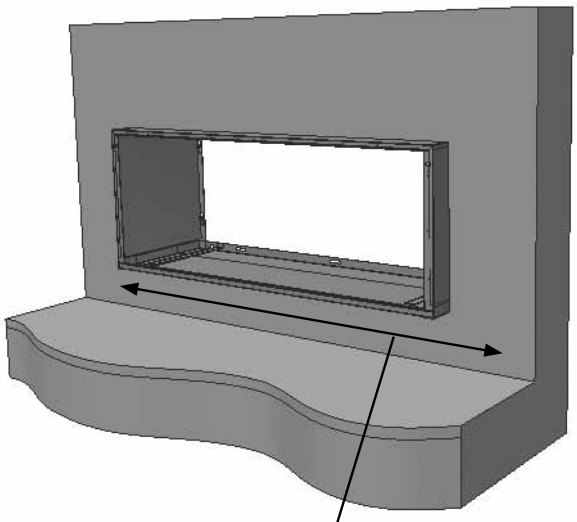


Figure 7 Framing and Minimum Wall Opening



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 that 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 EZ42 units, 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.

Figure 8 Wall Sleeve Installation

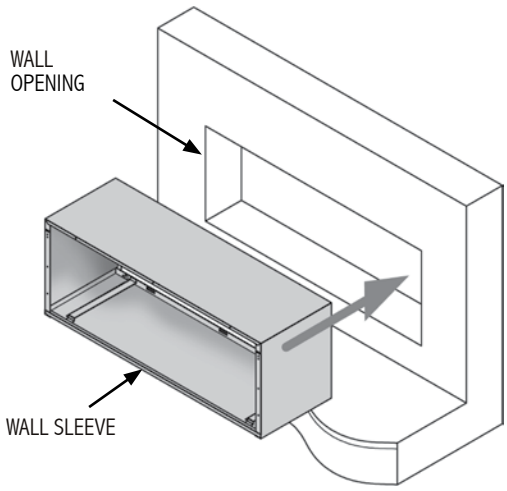


Figure 9 Wall Sleeve Installation

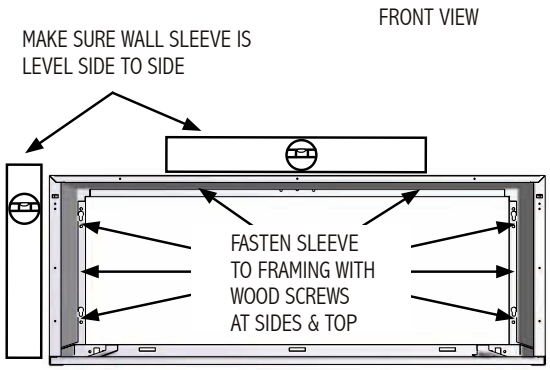
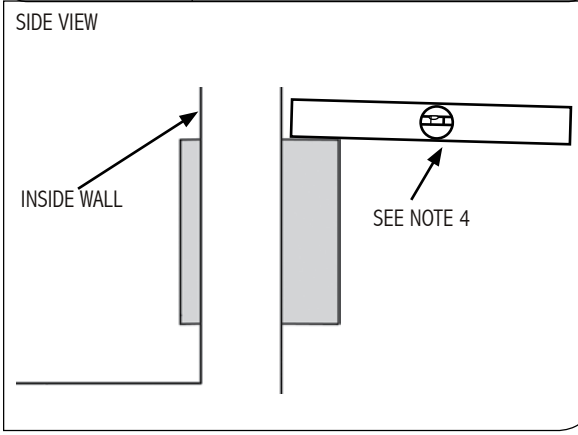


Figure 10 Wall Sleeve Installation



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

This drain kit serves only as a link between the unit and field-supplied condensate drain system.

Installing the kit without connecting it to a drainage system will result in inadequate condensate removal, possible leakage and corrosion.

Figure 11 External Drain Installation

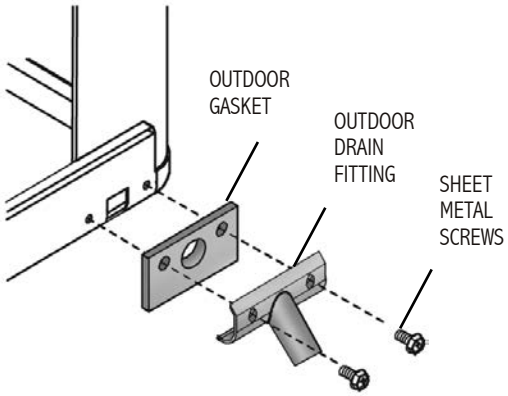
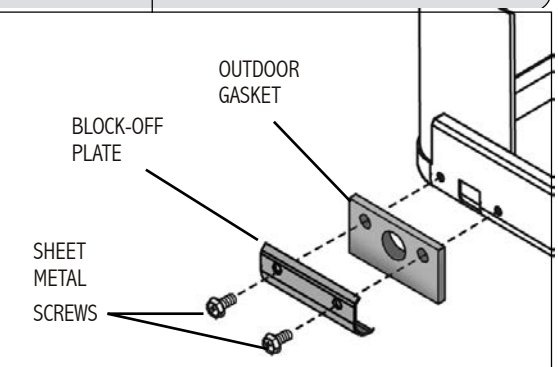


Figure 12 Block-Off Plate Installation



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 1/2" 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 13 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 1/2" 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 blank-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.

Figure 13 | Internal Drain Location

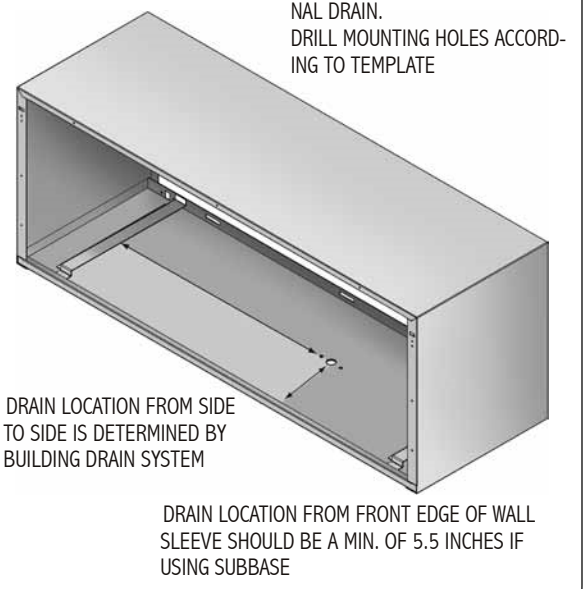


Figure 14 | Internal Drain Installation

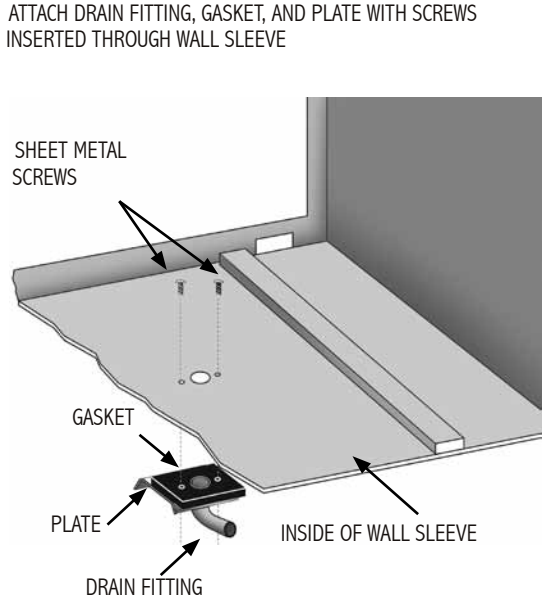
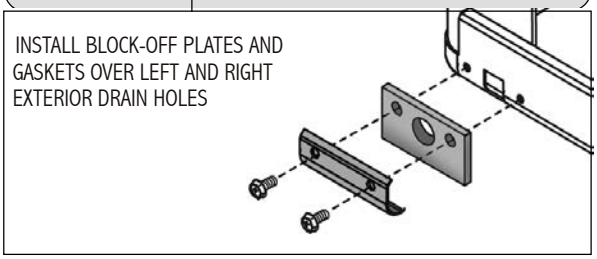


Figure 15 | Block-Off Plate Installation



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

6. Prepare the grille for installation by installing the five plastic fasteners supplied through the holes in the grille.

7. 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.

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

Figure 16 Standard Grille Fastener

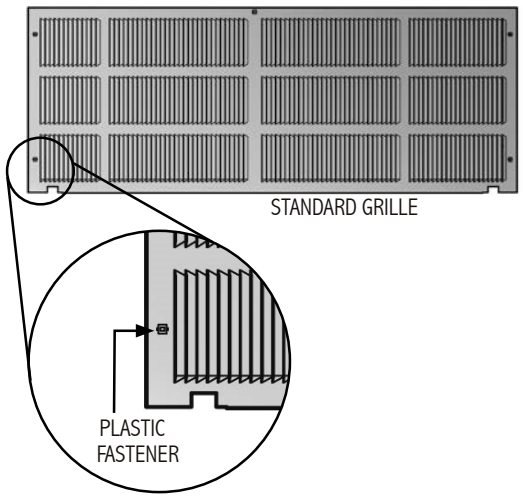


Figure 17 Std. Grille Installation

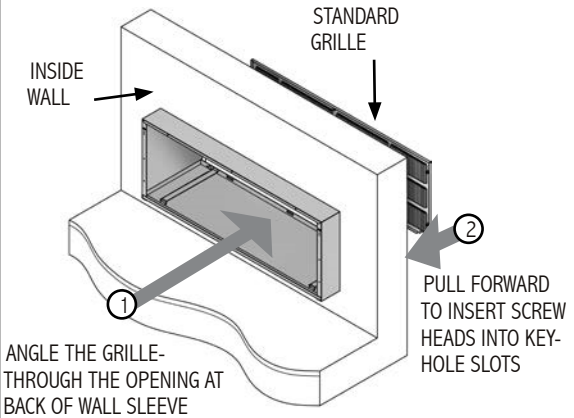
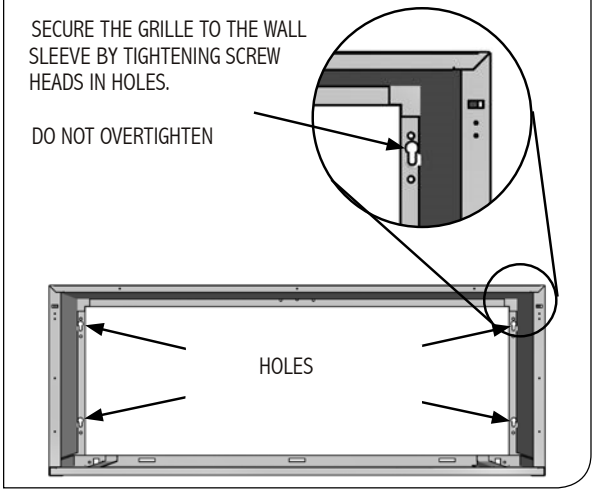


Figure 18 Std. Grille Installation



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.

Figure 19 | Architectural Rear Grille Parts

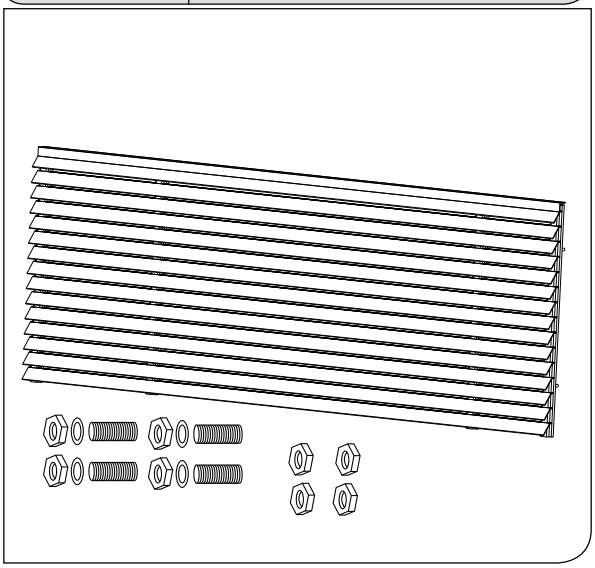
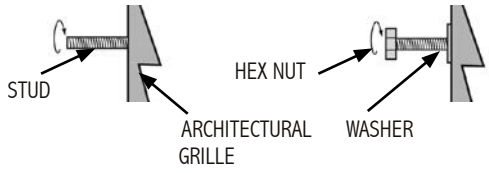
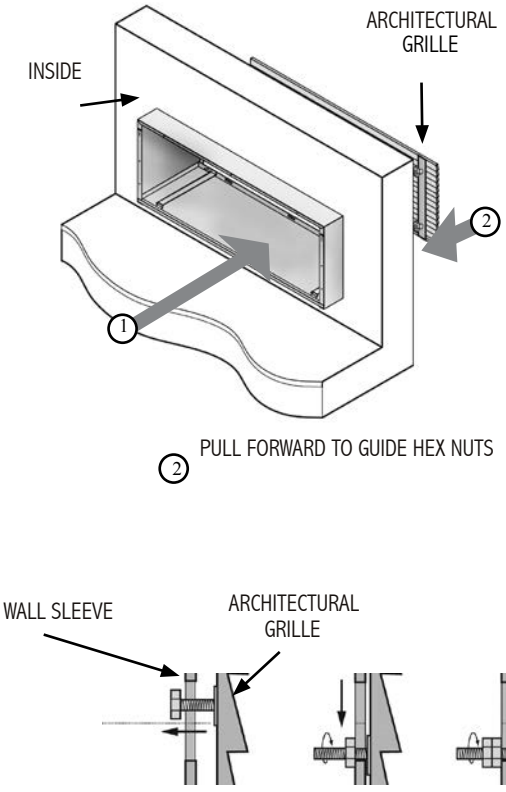


Figure 20 | Threaded Stud Installation



INSTALL THE FOUR THREADED STUDS INTO THE THREADED OPEN

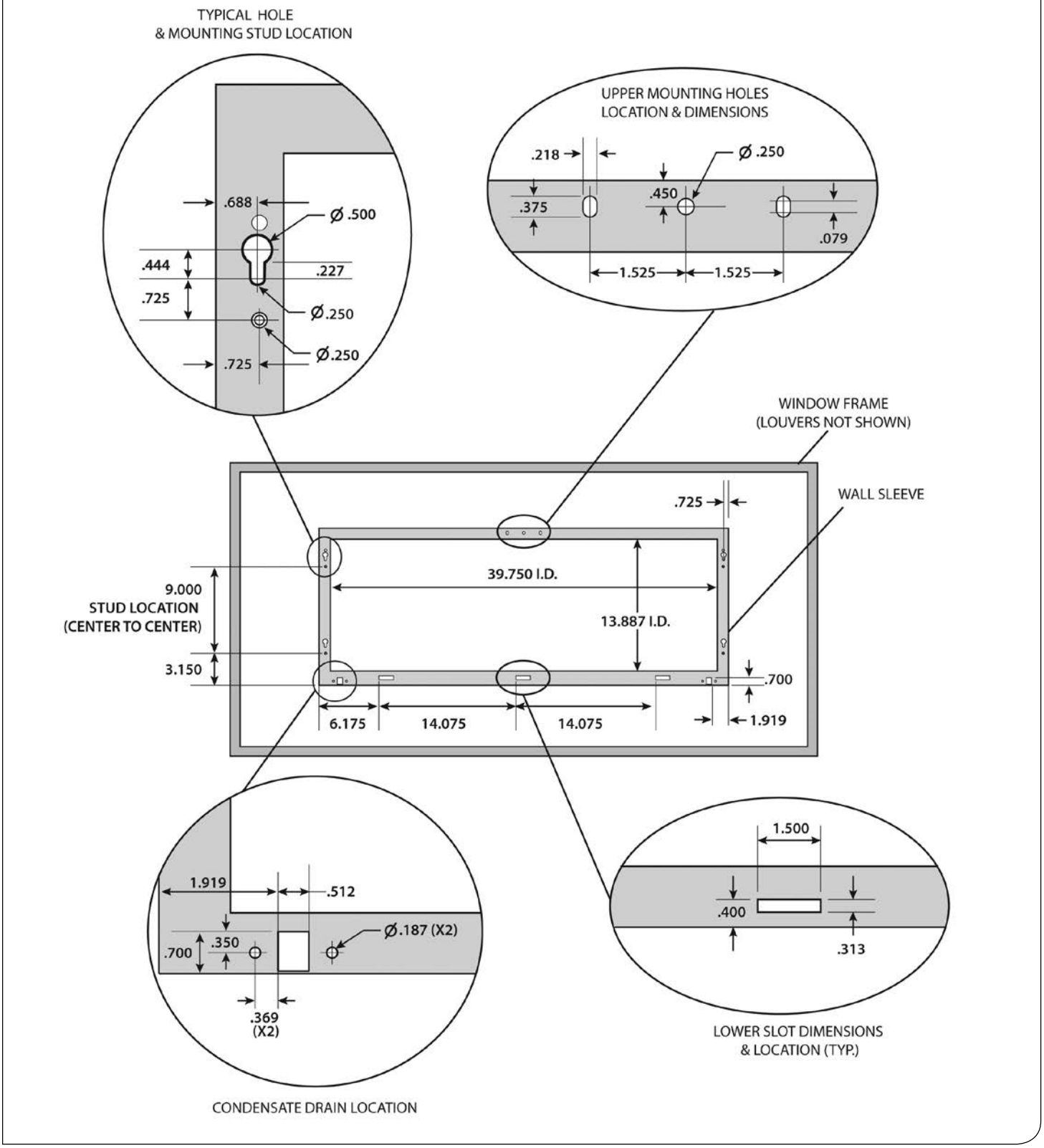
Figure 21 | Arch. Rear Grille Installation



Rear Grille Installation Instructions (*cont.*)

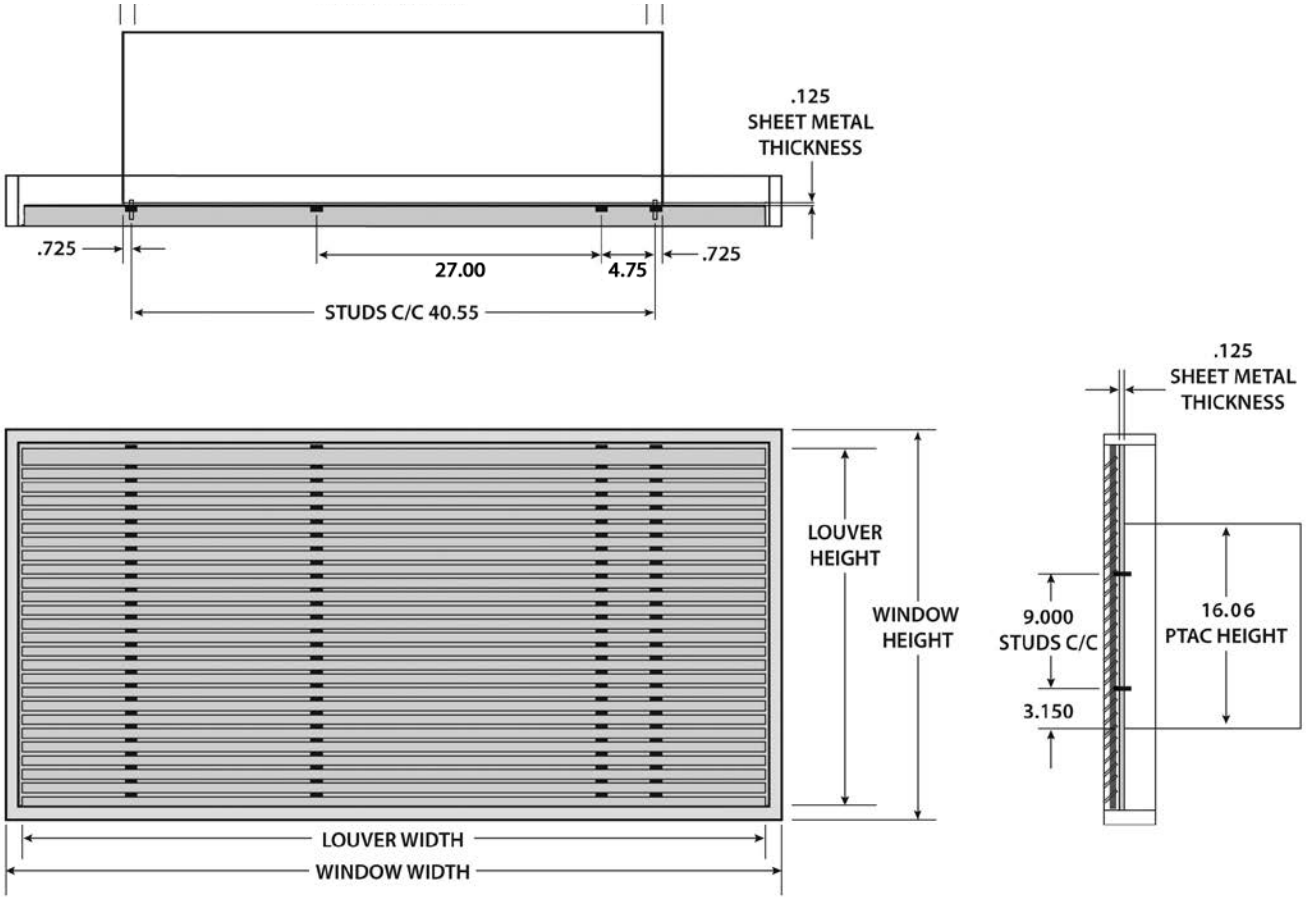
Part Supplied By Others

Figure 22 | Wall Sleeve Dimensions and Mounting Hole Locations for Installation of Exterior Louver Grille by Others



Part Supplied By Others

Figure 23 | Wall Sleeve Dimensions and Mounting Stud Locations for Installation of Exterior Louver Grille by Others



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 26.

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.

Figure 24 Assembled Subbase

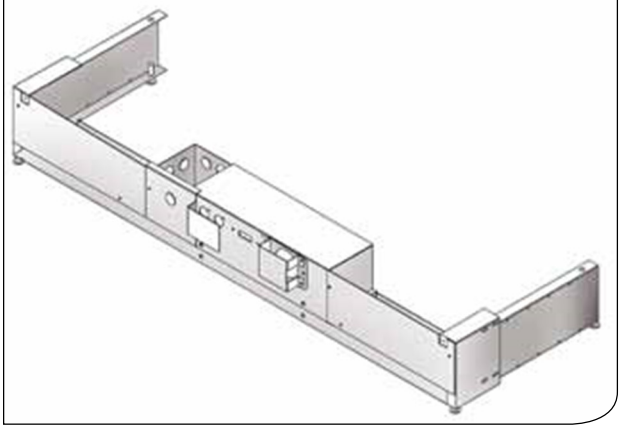
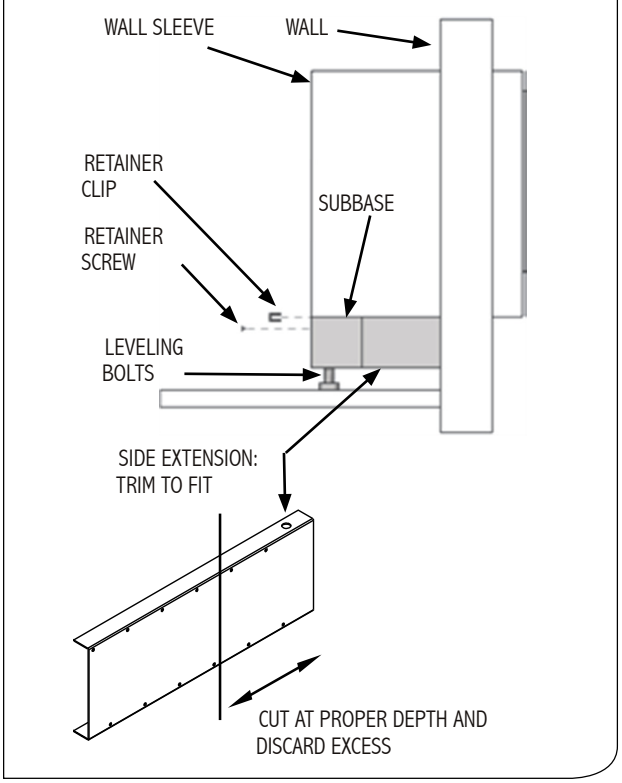


Figure 25 Subbase Installation



SUBBASE ASSEMBLY & INSTALLATION (*cont.*)

Figure 26 | Subbase Nomenclature

SUBBASE SELECTION CHART

EZSB 42 05 BP R12 S00 F15 V01

TYPE

EZSB - Sub Base

MODEL TYPE

16 - Amer. Air Filter 16
25 - Amer. Air Filter 25
40 - Amer. Standard SR40
41 - Amer. Standard TW41
42 - Islandaire 42 x 16
45 - Amer. Standard 45
5R - Ice Cap 5R
61 - Climate Mstr. 801
8S - Climate Mstr. 801 Small
AD - Friedrich CM700
AM - Amana Coffin
C7 - Friedrich CM701
C8 - Friedrich CM180
CC- Slant Fin CC
CH - Chromalox Up/Down Flow
CK - Zoneaire Climette/Keeprite (Flat)
CM - Climate Mstr. 702/703/704
CS - Zonaire Climette/Keeprite (Slope)
CX - Chormatox CAM
CY - Chrysler/Nesbit
EB - Singer/McQuay EB
EC - Singer/McQuay EC
ED - Singer/McQuay EA/RS
EH - McQuay HC/EMEK
Singer KS (EK)
ET - Friedrich ET
FM - Slant-Fin Monterey
GE - GE Flat Top
GS - Islandaire Gas/LP PTAC
G3 - Islandaire 38" Gas PTAC
HP - AAF HP/Singer CC
HW - AAF HW/Singer CC
HQ - Hell Quaker SEA
IT - Integrity
JA - Singer/McQuay J
JK - Slant-Fin JK Up/Down Flow
KF - Singer/McQuay K
LM - Singer/McQuay LM
MX - Fedders Maxizone
N3 - Dunham-Bush Newport III
N4 -Dunham-Bush Newport IV
NC - Nesbitt Challenger
NE - McQuay N/Carrier 42 x 16
NR - Nesbitt Roomate
NY - Islandaire 42 x 16 (Hydronic)
PT - Lennox PTEIA
RB - Westinghouse RB
RK - Icecap RSK
RM - Zonaire RM
RT - Ice Cap RSC
UN - Fedders Unizone
VF - Singer/McQuay Vertical Water Source
WC - Cool Heat WCC-6
WH - Friedrich 800
WL - Ice Cap WL
WM - Singer/McQuay WM

HEIGHT

03 - 3"
04 - 4"
05 - 5"
06 - 6"
07 - 7"
08 - 8"
09 - 3"
10 - 10"

ELECTRICAL MODULE

BP - Blank Plate (Non-electrical)
EM - With Module for Electrical Kits

REPLACEMENT KIT

R00 - None
R01 - Perm. Connection BX
R12 - 208/230V 15/20A
R13 - 208/230V 30A
R14 - 277V 15A
R15 - 277V 20A
R16 - 277V 30A
R17 - 115V 15/20A

SWITCH/CIRCUIT BREAKER KIT

S00 - None
S30 - Disconnect Switch

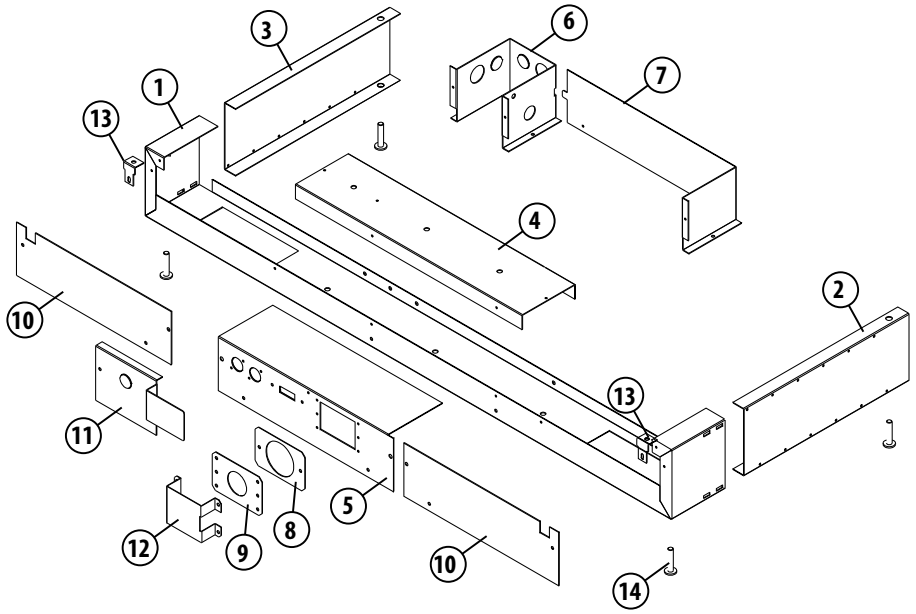
FUSE KIT

F00 - None
F15 - 15 Amp Fuse
F20 - 20 Amp Fuse
F30 - 30 Amp Fuse

LOW VOLTAGE CONNECTIONS KIT

V00 - None
V01 - Low Voltage Connections (12Pins)

SUBBASE PARTS LIST



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

6. Remove the cabinet front from the chassis as described in Front Removal.
7. Insert the chassis into the wall sleeve.
8. Slide the chassis into the wall sleeve until the chassis flanges contact the front edge of the wall sleeve.
9. 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.

Figure 27 Chassis Installation

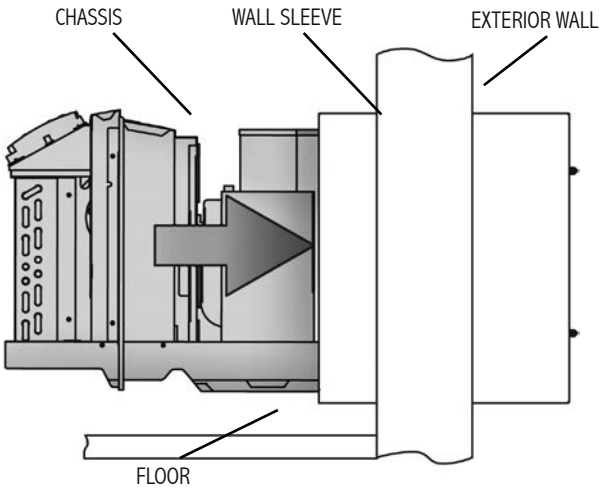
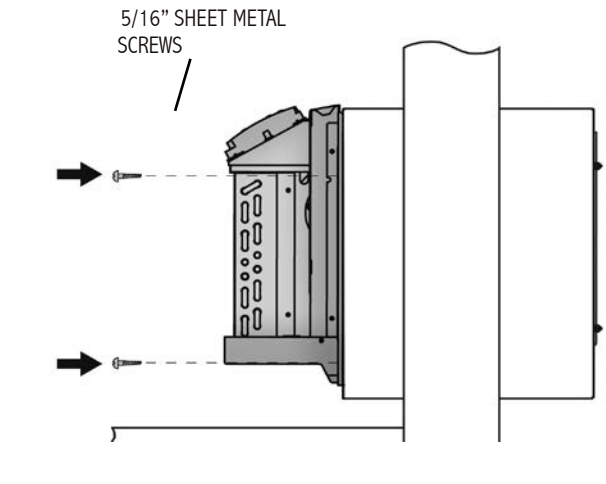


Figure 28 Chassis Installation



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.

Figure 29 Front Cover Tabs

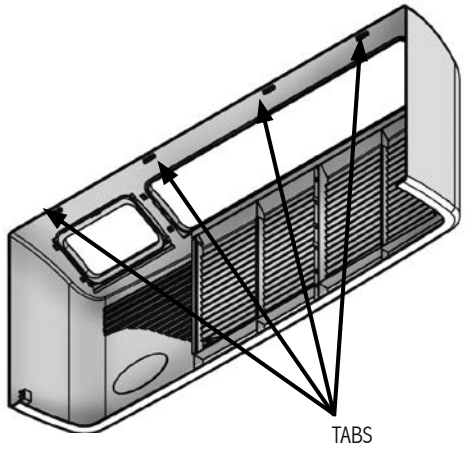


Figure 30 Front Cover Installation

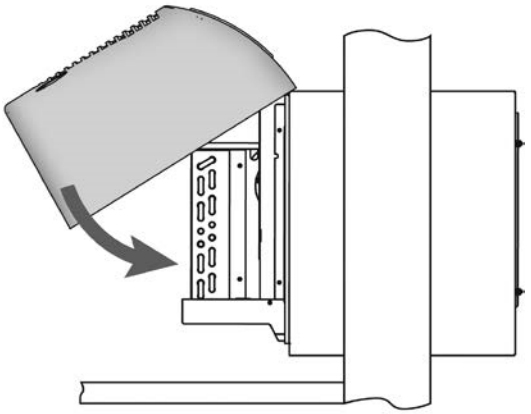
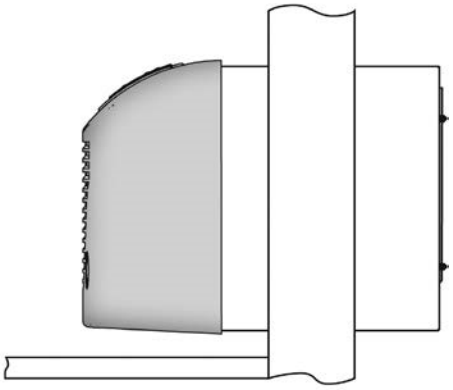


Figure 31 Front Cover Installation



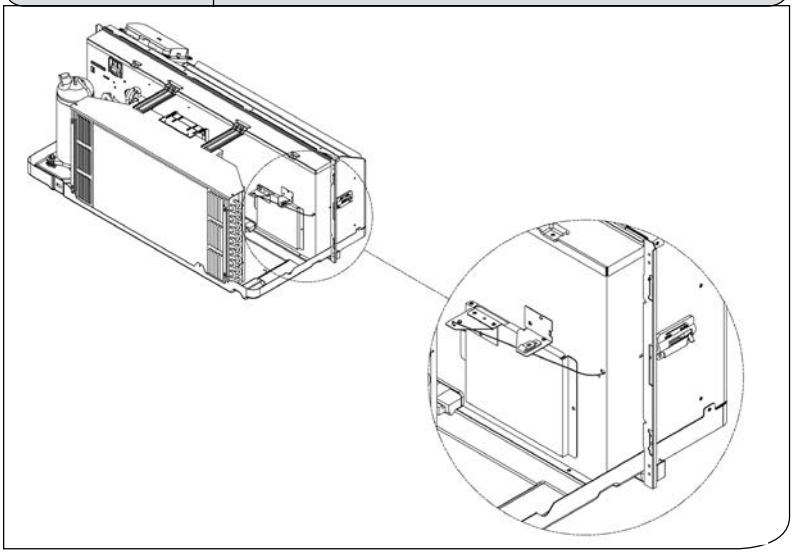
Fresh Air Vent

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.

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.

Figure 32 | Fresh Air Vent



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.

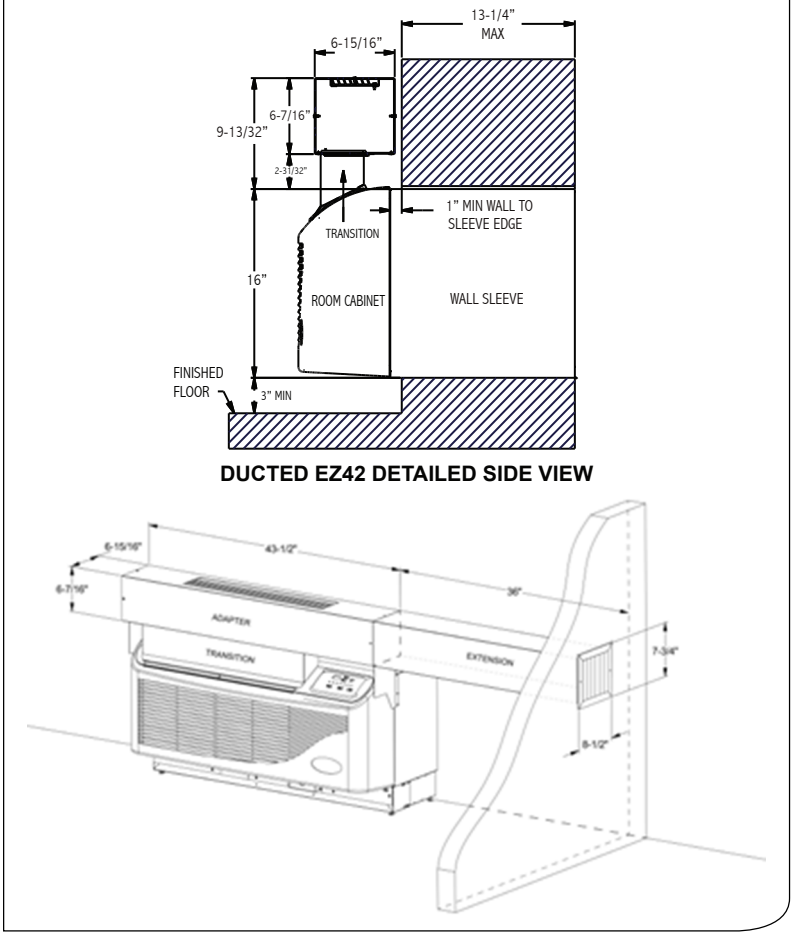
The kit consists of a main duct for the room of origin and an extension duct to reach the adjoining room and terminal duct.

Part Number 4082401 Main Duct with Transition

Part Number 4082404 Duct Extension

Part Number 6070199 End Grille

Figure 33 | Lateral Duct Kit



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.

Maintenance

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

Air Intake Filters

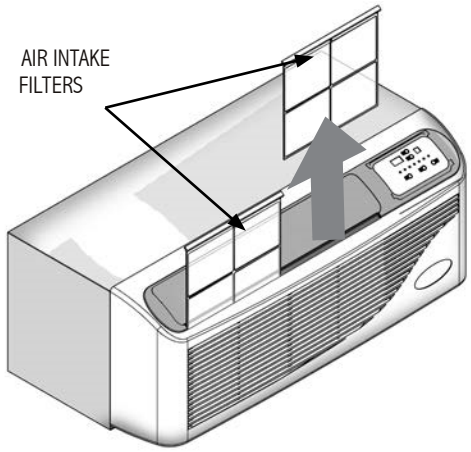
(2 per) Part Number 6080067

When 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.
2. 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.

Figure 34 Filter Removal



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.

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.

Figure 35 Hardwire Kit

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.

Figure 36 LCDI Cord

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.

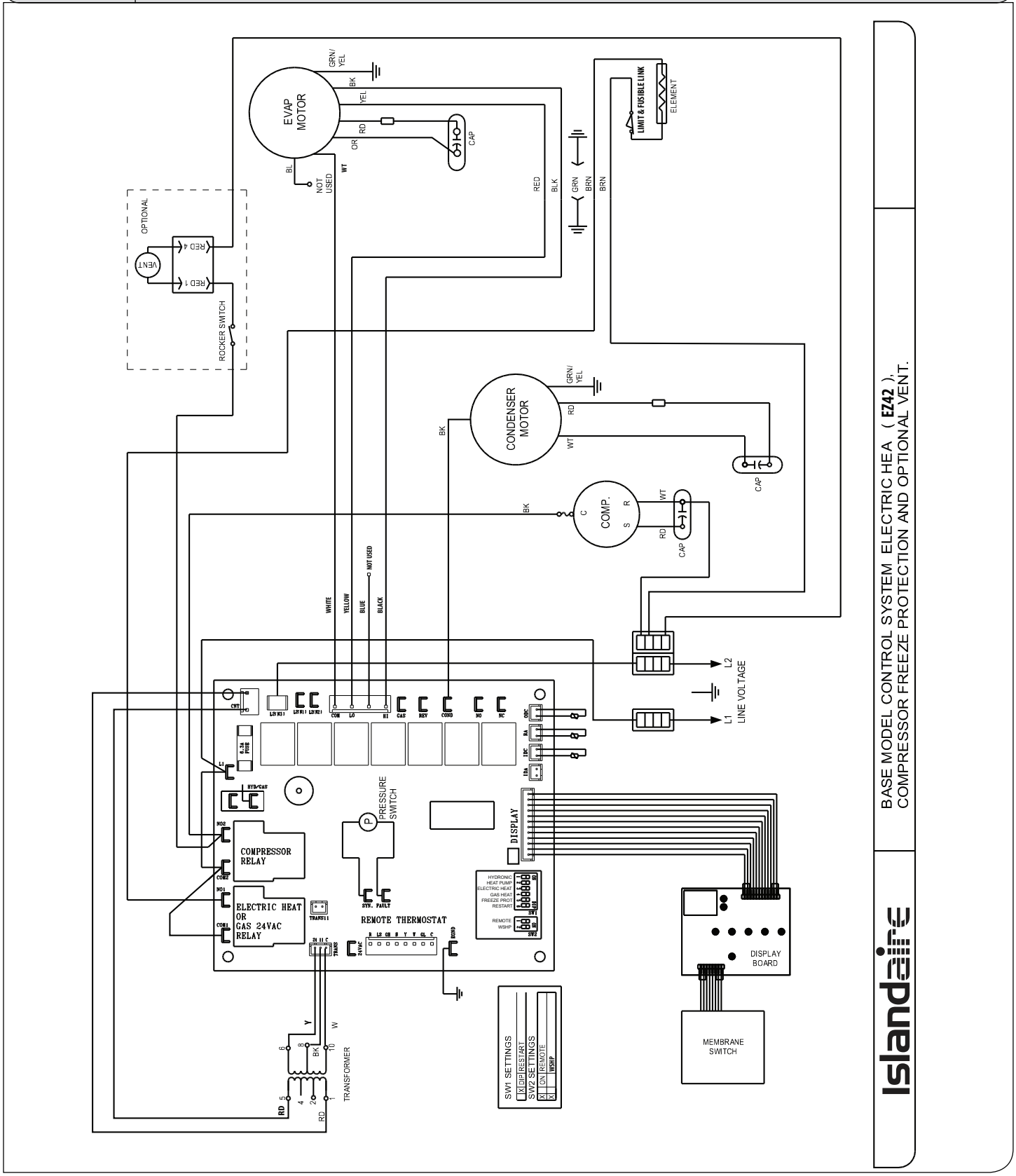
VOLTAGE MEASUREMENTS

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.

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

Wiring Diagram

Figure 37 | Wiring Diagram



User Interfaces

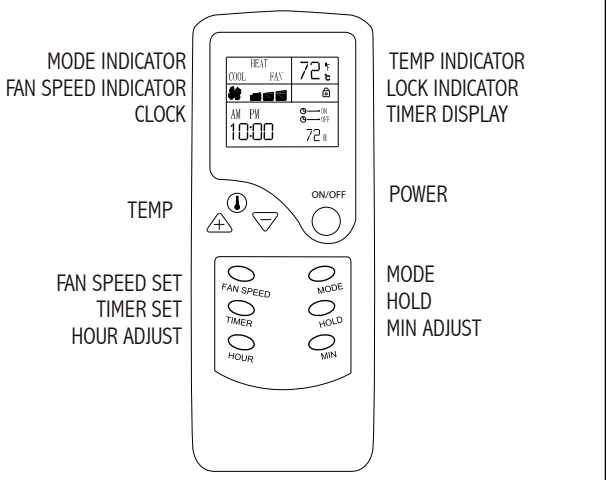
The Islandaire EZ42 PTAC can be operated by several different control systems. Listed on this page are some of the important control features and a brief description of their functions.

Remote Control

Part Number 6040694 - Fahrenheit
6040806 - Celsius

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

Figure 38 | Remote Control



General Operation

Press the On/Off button on the remote control.

Press the MODE button to select the desired operation mode: Cool/Fan/Heat. Press the TEMP + or - buttons to set desired temperature. Press the Fan Speed button to set the desired air flow rate (high/med/low).

Setting the Clock

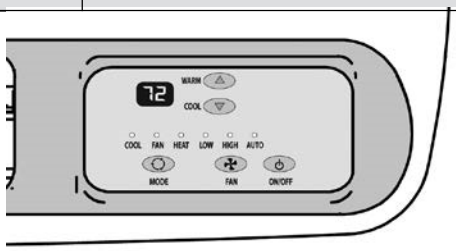
When new batteries are inserted, the default clock setting is 00:00 A.M. To adjust the setting to the current time, open the back cover and push the CLK button; the clock display will blink. Use the HOUR and MIN buttons to set the current time. Then press the CLK button again and close the back cover.

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 pages 36 & 37 for full details

Figure 39 | Digital Control Panel



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 pages 38 & 39 for full details

Figure 40 | Wall Thermostats

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 EZ42 PTAC 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 43 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 42 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 41 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.

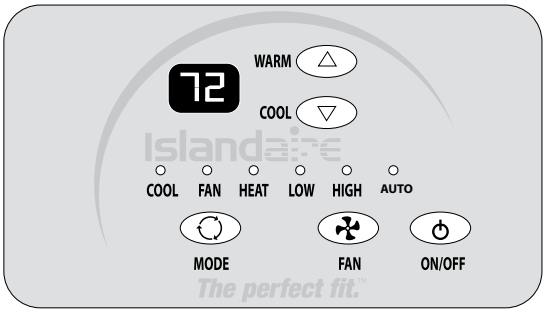
Power Control

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.

Figure 41 Digital Control Panel



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.

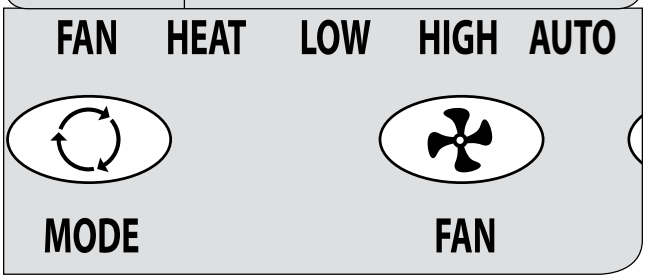
Heater Safety Feature

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

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.

Figure 42 | Fan Controls - Digital Control Panel



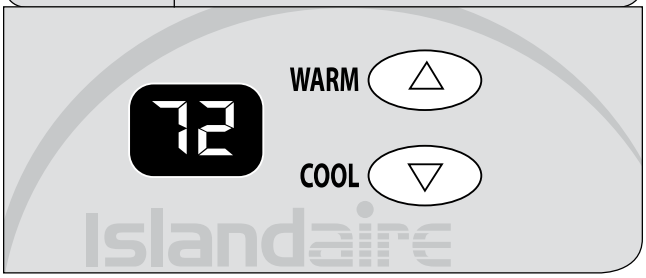
If either the Low or High fan settings are selected the fan will continuously operate in the selected Low or High speed even if the set temperature has been reached.

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.

Figure 43 | Temp Controls - Digital Control Panel



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 EZ42 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 37).

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 3-1/2 °F from the set-point. The unit is placed in cooling mode when the set-point is over 3-1/2° F; 3-1/2 °F under the set point places the unit in the heating mode. This 3-1/2 °F variation is usually adjustable from a 1/2 °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 power module 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. Shut main power to unit off.
2. Access main control board and turn remote thermostat dip switch on.
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.

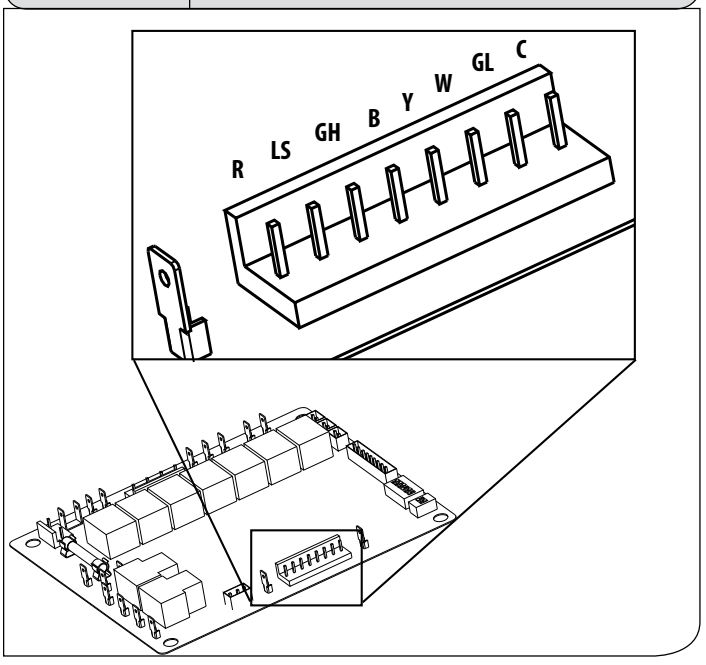
Terminal GL (Orange)

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)

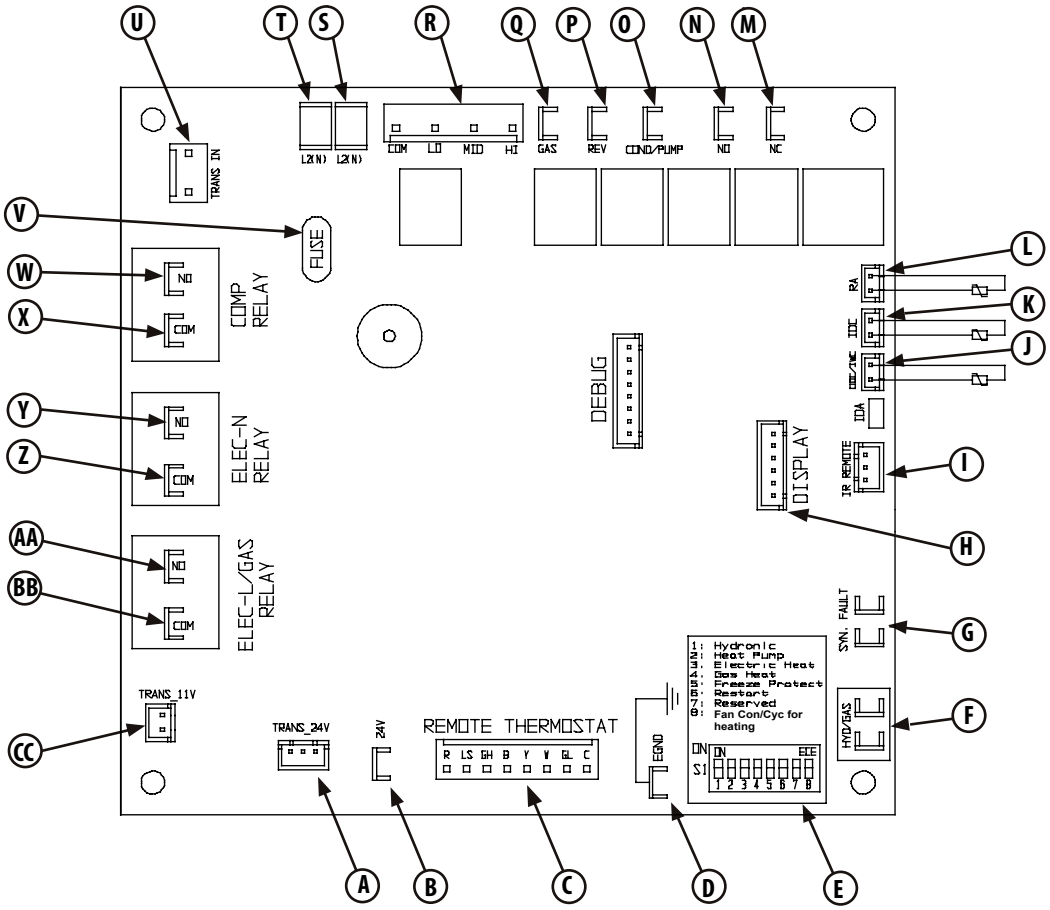
Low voltage terminal, 24 Vac common, to provide opposite polarity voltage to wall thermostat.

Figure 44 Thermostat Terminal Block



Control Board

Figure 13 | Control Board Physical Features

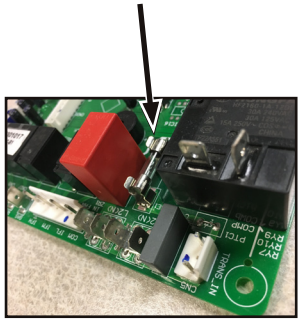


KEY

- (A) TRANS 24V
- (B) 24 VAC – ACCESSORY
- (C) REMOTE THERMOSTAT
- (D) EGND – ACCESSORY
- (E) DIP SWITCH - HEAT CONFIGURATION
- (F) HYD/GAS – FAN SWITCH
- (G) SYN FAULT
- (H) DISPLAY
- (I) IR REMOTE
- (J) ODC/IWC- OUTDOOR COIL SENSOR
- (K) IDC – INDOOR COIL SENSOR
- (L) RA – RETURN AIR SENSOR
- (M) N.C. – NORMALLY CLOSED
- (N) N.O. – NORMALLY OPEN
- (O) COND – CONDENSER MOTOR
- (P) REV – REVERSING VALVE
- (Q) GAS – GAS VALVE
- (R) FAN – EVAPORATOR MOTOR
  - HI
  - LO
  - COM
- (S) L2(N)
- (T) L2(N)
- (U) TRANS IN
- (V) FUSE
- (W) N.O. – COMPRESSOR
- (X) COM – COMPRESSOR
- (Y) N.O. – ELEC_N
- (Z) COM – ELEC_N
- (AA) N.O. – ELEC_L
- (BB) COM – ELEC_L
- (CC) TRANS 11V

Fuse

An easily replaceable 8.0 Amp 250V fuse (V) is conveniently located on the control board.



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.

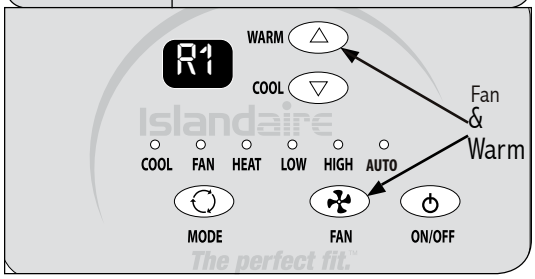
To enter the Set point setup mode, hold down the FAN +WARM buttons for 5 seconds.

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.

Figure 46 Display - Temp Limit Code



Available Set Point Ranges

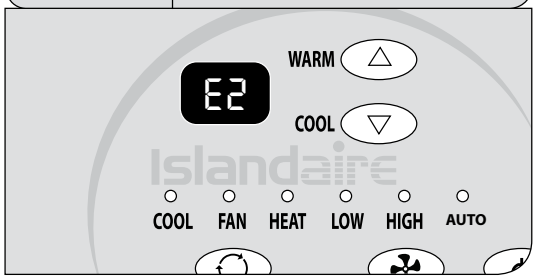
DISPLAY CODE	LOW LIMIT (DEGREES F)	HIGH LIMIT (DEGREES F)
R1	63	86
R2	65	86
R3	65	90
R4	67	88
R5	67	92
R6	69	90
R7	68	72
R8 (FACTORY DEFAULT)	60	90

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.

Figure 47 Display - Error Code



ERROR CODE	DIAGNOSIS	CAUSE	NOTE
E2	RETURN AIR (RA) TEMPERATURE SENSOR FAILURE	RA SENSOR BROKEN OR LOOSE AT BOARD CONNECTION	TURN OFF POWER TO DISPLAY
E3	INDOOR COIL (IDC) TEMPERATURE SENSOR FAILURE	IDC SENSOR LOOSE OR BROKEN AT BOARD CONNECTION	TURN OFF POWER TO DISPLAY
E4	ABNORMAL OPERATION	• CHECK PROPER LOCATION OF IDC SENSOR AND ODC SENSOR • ENSURE THAT BOTH SENSORS ARE SECURE TO COILS • COMPRESSOR FAILURE • COMPRESSOR OVERLOAD OPEN • REFRIGERANT LEAK	TURN OFF POWER TO DISPLAY
E5	OUTDOOR COIL (ODC) TEMPERATURE SENSOR FAILURE	ODC SENSOR BROKEN OR LOOSE AT BOARD CONNECTION	TURN OFF POWER TO DISPLAY
E9	SYN. FAULT TERMINALS OPEN	• HIGH PRESSURE SWITCH OPEN - DIRTY CONDENSER COIL (COOLING) - FAILED CONDENSER MOTOR (COOLING) - BE SURE BAFFLES ARE INSTALLED (IF REQUIRED) - REFRIGERANT RESTRICTION - DIRTY FILTER / EVAPORATOR COIL (HEAT PUMP) - EVAPORATOR MOTOR FAILURE (HEAT PUMP) - RETURN / SUPPLY AIR RESTRICTED (HEAT PUMP) • ALL ADDITIONAL SAFETIES ADDED TO UNIT SHOULD BE CHECKED	TURN OFF POWER TO DISPLAY

Packaged Terminal Cooling Unit with Heat Pump or Electric Heating

PART I: SPECIFICATIONS

Size Range: Cooling: 6,900 to 15,100 Btuh

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

6,400 to 17,000 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.

Performance Specifications (*cont.*)

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 UL listed.

Subbase options include:

1. 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 in. 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 in. 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. See section 4.0 for detailed specification.

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.

Warranty

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 East Setauket, New York warrants the unit 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 an Islandaire Authorized Service Company 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. Check, test, and start by an experienced person are responsibility of the installing contractor. Check, test and start shall include physically operating each unit in both cooling and heating modes and correcting any minor deficiencies noted. 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. Correction of these minor conditions is part of Check, Test, and Start.

WARRANTY Coverage of the Compressor and parts only shall continue from the 2ND through 5th year from date of equipment installation* Labor is not included.

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 the 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.

Contact the Islandaire Customer Service Department at 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.

EZ REPLACEMENT GUIDE
TO THRU-WALL AIR CONDITIONERS AND HEAT PUMPS

Original Model	Case Height	Case Width	Our Model
Amana®			
PT 42 x 16 Series	16	42	**42**
PB 26 x 16 Series	16	26	**26**
American Air Filter®			
Enersaver Type 16	16	37 1/2	**16**
Type 16 Hydronic	16	41 1/2	**16**
Nelsonaire Series 25	16	36 1/2	**25**
American Standard®			
TW Series Type 41	16	36 1/2	**41**
Type 40 Remotaire(SR)	16 1/2	37	**40**
Applied Comfort®			
DM/DMQ	18 5/16	32	**CS**
SC Series	16	40	**SC**
SC Series	16	36	**RM**
Carrier®			
51PH Wallmate	18 15/16	32	**CS**
Cartaret®			
Type 45	16 1/2	37	**45**
Chromalox®			
Space Command	16 1/2	45 1/8	**CH**
CAM (2 section)	15	35 1/2	**CX**
Chrysler®	15 1/2	36	**CY**
Climate Master®			
Climate Master Series 700AD	16	36	**AD**
Climate Master Series 701	16	40 1/2	**C7**
Climate Master Series 702, 703 & 704	16	36	**CM**
Dunham Bush®			
New Port III	25	52	**N3**
New Port IV	25	52	**N3**
Fedders®			
Maxizone Series	16 1/4	27	**MX**
Unizone	16	48	**UN**
Friedrich®			
Climate Master Series 700AD	16	36	**AD**
Climate Master Series 701	16	40 1/2	**C7**
Climate Master Series 702, 703 & 704	16	36	**CM**
ET Series	20	28	**ET**
TE Series	16	42	**TE**
Vert-I-Pak	32	23	**VP**
General Electric®			
Zoneline	16	42	**42**
AJ Series	16	26	**26**
AZ Vertical	31	23 1/4	**VP**
Heil Quaker®			
SEA Series	14 1/2	35 7/8	**HQ**
SHA Series	14 1/2	35 7/8	**HQ**
Series C	18 5/16	32	**CS**
Ice-Cap / Ice Air®			
RSK Series	16	36	**RK**
RSCT Series	15 3/4	41	**RT**
RSWL Series	13 1/4	56 1/2	**WL**
ITT Nesbitt®			
Challenger Series	16 1/4	42 1/4	**NC**
Roomate Series - N	-	-	**CY**
Modular Roomate (MW)	-	-	**NR**

Original Model	Case Height	Case Width	Our Model
Keeprite®			
Climette	18 5/16	32	**CS**
Seasonall	18 5/16	32	**CS**
Lennox®			
PTEIA Series	22 1/4	38	**PT**
McQuay®			
C/EC	27 3/8	54 1/2	**EC**
EB Series	22	30 5/8	**EB**
J/EJ Series	14	30	**JA**
K, EK and RK Series	13 15/16	36	**KF**
Type EA, ES and RS	16 3/8	44 7/8	**ED**
Type NE	16	42	**NE**
Mueller®			
Climatrol	16	48	**UN**
Remington®			
J/EJ Series	14	30	**JA**
K, EK and RK Series	13 15/16	36	**KF**
Type 41	16	36 1/2	**41**
Type 45	16 1/2	37	**45**
Simonaire®			
SSK	15 3/4	41	**RT**
SSEZ	15 3/4	41	**RT**
SSCT	15 3/4	41	**RT**
Singer®			
C/EC	27 3/8	54 1/2	**EC**
EB	22	30 5/8	**EB**
J/EJ Series	14	30	**JA**
K, EK and RK Series	13 15/16	36	**KF**
Type 41	16	36 1/2	**41**
Type 45	16 1/2	37	**45**
Type EA, ES and RS	16 3/8	44 7/8	**ED**
Slant Fin®			
JK	16	42	**JK**
CC Monterrey	16	42	**CC**
Monterrey	17 1/2	36	**FM**
Suburban Dynaline®			
Gas Unit	16	42	**GS**
TPI®			
Ra-Matic	16	36	**RM**
Weil-Mclain			
ClimateMaster Series 700AD	16	36	**AD**
Climate Master Series 702, 703 & 704	16	36	**CM**
Westinghouse®			
RB Series	15	38 1/2	**RB**
Worthington®	16	48	**UN**
Zoneaire®			
CHP Series	18 5/16	32	**CS**
CSM Series	18 5/16	32	**CS**
Zoneaire, RM Series	16	36	**RM**
Zoneaire, SC Series	16	40	**SC**

Custom Products

Vertical Units, Fan Coils, and other related HVAC products. (Consult with Factory)

If you don't see the unit you're looking for in the above list, please call us about having a unit custom designed for you.

Ask your salesman about our DR. PTAC option!*

DR. PTAC
THE CURE FOR UNCONDITIONED MAKE-UP AIR™

*100% conditioned fresh air

NEW!
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For New Construction and as Replacement for:

GE AZ Vertical, Friedrich Vert-I-Pak and First Company SPX

Islandaire
The perfect fit.™

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Locally Represented By: