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CITYMULTI® CATALOG

VARIABLE REFRIGERANT FLOW ZONING SYSTEMS

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MITSUBISHI ELECTRIC IS A WORLD LEADER IN PRODUCTS THAT HELP PEOPLE LIVE BETTER.

When it comes to providing personalized comfort in every room of every building, we are here to help. No other company is as committed to creating environmentally friendly and affordable technology that's ideal for today's home and work environments, no matter the size or shape.

QUALITY

Mitsubishi Electric is consistently recognized by HVAC contractors as the #1 preferred brand with the highest quality rating among manufacturers. With over 30 years of industry leadership, we are proud to be America's #1 selling brand of variable refrigerant flow (VRF) zoning technology.

PERFORMANCE

We deliver a complete range of compact and powerful heat pump products that are also intelligent, quiet, and use energy effectively.

TRAINING

We provide comprehensive product and applications instruction through our regional training centers across the United States.

SUPPORT

We offer the most extensive network of experienced VRF zoning system professionals to provide project consultation in the areas of application planning and design, plus installation and start-up. Post installation, we can provide support, including user training and operation monitoring.

GROWTH

Our products and services provide opportunities for architects, engineers, distributors and contractors to enhance and grow their businesses. With nearly 20 years of consistent double-digit percentage growth, we continue to lead the market's growth acceleration.

ECO CHANGES



Eco Changes is our commitment to continuously strive for a greener tomorrow through cutting-edge global environmental technologies and outstanding strength in manufacturing.

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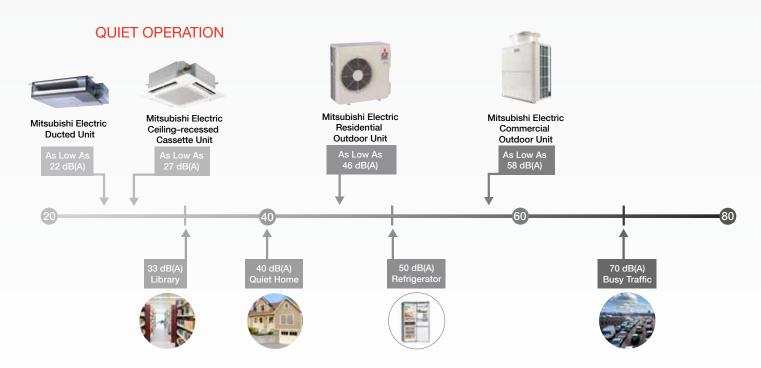
WHY CITY MULTI VRF ZONING SOLUTIONS?

As a global leader in VRF zoning solutions, you can trust that you're getting the most advanced technology and dedicated support in the industry.

ADVANTAGES CITY MULTI OFFERS:

- **Ultra-efficient design** to ensure total comfort in any commercial space.
- Advanced INVERTER technology varies the speed of the compressor for more efficient cooling and heating.
- Complete zoning control so you heat and cool the areas that need it without paying for the ones that don't.
- Design flexibility for any application, from modern designs to historic renovations.

- Complete product family to handle every job from the smallest spaces to the largest buildings and campuses.
- Green technology that contributes to Leadership in Energy & Environmental Design (LEED) credits and saves energy.
- **Quiet operation** that's even softer than a human whisper.
- Simultaneous operation to cool and heat with just two pipes.



PRODUCT OVERVIEW

OUTDOOR UNITS

Mitsubishi Electric offers an extensive air-source and water-source unit line-up that can be tailored to any building design need.

AIR-SOURCE HEAT RECOVERY



H2i[®] R2-Series



R2-Series



WY-Series
WATER-SOURCE
HEAT PUMP



WR2-Series
WATER-SOURCE
HEAT RECOVERY

AIR-SOURCE HEAT PUMPS



H2i® Y-Series



Y-Series



S-Series

INDOOR UNITS

Mitsubishi Electric's wide selection of indoor units enables you to choose the style and size that meets your requirements for layout and design.



PKFY Wall-mounted



PMFY Ceiling-recessed Cassette (1-Way)



PCFY Ceiling-suspended



PVFY Multi-position Air Handler



PLFY-NBMU (33"x33") PLFY-NCMU (22"x22") Ceiling-recessed Cassette (4-Way)



PWFY-NMU-E-AU (HEX) PWFY-NMU-E-BU (Booster) Hydronic Heat Exchanger



PEFY-NMSU Low Profile PEFY-NMAU Medium Static PEFY-NMHU /NMHSU High Static Ceiling-concealed Ducted



PFFY-NEMU Exposed PFFY-NRMU Concealed Floor-standing

CITY MULTI® CONTROLS NETWORK (CMCN)

The flexibility of CITY MULTI controls allows you to select the level of control and integration that fits the application's needs.

CENTRAL CONTROLLERS



AE-200A / AE-50A Touch Screen Centralized and Expansion Controllers (Browser Capable)



EW-50A Centralized and Expansion Controller (Browser Capable)



TC-24B
Touch Screen
Centralized Controller

ZONE CONTROLLERS



Zone Control iOS App



PAR-U01MEDU-J
SmartME
Remote Controller



PAR-FL32MA
Wireless MA
Wireless Remote Controller



PAR-31MAA Wired MA



PAC-YT53CRAU
Simple MA
Remote Controller



PZ-60DR Lossnay® Controller



PZ-43SMF Lossnay® Controller

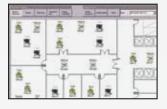
CUSTOM CONTROL SOLUTIONS



PAC-YG63MCA (AI) PAC-YG66DCA (DIDO) I/O Control Boards



DC-A2IO AdvancedHVAC I/O Controller



TG-2000™ Integrated System Software



LMAP04U LonWorks® Interface



BAC-HD150 **BACnet**[®] Interface



DC-600E **Diamond Controls**[™] **Building** Management System



PRODUCT ADVANTAGES



CITY MULTI® HIGH-PERFORMANCE, MODULAR VRF ZONING SYSTEMS

CITY MULTI outdoor units feature a lightweight modular design with a smaller footprint, lower sound level, easy piping, maintenance and much more.

1. INVERTER-DRIVEN COMPRESSOR TECHNOLOGY

The compressor varies its speed to match the indoor cooling or heating demand to consume only the energy that is required. No other compressor design can match the efficient performance.

2. EASY MAINTENANCE

In many cases, our systems allow an indoor unit to be serviced while other indoor units within the same piping system are still in operation. Indoor units only require periodic filter changes and cleaning. Protective coating comes standard on air-source outdoor units to lengthen coil life while additional Bermuda Special treatment, designated -BS within the model number, provides enhanced protection for the rest of the outdoor unit in seacoast environments.

3. LONGER LINE LENGTH

The R2- and Y-Series outdoor units allow for increased line lengths to the connected indoor units. Maximum total length of refrigerant piping is up to 2,624 feet for R2–Series and up to 3,280 feet for Y–Series.

4. ADJUSTABLE STATIC PRESSURE

R2-, Y- and H2i® R2- and Y-Series outdoor fan features adjustable static pressure up to 0.24" W.G., enabling the use of louvers or ductwork in its installation. The static pressure setting is adjustable by changing a dip switch. The default setting is 0" W.G., with options 0.12" and 0.24" W.G.

5. QUIET OPERATION

CITY MULTI air-source outdoor units operate at sound levels as low as 58 dB(A)—the level of a common office environment, restaurant conversation or background music. Water-source units operate as low as 47 dB(A). Contributing features include our INVERTER-driven compressor compartment sealed by insulation-lined metal panels, vibration-absorbing compressor mounts, INVERTER-driven fan and Low Noise operating mode.

LOW AMBIENT OPERATION

CITY MULTI systems provide 100% cooling capacity down to -10° F with the optional low ambient kit. Systems provide guaranteed heat down to -13° F (H2i® systems only). See page 29 (Low Ambient Cooling) for more information.

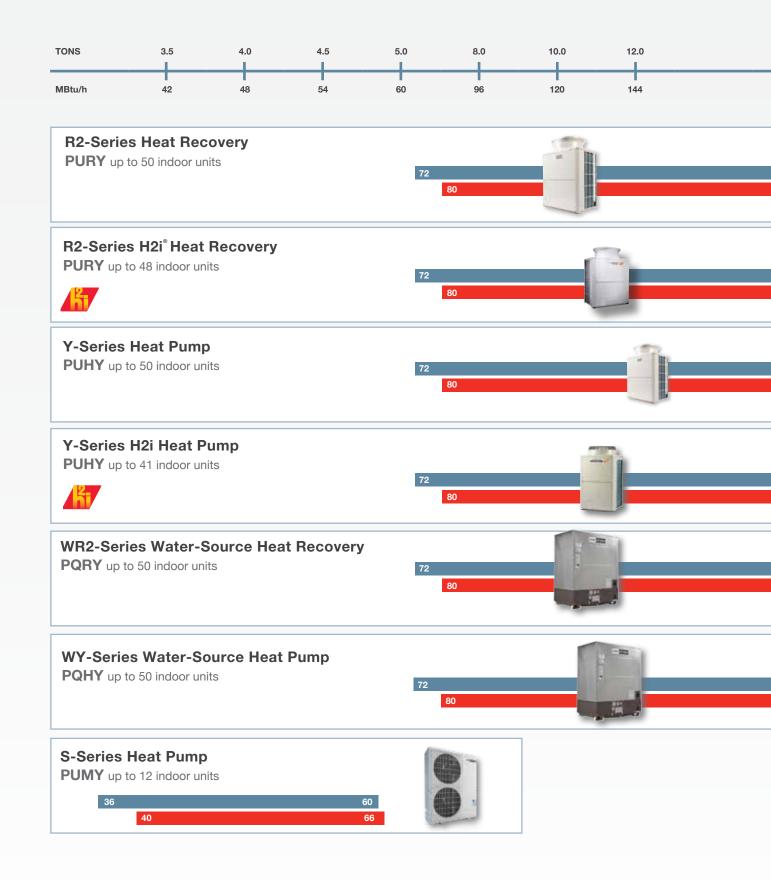






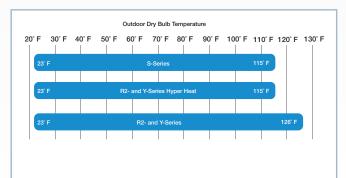


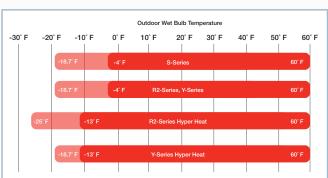
OUTDOOR UNITS SHOWCASE





CITY MULTI OUTDOOR UNIT OPERATING RANGES







R2-SERIES

The only two-pipe heat recovery system that simultaneously cools and heats.

The R2-Series simultaneously cools and heats different zones within a building to provide energy-saving heat-recovery operation through the use of the Branch Circuit (BC) Controller.



KEY FEATURES: L-GENERATION

- Up to 54% increase in efficiency ratings.
- Single modules up to 14 tons with the ability to combine modules for systems up to 28 tons
- HexiCoil™ aluminium flat tube heat exchanger technology, eliminating copper tubing from the coil.
- Up to 50% less refrigerant charge required than previous generations.
- Supports up to 50 indoor units per outdoor unit.
- Optimized refrigerant circuit and component design for improved flow distribution, allowing maximum energy transfer with minimal power input.
- Superior high-ambient cooling performance with guaranteed operation to 126°F.
- Extended 10-year parts and compressor warranty available.



HEXICOIL™ CONDENSER COIL TECHNOLOGY

- Turbulated tube walls and optimized cross section ensure maximum heat transfer.
- Zinc coated for long-term corrosion resistance.
- Unique fin shape and coating provide water shedding capability.
- Capillary tube system leading to even fluid distribution.

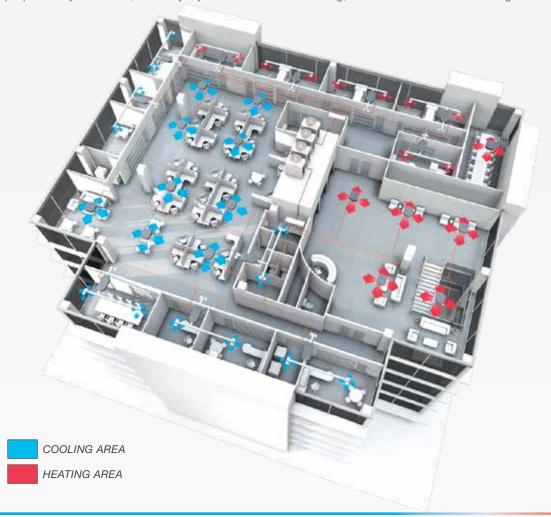
Refrigerant Piping Lengths (Maximum Feet)								
Total Length ¹	1,761-3,073							
Farthest Indoor from Outdoor	541 (623 equivalent)							
Maximum Length between Outdoor and Single/Main BC Controller	360							
Maximum Length between Single/Main BC Controller & Indoor	131-197							
Vertical Differentials Between Components (Maximum Feet)								
Indoor/Outdoor (Outdoor Higher) ³	164							
Indoor/Outdoor (Outdoor Lower) ⁴	131							
Indoor/BC Controller (Single/Main) ²	49							
Indoor/Indoor	98							
Main Controller/Sub BC Controller	49							

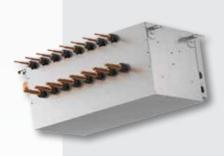
- 1. Maximum Total Length is dependent on the outdoor unit model and distance between BC Controller.
- 2. Maximum length between single/main BC Controller and indoor is dependent upon the vertical differential between the single/main BC Controller and the indoor unit.
- 3. 295' is available depending on model and installation conditions. For more detailed information, contact your local distributor.
- 4. 197' is available depending on model and installation conditions. For more detailed information, contact your local distributor.

Benefits

SIMULTANEOUS OPERATION

CITY MULTI® VRF systems provide simultaneous cooling and heating any time of year. This innovation optimizes repurposes rejected heat, normally rejected outside the building, to be used within the building.





Branch Circuit Controller

The BC Controller is the technological heart of the CITY MULTI R2–Series. It works in unison with the outdoor unit to provide simultaneous cooling and heating, something no other two–pipe system can do.

Single BC Controller:

For systems with up to 120,000 Btu/h nominal cooling capacity that require only one BC Controller.

Main BC Controller:

For larger systems that require the use of Sub BC Controllers.

Sub BC Controller:

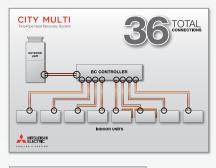
Used with a Main BC Controller to connect additional indoor units. A maximum of two Sub BC Controllers can be connected to one Main BC Controller per system.

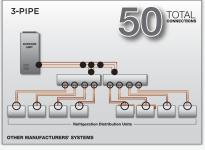


THE TWO-PIPE ADVANTAGE

Provides simultaneous cooling and heating with just two pipes, something no other VRF manufacturer can do. As the number of indoor units grow, so do the two-pipe installations savings, in terms of connections (refrigerant and electrical) as well as maintenance access.

FEWER CONNECTIONS REQUIRED FOR SIMULTANEOUS OPERATION







= 2 CONNECTIONS = 3 CONNECTIONS

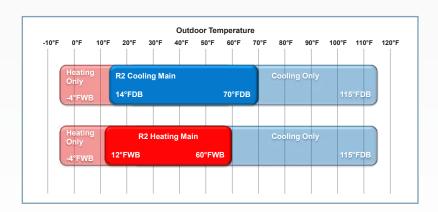
EFFECTIVE ENERGY USAGE

The total applied capacity of the R2-Series system's indoor units can be up to 150% of the capacity of the outdoor unit. This is made possible by taking advantage of load diversity and simultaneous cooling and heating operation. CITY MULTI VRF zoning systems can satisfy a significantly higher building load by efficiently distributing the capacity to the outdoor unit and indoor units while using much less energy. CITY MULTI systems, in combination with Mitsubishi Electric's TG-2000 integrated control system configured with optional Energy Allocation software, appropriately allocates the cooling and heating usage among the tenants. The allocation is based on each tenant's usage of comfort control based on the temperature setting on their system controller. Energy Allocation can control up to 2,000 indoor units from a single PC.

MODULAR SCALABILITY

With the Twinning Kit accessory, the modular units easily combine in the field to create a larger capacity system. Only two refrigerant pipes need to be twinned, saving time and materials. Oil and pressure equalization lines aren't needed when combining modules. This also helps to reduce installation cost.

SIMULTANEOUS OPERATING RANGE

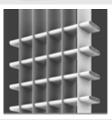


Y-SERIES

Two-pipe zoned system designed for heat pump operation

Y-Series outdoor units are flexible enough to cool or heat up to 50 individual zones, maximizing building design options. The modular unit design features a small footprint and low operating sound.





KEY FEATURES: L-GENERATION

- Up to 54% increase in efficiency ratings.
- Single modules up to 14 tons with the ability to combine modules for systems up to 30 tons.
- HexiCoil™ aluminium flat tube heat exchanger technology, eliminating copper tubing from the coil.
- Up to 50% less refrigerant charge required than previous generations.
- Supports up to 50 indoor units per outdoor unit.
- Optimized refrigerant circuit and component design for improved flow distribution, allowing maximum energy transfer with minimal power input.
- Superior high-ambient cooling performance with guaranteed operation to 126° F.
- Extended 10-year parts and compressor warranty available.

HEXICOIL™ CONDENSER COIL TECHNOLOGY

- Turbulated tube walls and optimized cross section ensure maximum heat transfer.
- Zinc coated for long-term corrosion resistance.
- Unique fin shape and coating provide water shedding capability.
- Capillary tube system leading to even fluid distribution.

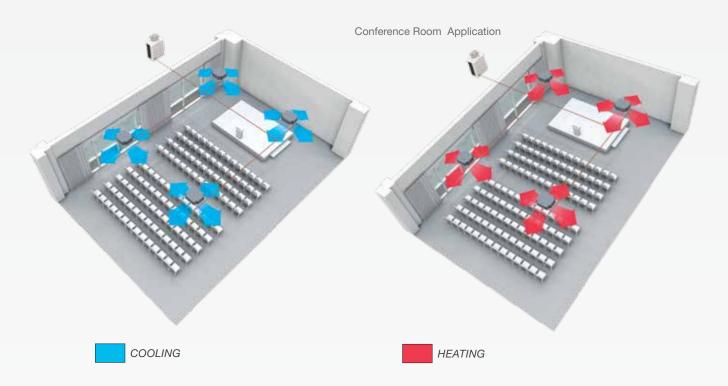
Maximum Refrigerant Piping Lengths (Feet)								
Total Length	3,280							
Indoor to Outdoor	541							
Indoor to First Branch	295							
Vertical Differentials Between Units (Maximum Feet)								
Indoor/Outdoor (Outdoor Higher) ¹	164							
Indoor/Outdoor (Outdoor Lower) ²	131							
Indoor/Indoor	98							

- 1. 295' is available depending on model and installation conditions. For more detailed information, contact your local distributor.
- 2. 197' is available depending on model and installation conditions. For more detailed information, contact your local distributor.

benefits

ULTIMATE IN ZONING

The CITY MULTI® Y-Series uses a two-pipe system with a wide variety of indoor units and individual zone controllers to provide the ultimate zoning system. Headers and T- branches simplify the piping design and provide design freedom for placement of both piping and indoor units. Individual zones are managed by remote controllers placed in each zone or by the centralized controller.



INTELLIGENT ENERGY USAGE

The highly responsive INVERTER technology and customized zone control of the CITY MULTI Y-Series provides year-round savings. In warm summer months, the Y-Series provides exceptional zoned cooling, and in cold winter months, the INVERTER-driven compressor provides outstanding heating performance. CITY MULTI systems, in combination with Mitsubishi Electric's TG-2000 integrated control system configured with optional Energy Allocation software, appropriately allocates the cooling and heating usage among the tenants. The allocation is based on each tenant's usage of comfort control based on the temperature setting on their system controller. Energy Allocation can control up to 2,000 indoor units from a single PC.

DESIGN FLEXIBILITY

Flexibility is the key with the CITY MULTI Y-Series. The Y-Series, just like the R2-Series, can condition up to 50 zones. By using T-branches and headers, the Y-Series provides the ultimate in piping design flexibility that is truly simple in application.

H2i® R2-SERIES

Bringing year-round comfort to extreme climates with energy recovery

The Hyper-Heating INVERTER (H2i®) R2-Series simultaneously cools and heats different zones within a building to provide energy saving heat recovery operation. Our 2-pipe H2i® R2-Series gives you the flexibility to fit the specific needs of any building and provides reliable cold-climate heating performance.



KEY FEATURES

- 2-pipe, simultaneous operation for up to 48 zones.
- Available sizes: 6, 8, 12, and 16 ton.
- 50%-150% connectable capacity.
- Extreme performance provides up to 100% heating output at 0° F and 83% heating capacity at -13° F.
- Simultaneous cooling and heating possible down to -5.8° F.
- Uses BC Controllers and headers to provide piping design flexibility and simultaneous operation.
- INVERTER-driven compressor for outstanding performance and optimized energy usage.
- Connects to CITY MULTI® indoor units; controlled via CITY MULTI Controls Network (CMCN).

Maximum Refrigerant Piping Lengths (Feet)	
Total Length (Maximum Total Length is dependent on the outdoor unit model and distance between BC Controller)	1,804-2,460
Farthest Indoor from Outdoor	541 (623 equivalent)
Maximum Length between Outdoor & Single/Main BC Controller	360
Maximum Length between Single/Main BC Controller and Indoor	131-197
Vertical Differentials Between Components (Maximum Feet)	
Indoor/Outdoor (Outdoor Higher)	164
Indoor/Outdoor (Outdoor Lower)	131
Indoor/BC Controller (Single/Main) (Maximum length between single/main BC Controller and indoor is dependent upon the vertical differential between the single/main BC Controller and the indoor unit)	49
Indoor/Indoor	49
Controller/Sub BC Controller	49

H2i° Y-SERIES

Bringing year-round comfort to extreme climates

Hyper-Heating INVERTER (H2i®) technology enhances the Y-Series by providing full heating capacity to -4° F outdoor ambient temperature. H2i® patent-pending technology is exclusively from Mitsubishi Electric and is available in select CITY MULTI® VRF models.



KEY FEATURES

- Heat pump that provides either all-cool or all-heat operation up to 41 zones.
- Available sizes: 6, 8, 12, and 16 ton.
- 50%-130% connectable capacity.
- Extreme performance provides up to 100% heating output at -4° F and 85% heating capacity at -13° F.
- Uses T-branches and headers to provide piping design flexibility.
- INVERTER-driven compressor for outstanding performance and optimized energy usage.
- Connects to CITY MULTI indoor units; controlled via CITY MULTI Controls Network (CMCN).

Maximum Refrigerant Piping Lengths (Feet)									
Total Length	984								
Indoor to Outdoor	492								
Indoor to First Branch	131								
Vertical Differentials Between Units (Maximum Feet)									
Indoor/Outdoor (Outdoor Higher)	164								
Indoor/Outdoor (Outdoor Lower)	131								
Indoor/Indoor	49								

Benefits

EXTREME HEATING PERFORMANCE

With its expanded heating capabilities, the CITY MULTI® H2i R2- and Y-Series provides year-round comfort, even in extreme climates.

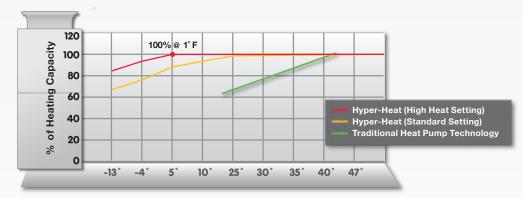
- At -13° F outdoor temperature, the H2i system can provide 100° F discharge air temperature from
- At 5° F outdoor temperature and above, the discharge temperature reaches an impressive 110° F.
- At start-up, a special circuit assures that normally dormant refrigerant quickly enters the conditioning cycle.
 This process rapidly increases the mass flow rate in the system, which quickly provides comfortable discharge temperatures from the indoor units.

UNEQUALED COMFORT

The patented flash injection process cools the compressor, allowing higher speeds at a lower outdoor temperature without overheating. This also allows the system to maintain indoor coil temperatures providing phenomenal heating performance at low temperatures. The Hyper–Heating INVERTER combines the ultimate in application flexibility and powerful conditioning capabilities to deliver personalized comfort control to multiple zones of a commercial or institutional building. The outdoor units deliver full-sized performance from a compact, space–saving design for ease of transportation and installation. The INVERTER-driven scroll compressor delivers the precise amount of comfort to the zones as required.

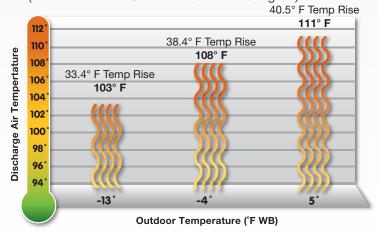
HYPER-HEATING INVERTER VS. OTHERS

(72,000 Btu/h, 70° F W.B. entering Indoor Unit)



INDOOR UNIT HEATING DISCHARGE TEMPERATURE

(PEFY-P24 NMAU-E with 70° F Entering Air)



S-SERIES (PUMY)

Solutions for light commercial and large residential applications

The CITY MULTI® S-Series is a single-phase heat pump system perfect for light commercial or large residential applications. It uses the CITY MULTI Controls Network (CMCN) to cool or heat up to 12 individual zones with a choice of indoor unit styles.



KEY FEATURES

- Single-phase 208/230V operation—allows use in residential and light commercial applications.
- Available in 36,000, 48,000 and 60,000 Btu/h.
- Connects up to 12 indoor units.
- 50%-130% connectable capacity.
- Utilizes single-phase power.
- Service accessible through both a front and side panel.
- Heat pump that provides either all-cool or all-heat operation.

Maximum Refrigerant Piping Lengths (Feet)							
Total Length	4921						
Indoor to Outdoor	262						
Indoor to First Branch	98						
Vertical Differentials Between Units (Maximum Feet)							
Indoor/Outdoor (Outdoor Higher)	164						
Indoor/Outdoor (Outdoor Lower)	131²						
Indoor/Indoor	49						

- 1. 393' on PUMY-NHMU models.
- 2. 65' on PUMY-NHMU models.

Benefits

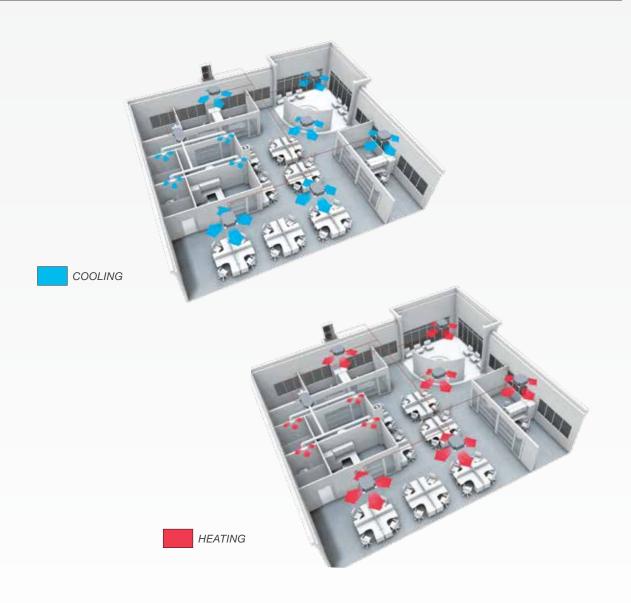
EASY INSTALLATION AND SERVICE

Single-phase 208/230V power provides easy installation in light commercial and residential applications. The unit's compact dimensions and easy accessibility allow multiple units to be stacked side-by-side in tight areas, saving valuable space and resources. The S-Series outdoor unit can be accessed for service through both a front and side panel.

FLEXIBLE APPLICATIONS

Connect up to 12 indoor units in various combinations using T-branches and headers with a total connected capacity of up to 130%.

S-SERIES TWO-PIPE COOLING OR HEATING SYSTEM



W-SERIES

Modular heat pump systems that combine the convenience of water source with VRF technology

W-Series units are easily installed indoors, which means that system performance efficiency is independent of outdoor ambient temperatures. W-Series includes WR2 models for simultaneous cooling and heating, and WY models for independent cooling and heating operation.



WY- and WR2-Series

KEY FEATURES: L-GENERATION

- Single modules up to 20 tons with the ability to combine single modules for systems up to 30 tons.
- 208/230V, 3-Phase, 60 Hz and 460V, 3-Phase, 60 Hz options.
- 0-10V output signal to modulate water flow for compliance with energy codes.
- Enhanced water-side heat exchanger design for improved efficiency and reduced risk of clogging.
- Designed for closed water loops.
- Connects to CITY MULTI indoor units and controlled via CITY MULTI Controls Network (CMCN).
- Stack multiple units on a field-supplied rack to take advantage of vertical space when available.
- Extended 10-year parts and compressor warranty available.

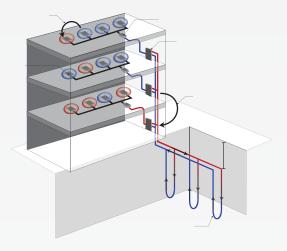
Renefits

CITY MULTI SYSTEMS AND GEOTHERMAL APPLICATIONS

CITY MULTI water cooled systems, used in geothermal applications, work by taking heat or rejecting heat from/ to the ground. Closed loop systems accomplish this by circulating water through a series of wells or loops that are installed in the ground, turning the ground into a large heat exchanger. Because the ground remains relatively unaffected by outdoor ambient temperatures, the loop runs at temperatures lower than ambient temperatures throughout the cooling season and higher than ambient temperatures throughout the heating season.

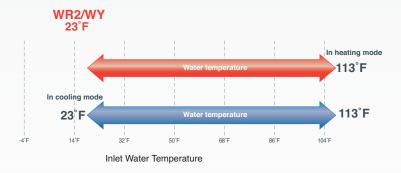
DOUBLE-HEAT RECOVERY

The double-heat recovery feature of the WR2-Series helps recover energy that would normally be rejected to the condensing water loop. First, within the system, energy is absorbed in units providing cooling. The energy is redirected by refrigerant to units that are in heating mode. Secondarily, energy can be recovered between systems through the water loop.



EXTENDED TEMPERATURE RANGE

WR2- and WY-Series CITY MULTI® water-source units can handle entering water temperatures down to 23° F (with the addition of glycol to the condenser water loop) in both heating and cooling mode allowing more possibilities for geothermal applications. Coupling the water-source units with a geothermal loop will not only provide the benefit of higher efficiencies by using a lower entering water temperature but will also provide all the benefit of an INVERTERdriven CITY MULTI system.



LOW AMBIENT COOLING KIT

Full cooling performance at extreme conditions

The specially designed wind deflectors will block unwanted wind that could impede operation and will allow full airflow when required at higher ambient temperatures or in heating mode. The assembly also provides a more efficient defrost cycle when the unit is operating in heating mode. Complete Low Ambient Kit requires hood with control damper assembly and wind deflectors.



PATENTED TECHNOLOGY

Low ambient hood (LAHK1 or LWHK2) and side deflector (SWDK1).

KEY FEATURES

Allows system to operate at 100% cooling capacity at reduced outdoor temperatures:

- Y-Series Outdoor Units (down to -10° FDB Outdoor Temp.)
- R2-Series (includes H2i[®] R2-Series) Outdoor Units (down to -10° FDB Outdoor Temp.)

ADDITIONAL FEATURES

- Hood and wind deflectors constructed of 20 gauge hot-dipped galvanized G-90 steel.
- Heavy-duty polyester-based powder paint finish.
- Designed to work with both 208/230 and 460V 3-phase units.
- NEMA 4X control box protects electrical components from the elements.
- Kit easily connects to outdoor unit with plug-in electrical connections.
- Wind deflectors easily install in place of existing wire guard.

APPLYING TO MULTIPLE OUTDOOR UNITS

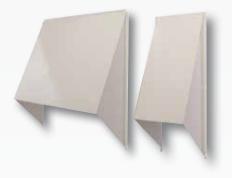
For outdoor units with multiple modules, a minimum 1-3/16" separation between the modules is recommended. If modules are placed more than 15" apart, more than one set of side wind deflectors may be needed. For multiple units or module sets placed in a row, only one side wind deflector is needed for each of the outside module coil surfaces.

COLD WEATHER SOLUTIONS GUIDE



Low Ambient Cooling (LHKA Series)

The specially designed wind deflectors block unwanted wind that could impede operation and allow full airflow when required at higher ambient temperatures or in heating mode. The wind deflectors also provide a more efficient defrost cycle when the unit is operating in heating mode. The complete Low Ambient Kit requires a hood with a control damper assembly and wind deflectors. With the addition of wind deflectors, CITY MULTI® Y-Series and R2-Series outdoor units feature 100% cooling capacity at outdoor temperatures down to -10° F. The wind deflector kit easily installs in the place of the existing wire guard, and connects to the outdoor unit with plug-in electrical connections.



Hail/Snow Guards (SGK Series)

Mitsubishi Electric hail/snow guards are designed to protect the outdoor unit coil surfaces from hail damage or snow build-up in severe climates. Made of 20-guage, hot-dipped galvanized G-90 steel, the hail/snow guards feature a heavy-duty polyester-based powder paint finish to match the outdoor units. Using existing wire guard fasteners, the hail/snow guards are easily installed to the sides and rear of the unit in just minutes.



Hail/Snow Hoods (SHK1)

Mitsubishi Electric hail/snow hoods are made to the same specifications as the hail/snow guards, and protect the outdoor unit fan guard from hail damage and snow build-up in severe climates. Using existing wire guard fasteners, the hail/snow hoods are easily installed to the sides and rear of the unit in just minutes. Hail/snow hoods are sold separately, or can be order in a combination kit with hail/snow guards.

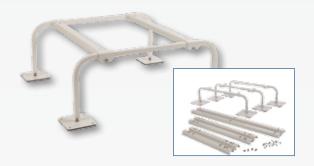
Base Pan Heaters

Mitsubishi Electric base pan heaters feature a heating coil controlled by the CITY MULTI outdoor unit which prevents ice buildup. The base pan heater is ideal for low temperature, high humidity environments where the outdoor unit will be operating in heating mode for an extended period of time. A complete base pan heater kit order includes a relay box, the heating element(s), required mounting brackets, and all other associated items required for installation. Note: Snow hoods and side/rear snow guards are also recommended for installations with base pan heaters.



Cold weather stands and supports

Mitsubishi Electric features multiple configurations of stands and supports for M-Series, P-Series, and CITY MULTI outdoor units. The sturdy stands and supports are designed to keep the outdoor unit above or off the ground and away from snow drifts in cold weather climates



Also Available

CITY MULTI Outdoor Units: U-Bar with Feet

- Rubber roof friendly.
- Adjustable height in 1/4" and 1/2" increments.
- U-Bars made from 11 gauge steel square tubing.
- Available leg heights: 12", 18", and 24".

M-Series and P-Series: Adjustable Stands

- Four points of anti-vibration isolation washers.
- Adjustable footprint from 34" to 40" in 1" increments.
- Single and two-fan models are available in 12" and 18" heights.
- Maximum capacity of 400 pounds.

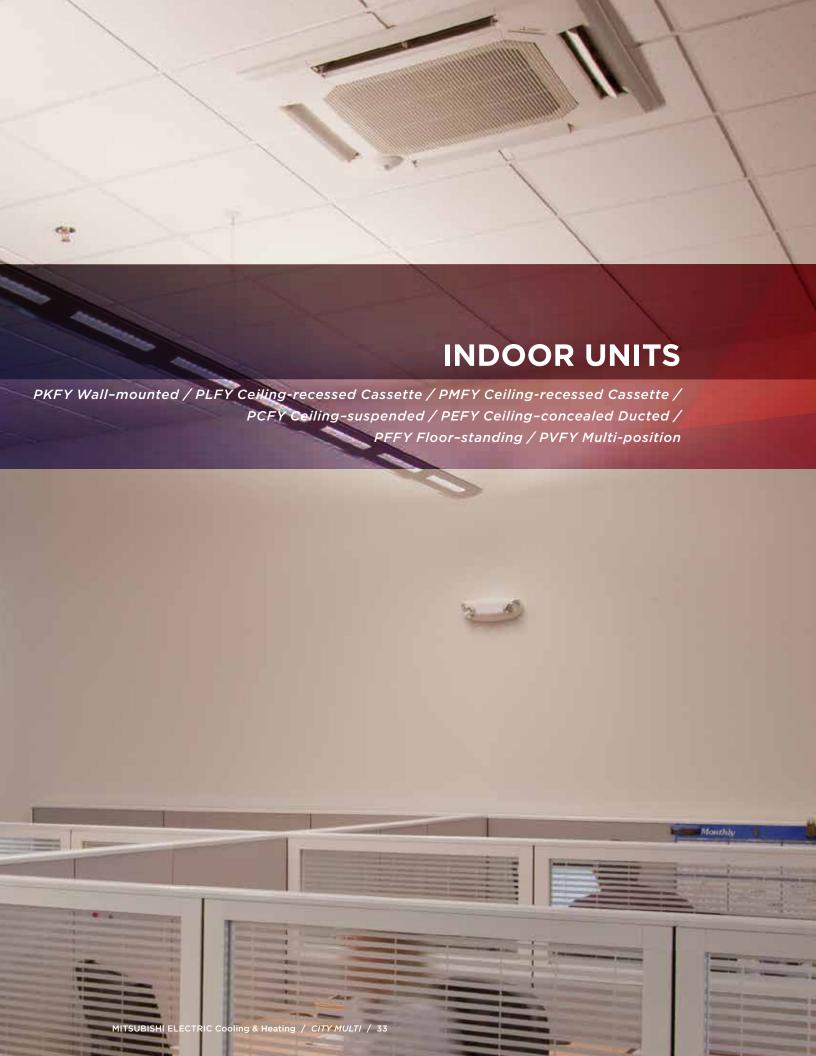
M-Series and P-Series Outdoor Units: Wall-mount Supports

- 25" mounting rails.
- Nine points of anti-vibration isolation.
- Available in painted steel (QSWB2000M-1) and 316 stainless steel (QSWB2000SS).
- Maximum capacity of 500 pounds.



Outdoor unit must be mounted at least 12" off the ground of 12" above the highest average snow depth, whichever is greater. The outdoor unit may require additional mounting restraints depending on the mounting location.





INDOOR UNITS

Complete Building Comfort Solutions

All models feature quiet operation, easy maintenance, and the ultimate in personalized comfort control. The chart below gives the capacity size for each model.

apacity Code	Nominal Btu/h												
	6,000	8,000	12,000	15,000	18,000	24,000	27,000	30,000	36,000	48,000	54,000	72,000	96,000
Wall-mounted PKFY-P-N*MU-E	•	•	•	•	•	•		•					
Ceiling-recessed Cassette (4-way) PLFY-P-NBMU		•	•	•	•	•		•	•				
Ceiling-recessed Cassette (4-way) PLFY-P-NCMU		•	•	•									
Ceiling-recessed Cassette (1-way) PMFY-P-NBMU	•	•	•	•									
Ceiling-suspended PCFY-P-NKMU				•		•		•	•				
Ceiling-concealed (Ducted Low-Profile) PEFY-P-NMSU	•	•	•	•	•	•							
Ceiling-concealed (Ducted) PEFY-P-NMAU	•	•	•	•	•	•	•	•	•	•	•		
Ceiling-concealed (Ducted High-Static Option) PEFY-P-NMHU / NMHSU				•	•	•	•	•	•	•	•	•	•
Floor-standing (Exposed/ Concealed) PFFY-P-NEMU / NRMU	•	•	•	•	•	•							
Multi-position PVFY-P-NAMU			•		•	•		•	•	•	•		
PWFY-P-NMU-E-AU PWFY-P-NMU-E-BU									•			-AU only	

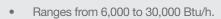


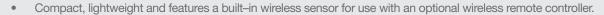
PKFY (Wall-mounted)

Elegant design and compact dimensions

Whatever the size or shape of your room, there's a Mitsubishi Electric PKFY wall-mounted unit that is just right for you. PKFY units mount high on the wall and blend beautifully into any space. Perfect for hotels, assisted living facilities, offices, residences and other applications where wall space is available.

KEY FEATURES





- Extremely quiet: as low as 32 dB(A).
- Multiple fan speed settings.
- Multiple vane settings and swing setting adjust airflow in vertical directions.
- Front panel opens easily—no tools are needed to gain access to the filter.
- Refrigerant and drain piping can be connected from the rear, right, base, or left of the unit.

benefits

EASY FILTER CLEANING

The front grille hinges open easily—no tools are needed to gain quick access to the filter. The filter can be removed and cleaned as needed.

QUIET OPERATION

The unit incorporates a random–pitch fan to assure quiet operation. The optimal design of the airflow passage features a small fan diameter to allow for a compact installation. Thanks to practical casing configuration, airflow generated by the fan is uniformly distributed.

SUPERIOR AIR DISTRIBUTION

A user–selectable vane swing setting with the SmartME and SimpleMA remote controllers enhances air distribution in the conditioned space.

FLEXIBLE INSTALLATION

Refrigerant and drain piping can be connected from the rear, right, base, or left of the unit, providing much greater flexibility for piping and selecting an installation site.

PLFY (Four-way Ceiling-recessed Cassette)

Adjustable airflow to meet your every need

The PLFY-Series four-way ceiling-recessed cassette provides exceptional performance and air coverage. Two styles are available: the PLFY-P-NBMU and the PLFY-P-NCMU. Both models can be accessorized with installation trim panels to ensure a seamless integration into any ceiling.



PLFY-NBMU

KEY FEATURES

- 33" x 33" cabinet size.
- Capacity range of 8,000 to 36,000 Btu/h.
- Sound levels as low as 27 dB(A).
- Ventilation air connection (Second connection found in Multi-function Casement).
- High-efficiency filter option (MERV-10 requires Multi-function Casement).
- Branch ducting capability.
- Four-speed fan settings.
- Integrated condensate lift mechanism to provide up to 33-1/2" of lift.







PLFY-NCMU

KEY FEATURES

- 22" x 22" cabinet size to fit in standard T-grid ceiling.
- Capacity range of 8,000 to 15,000 Btu/h.
- Sound levels as low as 29 dB(A).
- Ventilation air connection.
- Four-speed fan settings.
- Integrated condensate lift mechanism to provide up to 19-11/16" of lift.

HIGH PERFORMANCE AND VERSATILITY

The four–way cassette unit is compact and recesses easily into a ceiling space, so all you see is an attractive flush-mounted grille. The PLFY–NBMU has a unit height of only 10-1/4" or 11-3/4", depending on the model. At 8-3/16" in height and 22-7/16" x 22-7/16" width, the PLFY–NCMU makes satisfying even the tightest of ceiling installations a possibility.

QUIET OPERATION

This powerful indoor unit is whisper–quiet, down to 27 dB(A) for the PLFY–NBMU and 29 dB(A) for the PLFY–NCMU.

CUSTOMIZE THE AIRFLOW PATTERN TO MEET YOUR NEEDS

The different airflow options provide the best solution for a variety of room layouts and air–conditioning requirements. For extra versatility, you can select up to 72 airflow patterns with two–, three–, or four–way airflow.

BUILT-IN CONDENSATE LIFT MECHANISM

The drain piping of the PLFY–NBMU can be positioned anywhere up to 33-1/2" from the ceiling's surface, allowing for long piping and versatility. The PLFY–NCMU model has a built–in pump that lifts condensation 20" from the ceiling's surface. The unit recognizes if there is a pump failure and safeguards against leaks.

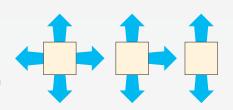
CORNER-POCKET DESIGN SIMPLIFIES MAINTENANCE AND INSTALLATION

PLFY-NBMU allows access through the pockets equipped on each of four corners of the grille to complete installation, maintenance work, and height adjustment.

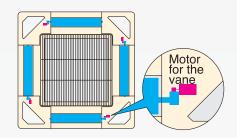
EASY MAINTENANCE, LONG-LIFE FILTER

The washable filter provides about 2,500 hours of use in a normal office environment before cleaning is needed.

4, 3, OR 2 WAY AIRFLOW



FIXED AIRFLOW DIRECTION PER VANE



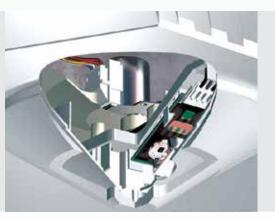
INDEPENDENT VANE MOTOR CONTROL





This amazing technology constantly monitors and adjusts temperatures for maximum comfort and efficiency.

- Measures infrared rays generated from surrounding walls and surface angles.
- Rotates 90 degrees slowly in five second intervals.
- Efficiently adjusts temperatures to ideal comfort levels for occupants.



PMFY (One-way Ceiling-recessed Cassette)

Compact and lightweight, perfect for office spaces with windows

The PMFY model is a ductless, one-way, ceiling-recessed cassette that moves air in one direction, and has the capability of introducing ventilation air.



KEY FEATURES

- The PMFY is available in 6,000, 8,000, 12,000 and 15,000 Btu/h.
- Standardized cabinet size for all models: 31-31/32".
- Airflow control technology operates as low as 27 dB(A) for industry-leading quiet performance.
- Integrated condensate lift mechanism to provide up to 23-5/8" of lift.
- Full unit access through front cover panel.

Renefits

QUIET OPERATION

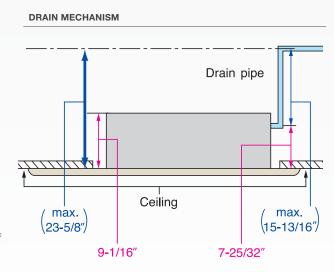
Specialized airflow control technology operates as low as 27 dB(A) for industry-leading sound performance.

BUILT-IN CONDENSATE LIFT MECHANISM

The drain pipe can be extended anywhere up to 23-5/8" above the ceiling's surface.

EASY INSTALLATION AND MAINTENANCE

PMFY body size has been standardized for all models at 31-31/32" for easier installation. With a height of only 9-1/16", the profile is one of the smallest of all CITY MULTI ceiling models. Unit weight is only 31 pounds for the main unit and seven pounds for the panel, making this unit one of the lightest available.





PCFY (Ceiling-suspended)

Compact design ideal for classrooms, restaurants and stores

The PCFY model features powerful air throw to cover entire spaces quietly and efficiently.



Capacity Range: 15.000–36.000 Btu/h

KEY FEATURES

- Available in 15,000, 24,000, 30,000 and 36,000 Btu/h capacities.
- Auto-vane and wide-range outlet provides uniformly distributed conditioned air to all corners of the room.
- Four-speed fan settings.
- Accessory filters are available to increase filtration effectiveness.
- Optional pump kit is available for condensate removal.

Renefits

POWERFUL PERFORMANCE

The easy-to-install, ceiling-suspended unit delivers enough cold or hot air to make any space more comfortable. Manually adjusted, over-sized swing louvers direct the airflow left or right, covering the entire space quietly and efficiently.

THE i-SEE SENSOR™ ACCESSORY

This amazing technology constantly monitors and adjusts temperatures for maximum comfort and efficiency.

- Measures infrared rays generated from surrounding walls and surface angles.
- Rotates 90 degrees in five second intervals.
- Efficiently adjusts temperatures to ideal comfort levels for occupants.

QUIET, EFFICIENT AIRFLOW

Appropriate airflow can be selected to enhance space conditioning efficiency and comfort while operating at a low sound level. PCFY's auto-vane and wide-range outlet swings the conditioned air and distributes it uniformly to all corners of the room.

EASY INSTALL

The PCFY's direct suspension allows installation on most ceiling surfaces quickly and securely using only suspension bolts and the durable attachment fixture. An optional pump kit is available to dispose of condensate.

PEFY (Ceiling-concealed Ducted)

Flexible design allows elegant interior layout

The PEFY models are high-performance, ceiling-concealed, ducted indoor units. An excellent choice for office buildings, schools, hotels, assisted-living facilities and other applications where ceiling space is available.

KEY FEATURES

- External static pressure settings are adjustable to meet varying application conditions.
- Choice of fan speed settings.
- Side access to control panel.
- Integrated condensate lift mechanism (low- and mid-static).



LOW PROFILE (NMSU)

- Extremely quiet, with sound ratings as low as 26 dB(A).
- Capacities range from 6,000 to 24,000 Btu/h.
- Integrated condensate lift mechanism to provide up to 21-11/16" of lift.



MEDIUM STATIC (NMAU)

- Provides up to 0.60" external static pressure.
- Extremely quiet, with sound ratings as low as 26 dB(A).
- Capacities range from 6,000 to 54,000 Btu/h.
- Integrated condensate lift mechanism to provide up to 27-9/16" of lift.



HIGH STATIC (NMHU-E2/NMHSU)

- Provides up to 1.00" external static pressure.
- Extremely quiet, with sound ratings as low as 36 dB(A).
- Capacities range from 15,000 to 96,000 Btu/h.
- Integrated condensate lift mechanism to provide up to 27-9/16" of lift.

CHOICE OF EXTERNAL STATIC PRESSURE

Additional external static pressure capacity provides flexibility for duct extension, branching, and air outlet configuration. The factory setting can be field-adjusted to match the installed ductwork for PEFY indoor units. The PEFY indoor unit is available in a low–profile option with up to 0.20" W.G. and a high–static option for up to 1.00" W.G.

QUIET OPERATION

The specially designed centrifugal fan provides exceptionally quiet operation, even at high operating speeds.

OPERATING SOUND RANGE

	PEFY-P-NMAU-E	P06	P08	P12	P15	P18	P24	P27	P30	P36	P48	P54
Sound Level dB(A)	Fan Speed and Low-High	26	-29	28	-34	28-35	29-36	30-	-38	32-41	35-44	36-45
	PEFY-P-NMSU-E	P06	P08	P12	P15	P18	P24					
Sound Level dB(A)	Fan Speed and Low-High	22-28	23-30	23-35	28-33	30-37	30-40					
	PEFY-P-NMHU-E	P15	P18	P24	P27	P30	P36	P48	P54	P72	P96	
Sound Level dB(A)	Fan Speed and Low-High	34	-39	36-41	35-41	38-43		38-44		36-43	39-46	

BUILT-IN CONDENSATE LIFT MECHANISM

The drain piping can be positioned anywhere up to 21-11/16" for NMSU or 27-9/16" for NMAU and NMHU-E2 from the ceiling's surface, allowing for long piping and versatility. A built–in switch halts operation if an error with the pump occurs, ensuring that no water leaks occur.

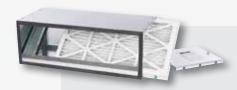
COMPACT OPTIONS (PEFY-P-NMSU)

The PEFY-P-NMSU-E model is very compact, with a height of 7-7/8". Standard features include brazed refrigerant connections, rear air return, and auto fan mode. The unit operates as low as 22 dB(A), and the control panel is located on the opposite side from other ducted models. This unit is an ideal choice for guest rooms in hotels, dormitories, assisted living centers or any application with tight vertical clearances and minimal duct work.

FB (M,L,H) FILTER BOXES

Designed for CITY MULTI® Ceiling-concealed Ducted Indoor Units

Low-Profile FBL1 boxes include 1" thick pleated MERV 8 filter(s). **Medium-Static FBM2** boxes include 2" thick pleated MERV 13 filter(s). **High-Static FBH4** boxes include 4" thick pleated MERV 13 filter(s).



KEY FEATURES

- Rated Class 2 under UL Standard 900.
- Cabinet is constructed of non-insulated 20 gauge G-60 galvanized steel.
- Foam gasket provides air-tight connection to indoor unit and access door.
- Return connection in rear easily field converted to bottom.

Part Number	Used on CITY MULTI Models	Filters Included	Net Weight (lbs.)
FBL1-1	PEFY-P06, P08, P12-NMSU-E	(1) – 13" x 25" x 1"	12
FBL1-2	PEFY-P15, P18-NMSU-E	(1) – 12" × 20" × 1" (1) – 12" × 14" × 1"	15
FBL1-3	PEFY-P24-NMSU-E	(3) – 12" x 20" x 1"	18

Part Number	Used on CITY MULTI Models	Filters Included	Net Weight (lbs.)
FBM2-1	PEFY-P06, P08, P12-NMAU-E	(1) – 14" x 25" x 2"	20
FBM2-2	PEFY-P15, P18-NMAU-E	(1) – 14" x 20" x 2" (1) – 14" x 14" x 2"	26
FBM2-3	PEFY-P24, P27, P30-NMAU-E	(2) – 14" x 20" x 2"	32
FBM2-4	PEFY-P36, P48-NMAU-E	(2) - 14" x 20" x 2" (1) - 14" x 14" x 2"	41
FBM2-5	PEFY-P54-NMAU-E	(3) – 14" x 20" x 2"	46

Part Number	Used on CITY MULTI Models	Filters Included	Net Weight (lbs.)
FBH2-1	PEFY-P15, P18, P24-NMHU-E2	(1) - 20" x 24" x 2"	14
FBH2-2	PEFY-P27, P30-NMHU-E2	(1) - 20" x 16" x 2", (1) - 20" x 20" x 2"	24
FBH2-3	PEFY-P36, P48 P54-NMHU-E2	(2) - 20" x 20" x 2"	27
FBH4-4	PEFY-P72, P96-NMHSU-E	(2) - 24" x 24" x 4"	40

PFFY (Floor-standing)

Effectively use perimeter areas for space conditioning

PFFY floor-standing models are available as exposed or concealed indoor units. At less than nine inches deep, these units are easy to install in peripheral spaces, yet offer highly efficient air-conditioning performance. Their low operating sound and compact size make them ideal for hotel rooms, schools and office buildings.



KEY FEATURES

- PFFY-NRMU—designed for applications requiring a built-in, concealed, floor-standing unit.
- PFFY-NEMU—exposed-type model, perfect for most applications and requires no finish work.
- Available in 6,000, 8,000, 12,000, 15,000, 18,000 and 24,000 Btu/h.
- Two-speed fan settings.
- The PFFY-P-NRMU-E unit can be field converted from top discharge to front discharge.

Benefits

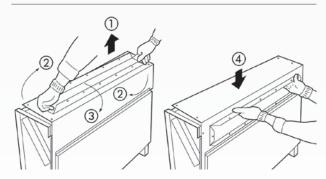
OPTIONAL MOUNTING FOR REMOTE CONTROLLER

PFFY units can house a remote controller in the top corner (under a cover panel). The remote controller can be mounted on the wall or in the PFFY unit.

INSTALLATION FLEXIBILITY

The PFFY-P-NRMU-E unit can be field converted from top discharge to front discharge to increase installation flexibility.

INSTALLATION FLEXIBILITY





PVFY (Multi-position Air Handler)

Ideal for closet, attic, or equipment room installations

PVFY multi-position air handlers can be connected to a system with other CITY MULTI® indoor units for complete system design flexibility. The multi-position design is suitable for any application, requiring no additional kits even for down-flow configuration, making it ideal for installation in a closet, attic, or an equipment room.

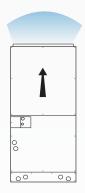


Capacity Range: 12,000-54,000 Btu/h

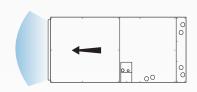
KEY FEATURES

- Selectable external static pressure up to 0.80.
- Reusable standard-size 1" filter.
- Side return available (P12-P24 only).
- Unique cabinet insulation design allows for no thermal penetration into the coil section.
- Cabinet can be fully disassembled to install in extra-tight spaces.
- Heavy gauge, high-gloss powder coat finish steel cabinets with 1" fiberglass-free foam insulation (R-4.2 insulation value).
- Accessories available for various custom applications, including two-stage auxiliary heat, fan speed indication, humidifier control, and more.
- Cabinet sections are embossed with fan, coil, and other components for easy identification and maintenance.

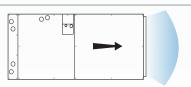
VERTICAL AIRFLOW



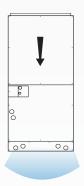
HORIZONTAL LEFT AIRFLOW



HORIZONTAL RIGHT AIRFLOW



DOWN FLOW



PWFY (Hydronic Heat Exchanger)

Heat and cool water, quickly and efficiently

The PWFY Hydronic Heat Exchanger is available in two configurations, the HEX (-AU) and the Booster (-BU). Each provides unique solutions to incorporate into an existing VRF system for an efficient means to heat and cool water. The PWFY is a closed-circuit water heater that works with the Y-Series or R2-Series outdoor units. They are not suitable for direct potable water flow.



Available Sizes: 36,000 and 72,000 Btu/h

PWFY-P36/72NMU-E-AU

KEY FEATURES

- Heats water to 113° F.
- Hydronic heat exchanger transfers energy from refrigerant to water.
- Can be used to recover waste heat from cooling operation to water when combined with any R2-Series, resulting in large energy savings.
- Cools water to 41° F to be used for cooling outside air, cooling pool water, misting stations, process cooling and more.
- Applications include radiant heating, snow melting, reheating air, pre-heating hot water and more.



Available Sizes: 36,000 Btu/h

PWFY-P36NMU-E-BU

KEY FEATURES

- Heats water to 160° F.
- Hydronic heat exchanger transfers energy from refrigerant to water.
- Compatible with R2-Series only.
- Can be used to recover waste heat from cooling operation to water, resulting in large energy savings.
- Includes R134A compressor circuit for boosting water temperature.
- Applications include radiant heating, hot water preheating, snow melting, reheating air, warming pools, and more.





PREMISYS® DEDICATED OUTDOOR AIR SYSTEM



The PremiSys series of rooftop ventilation products is a premier solution for conditioning outdoor air for commercial buildings. Designed to handle 100% outdoor air with optional energy recovery, PremiSys products offer premium features ideal for handling ventilation air in variable refrigerant flow (VRF) applications.

The PremiSys models MP and MPE (with energy recovery), are pre-engineered to provide semi-custom flexibility while maintaining the quality, consistency, and value of a standardized product.

Unit Size	Nominal Tonnage (tons)	Height (H)	Width (W)	Length (L)	Intake (A)	Condensing Section (B)	Nominal Weight (lbs)	Outdoor Intake	Supply Discharge	Exhaust Discharge
MP-1	5 - 15	58	81	117	22	30	2500	End	End Bottom or Side	N/A
MP-2	10 - 25	70	100	130	22	36	3600			
MP-3	15 - 30	82	100	143	27	32	4500			
MPE-1	5 - 15	58	81	169	22	30	3600	End		
MPE-2	10 - 25	70	100	184	22	36	4900		Bottom or Side	Side
MPE-3	15 - 30	82	100	205	27	32	6200		2.00	

PREMISYS® FUSION



The PremiSys series of rooftop ventilation products is a premier solution for conditioning outdoor air for commercial buildings. Designed to handle 100% outdoor air with energy recovery models, PremiSys products offer premium features ideal for handling ventilation air in VRF applications.

The PremiSys Fusion is the latest addition to the family of dedicated outdoor air systems. The MP-1 and MP-2 (split system with energy recovery) models are pre-engineered to provide semi-custom flexibility while maintaining the quality, consistency, and value of a standardized product. Take advantage of the split-system design to further enhance the flexibility of applying Mitsubishi Electric products to any building.

Unit Size	Nominal Tonnage (tons)	Height	Width	Length	Intake	Nominal Weight (lbs)	Outdoor Intake	Supply Discharge	Exhaust Discharge
MPF-1	5 - 12	58	53	148	22	2200	End	Bottom or	Cido
MPF-2	10 - 20	71	64	163	22	2800	⊏⊓a	Side	Side

LOSSNAY ENERGY RECOVERY VENTILATORS (ERVs)

Outdoor air solutions for improved indoor environmental quality





KEY FEATURES

- Lossnay core.
- Over 50% enthalpy exchange efficiency.
- Four fan speeds on 300, 470, 600 models: extra low, low, high, extra high.
- M-NET connectivity for use with CITY MULTI® central controllers and BMS interfaces.
- Sound pressure level: maximum sound level 42.5 dB(A).
- Three ventilation modes: Auto, Bypass, Heat Recovery.

INTERLOCK

Networking systems with Mitsubishi Electric air conditioners has never been easier. The M-NET adapter comes standard, and there is no need to purchase additional parts. Systems can be assembled simply and logically, reducing construction times and keeping initial costs low.

SYSTEM COMPATIBILITY

The LGH-F-RX5-E series is fully compatible with our controls network, further increasing the scope of total system management.

MULTI-FUNCTION LCD REMOTE CONTROLLER

The compact and attractive remote controller with a liquid crystal display is designed for easy visibility.

- ON/OFF, Run mode, and Ventilation mode.
- Filter Maintenance Display.
- Controls up to 16 Lossnay units in a single group.
- Night Purge.
- Timer Operations.

BYPASS VENTILATION STANDARD

Lossnay models offer three ventilation modes:

- Energy Recovery—Heat Exchange.
- Bypass-No Exchange.
- Automatic Heat Exchange/Bypass.

With conventional ERVs, bypass ventilation was impossible without attaching additional dampers and adapters. With the LGH-F-RX5-E series, however, this mode is available without the use of other parts. An automatic mode allows the system to select recovery or bypass as required. Mode selection is easy when interlocked with M-NET systems using the PZ-60DR remote controller, which is sold separately.







PZ-60DR

DEDICATED OUTDOOR AIR SYSTEM (DOAS)

Provides pre-conditioned outdoor air

The award-winning PEFY-AF Dedicated Outside Air System comes in two configurations, the CFM and the CFMR. Both configurations offer high capacity coils that will condition incoming air, making it suitable for distribution to down-stream fan coil units.

KEY FEATURES

- Single-speed 1200 CFM fan.
- Multiple external static pressure set points.
- Large DX coil with high latent capacity.
- Entering air temperature and humidity sensors factory installed.
- Thin 18-9/16" high cabinet installs in small areas.
- Drain lift mechanism up to 21-11/16" included as standard.
- 50° F to 70° F saturated air available in cooling mode (CFM/PUHY-P120).
- Reheat capabilities using recovered energy from cooling through the branch controller (CFMR/PURY-P120).
- 50° F to 60° F saturated air available leaving cooling coil (CFMR/PURY-P120).
- 63° F to 83° F leaving air temperature available leaving reheat coil (CFMR/PURY-P120).





CONTROLS AND SOFTWARE TOOLS



CONTROLS NETWORK

Our CITY MULTI[®] Controls Network (CMCN) makes it easy to manage your building.

The CMCN manages up to 2,000 indoor units from a single networked PC. The CMCN puts individual, personalized comfort in the hands of the tenants and the building manager.



benefits

FLEXIBLE DESIGN FOR CUSTOMIZED, INDIVIDUAL ZONE CONTROL

Building owners and engineers can select from a wide variety of remote controllers and timers to satisfy the exact level of tenant control on a zone—by—zone basis, while providing the ultimate in personal comfort control. The versatility of the CMCN customizes each building's controls network to address the specific design and tenant requirements, while providing unparalleled occupant comfort.

OPTIONAL EASY-TO-USE CONTROL VIA PC WEB BROWSER

From a web-browser on a PC, the building manager can now monitor, operate and schedule the HVAC system through the central controller. Plus, the building manager can enable tenants to control their own individual zones via a personal web browser on their networked PC.

EASY INSTALLATION

The CMCN uses simple, non-polar, two-wire control connections. All components are daisy-chained and added onto the M-NET communication bus. It all adds up to less labor and materials with quicker installation.

SINGLE-SOURCE CONTROL FOR UP TO 2,000 INDOOR UNITS

From a single networked PC configured with our TG–2000 software, you can control up to 2,000 units. This software, in conjunction with central controllers, empowers the building manager to control the HVAC system for multiple buildings in a business park, educational campus or retirement facility.

ENERGY ALLOCATION

The TG-2000 software configured with the energy allocation option and interconnected with RS-485 watt-hour meter(s) can calculate the HVAC energy consumption relative to each indoor unit on a per-tenant basis and generate a CITY MULTI energy allocation per tenant. The Energy Allocation feature is also available through the AE-200A/AE-50A centralized controller.

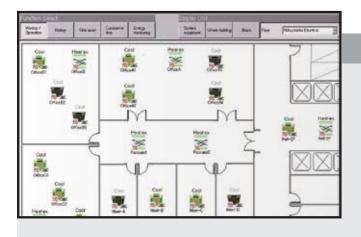
SYSTEM INTEGRATION

Not only can our CMCN act as a stand-alone building management system, it can also integrate with existing systems via LonWorks®, BACnet® or Modbus® interfaces.



TG-2000™ INTEGRATED SYSTEM SOFTWARE

The TG-2000 integrated system software enables the user to control multiple AE-200A/AE-50A/ EW-50A controllers and provide enhanced functions from a single, dedicated networked PC configured with the TG-2000 software and AE-200A/AE-50A /EW-50A software licenses. The TG-2000 configured PC is capable of controlling up to 2,000 indoor units with the AE-200A/AE-50A / EW-50A Centralized Controllers.



ENERGY ALLOCATION

KEY FEATURES

- Appropriately allocates heating and cooling usage based on the temperature setting on their system controller.
- Great for condos and multiple tenant spaces.
- Requires software license.

OPERATION SCREEN:





SCHEDULING:



SOFTWARE OPTIONS FOR CENTRAL CONTROLLERS

The centralized controllers support operations that supersede control of the remote controllers and include system configuration, daily/weekly scheduling, operation, and malfunction monitoring. Centralized controllers are equipped with an RJ-45 Ethernet port to support interconnection with a networked PC via a closed/direct Local Area Network (LAN).

STANDARD SOFTWARE



PC MONITORING (SW-MON)

Enables the building manager to easily monitor and operate all 50 units from the PC's browser.



PC SCHEDULING (SW-SCH)

Enables the building manager to customize daily, weekly and yearly schedules for all 50 units. Schedules can be applied to a single unit, a group of units or collectively (batch) to all units.



ERROR EMAIL (SW-EMAIL)

If an error occurs on the CITY MULTI® system monitored by the centralized controller, the fault will be detected and isolated, and a detailed alert will be sent to the necessary personnel via real–time email. The user can then view and clear the error logs from the PC and use the information for troubleshooting.



ONLINE MAINTENANCE TOOL (SW-MAINT)

Performs maintenance diagnostics via a networked PC, the central controller and Maintenance Tool software. Eliminates the need to connect an MN converter.

OPTIONAL SOFTWARE



INDIVIDUAL PERSONAL BROWSER VIA PC WEB BROWSER (SW-PWEB)

Allows individual users to control their zone conditioning via personal networked PC's with or without remote controllers. Personal web browser is only supported on AE–200A, AE-50A, and EW-50A Centralized Controllers.

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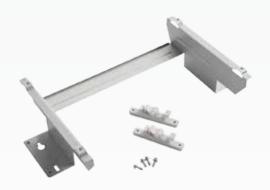
	Part Number	Description	AE-200A	AE-50A	EW-50A
ODTIONAL COSTIMADS	SW-Charge	Energy Allocation (requires TG-2000)	•	•	•
OPTIONAL SOFTWARE	SW-Pweb	Personal Web Browser	•	•	•
OPTIONAL ACCESSORIES	PAC-YG84UTB-J	Electric Box	•	•	
	PAC-YG86TK-J	Mounting Kit (for control panel)	•	•	
	PAC-YG82TB-J	Mounting Attachment (for wall surface)	•	•	





PAC-YG82TB-J

PAC-YG84UTB-J





CENTRALIZED CONTROLLER AE-200A



Combines the power of a touch-screen interface with the remote capabilities of an Internet browser. The AE-200A is our most capable central controller for managing your CITY MULTI® and peripheral systems. Up to three AE-50A or EW-50A expansion controllers can be added up to a single AE-200A. This allows the AE-200A to control and monitor up to 200 indoor units from one touch screen.



Function	Description
Touch Screen	10.4" high resolution color touch screen
Touch Screen	10.4 High resolution color touch screen
Max No. of Indoor Units	Up to 200 indoor units can be controlled and monitored when three expansion controllers (AE-50A and/or EW-50A) are networked together.
ON/OFF	On/Off operation for a single group and batch operation
Operation Mode	Setback /Cool / Dry / Auto (R2- and WR2-Series) / Fan / Heat
Temperature Setting	Supports single and dual set point operation with extended set temperature range
Fan Speed Setting	Hi / Mid-2 / Mid-1 /Low / Auto (Available fan speed settings depending on indoor unit)
Airflow Direction Setting	Swing / Horizontal / Mid-0 / Mid-1 / Mid-2 / Mid-3 / Auto (settings vary depending on indoor unit model)
Permit/Prohibit Function	Individual prohibit operations for each remote controller function (ON/OFF, Set Temperature, Operation Mode and Filter Reset)
Indoor Return Air Temperature	Displays the measured return air temperature from each group
Error Indication	Displays a four-digit code and the affected unit address
Test Run Function	Allows indoor units to operate in test mode
Ventilation Interlock	Allows the group to be interlocked with Lossnay unit
Schedule Operation	Annual, Weekly, and Today schedules
External Input/Output	Inputs: Level Signal–Batch Start / Stop, Batch Emergency Stop Outputs: Start / Stop Status, Error / Normal Status
Power Supply	Built-in
Dimensions – (H x W x D)	7-27/32" x 11-5/32" x 2-17/32"

CENTRALIZED CONTROLLER AE-50A



The AE-50A Expansion Controller connects to an AE-200A over Ethernet to expanded its monitoring capability to up to 200 indoor units. It features advanced functionality with expanded monitoring, control, dual set point and trending abilities.



Function	Description
Touch Screen	10.4" high resolution color touch screen
Max No. of Indoor Units	Up to 200 indoor units can be controlled and monitored when three expansion controllers (AE-50A and/or EW-50A) are networked together.
ON/OFF	On/Off operation for a single group and batch operation
Operation Mode	Setback /Cool / Dry / Auto (R2- and WR2-Series) / Fan / Heat
Temperature Setting	Supports single and dual set point operation with extended set temperature range
Fan Speed Setting	Hi / Mid-2 / Mid-1 /Low / Auto (Available fan speed settings depending on indoor unit)
Airflow Direction Setting	Swing / Horizontal / Mid-0 / Mid-1 / Mid-2 / Mid-3 / Auto (settings vary depending on indoor unit model)
Permit/Prohibit Function	Individual prohibit operations for each remote controller function (ON/OFF, Set Temperature, Operation Mode and Filter Reset)
Indoor Return Air Temperature	Displays the measured return air temperature from each group
Error Indication	Displays a four-digit code and the affected unit address
Test Run Function	Allows indoor units to operate in test mode
Ventilation Interlock	Allows the group to be interlocked with Lossnay unit
Schedule Operation	Annual, Weekly, and Today schedules
External Input/Output	Inputs: Level Signal–Batch Start / Stop, Batch Emergency Stop Outputs: Start / Stop Status, Error / Normal Status
Power Supply	Built-in
Dimensions – (H x W x D)	7-27/32" x 11-5/32" x 2-17/32"

CENTRALIZED AND EXPANSION CONTROLLER EW-50A



FUNCTION	DESCRIPTION
Max No. of Indoor Units	Up to 50 indoor units can be controlled and monitored.
ON/OFF	On/Off operation for a single group and batch operation
Operation Mode	Setback /Cool / Dry / Auto (R2- and WR2-Series) / Fan / Heat
Function	Hold (temporarily disables schedules) / Initial setting / Operation data back-up
Displays	CITY MULTI compressor speed and hi/low pressure / AdvancedHVAC Controller (DC-AIO) input/output status / Space temperature and humidity (from SmartME or AI controller) / Error code (four-digit code and the affected unit address) / Unoccupied setback temperature range / Occupancy and brightness status from the SmartME remote controller
Temperature Setting	Supports single and dual set point operation with extended set temperature range
Fan Speed Setting	Hi / Mid-2 / Mid-1 / Low / Auto (Available fan speed settings depending on indoor unit)
Airflow Direction Setting	Swing / Horizontal / Mid-0 / Mid-1 / Mid-2 / Mid-3 / Auto (settings vary depending on indoor unit model)
Permit/Prohibit Function	Individual prohibit operations for each remote controller function include ON/OFF / Set Temperature / Fan speed and direction / Operation Mode / Filter Reset
Ventilation Interlock	Allows the group to be interlocked with Lossnay unit
Schedule Operation	Annual, Today, and Weekly schedules
External Input/Output	Inputs: Level Signal-Batch Start / Stop, Batch Emergency Stop Outputs: Start / Stop Status, Error / Normal Status (requires PAC-YG10HA)
Trending Data	Fan operation time / Thermo-on time / Set temperature / Room temperature / Al controller temperature and humidity
Power Supply	Built-in
Dimensions – (H x W x D)	8-4/16" x 6-13/16" x 3-10/16"

CENTRALIZED CONTROLLER TC-24B



Customized individual zone control via a bright and easy to use touch-screen interface. The TC-24B is perfect for light commercial and residential applications.



Function	Description
Max No. of Indoor Units	Up to 24 indoor units can be connected
ON/OFF	On/Off operation for a single group and batch operation
Operation Mode	Setback /Cool / Dry / Auto (R2- and WR2-Series) / Fan / Heat
Temperature Setting	Supports single and dual set point modes / Set temperature from 57° F – 87° F depending on operation mode and indoor unit
Fan Speed Setting	Hi / Mid-2 / Mid-1 /Low / Auto (Available fan speed settings depending on indoor unit)
Airflow Direction Setting	Airflow angles: 100° - 80° - 60° - 40° and swing / Airflow direction settings vary depending on indoor unit model
Permit/Prohibit Function	Individual prohibit operations for each remote controller function (ON/OFF, Set Temperature, Operation Mode and Filter Reset)
Indoor Return Air Temperature	Displays the measured return air temperature from each group
Error Indication	Displays a four-digit code and the affected unit address
Ventilation Interlock	Allows the group to be interlocked with Lossnay unit
Schedule Operation	Weekly schedule can be set by groups based on operation pattern
External Input/Output	Inputs: Level Signal-Batch Start / Stop, Batch Emergency Stop Outputs: Start / Stop Status, Error / Normal Status
Power Supply	PAC-SC51KUA
Dimensions – (H x W x D)	4-3/4" x 7-1/8" x 1-3/16"



ADVANCEDHVAC CONTROLLER

DC-A2IO AdvancedHVAC Controller

The AdvancedHVAC controller features customizable applications for integrating CITY MULTI indoor units with third party equipment. Physical inputs and outputs can be used for reading sensors and energizing relays. An optional analog output accessory (AL2-2DA) can be added for modulating third party equipment signals. Status of inputs and outputs are displayed on the AE-200A, AE-50A, EW-50A web browser and the PAR-U01MEDU-J SmartME Remote Controller screen.



Function	Description
Inputs	Eight digital or analog inputs (sensor data collected in real time)
Outputs	Six digital outputs
Monitor and Control	Up to fifty groups (16 max indoor units per group) / Input and output status data monitored from AE-200A/AE-50A/ EW-50A Centralized Expansion Controller or PAR-U01MEDU-J SmartME Zone Controller / M-NET sensor data (collected every 70 seconds) / Error status of up to 50 indoor units / On/Off, Start/Stop, Enable/Disable
Schedule Operation	Weekly schedule can be set by groups based on operation pattern (requires AE-200A/AE-50A/EW-50A Central Controller)
Interlock Function	Interlock M-NET devices and output contacts according to status of input contacts
DC-A2IO Package	AL2-14MR-D α2 simple application controller and PAC-IF01AHC M-NET Adapter
Accessories	AL2-2DA expansion module adds 2 additional analog outputs / sensors and relays depending on application / NEMA rated enclosure / Wiring
Power Supply	24 VDC (sold separately) / 17-32 VDC M-NET Communication Power (PAC-SC51KUA M-NET power supply provided with TC-24B standard package)
Communication	M-NET
Dimensions – (H x W x D)	AL2-14MR-D: 3-1/2" x 6-1/4" x 1-9/16"

INPUT/OUTPUT CONTROL BOARDS

PAC-YG66DCA DIGITAL INPUT DIGITAL OUTPUT (DIDO) CONTROL BOARD

The DIDO controller used in conjunction with an AE-200A, AE-50A, EW-50A, or TC-24B centralized controller can control and monitor third–party general equipment.

STANDARD FEATURES

Function	Description
Inputs	Qty two Digital Status Inputs and 2 Digital Error Inputs (Non-Voltage Contacts)
Outputs	Qty two Digital Outputs (Non-Voltage Relay Contact Use only VDC with outputs
Monitor	Status, Fault Requires AE-200A, AE-50A, EW-50A, or TC-24B Centralized Controller
Control	On/Off, Start/Stop, Enable/Disable Requires AE-200A, AE-50A, EW-50A, or TC-24B Centralized Controller
Schedule Operation	Weekly schedule can be set by groups based on operation pattern Requires AE-200A, AE-50A, EW-50A, or TC-24B Centralized Controller
Interlock Function	Interlock M-NET devices and output contacts according to status of input contacts
Power Supply	24 VDC (5W plus loads)
Communication	M-NET
Dimensions - (H x W x D)	4–3/4" x 7–7/8" x 1–13/16"



PAC-YG63MCA ANALOG INPUT (AI) CONTROL BOARD

The Analog Input (Al) Control Board is used in conjunction with an AE-200A, AE-50A or EW-50A centralized controller to alarm, monitor, and trend temperature and humidity from a field-supplied temperature or humidity sensor.

Function	Description
Inputs	Qty two Analog Inputs (0/10 VDC, 4/20 mA, 1–5 VDC)
Monitor	Temperature and/or Humidity Requires AE-200A, AE-50A or EW-50A Centralized Controller and field supplied sensor
Interlock Function	Interlock M-NET devices and output contacts according to measured values on inputs
Alarms	Generate alarm based on user defined high and low limits
Power Supply	24 VDC (5W)
Communication	M-NET
Dimensions - (H x W x D)	4–3/4" x 7–7/8" x 1–13/16"

ZONE CONTROLLERS

Remote Controller for CITY MULTI systems featuring an intuitive touch screen interface with dual set point functionality and LED status indicator

Advanced functions include onboard temperature, humidity, occupancy and brightness sensors. The SmartME also displays AdvancedHVAC Controller input and output status and can send temperature and humidity set points to third party equipment through the AdvancedHVAC Controller.



PAR-U01MEDU

SMARTME

KEY FEATURES

- Intuitive backlit touch screen.
- Group control up to 16 indoor units in a single zone.
- Advanced sensor control for occupancy, temperature, humidity and brightness.
- Displays room name and humidity.
- Monitors third-party equipment through AdvancedHVAC controller.
- Supports dual set point and setback functions.
- Improved scheduling.
- Color glow status indicator LED bar.
- Dimensions (H x W x D): 4-3/4" x 5-9/16" x 1".

COLOR GLOW STATUS INDICATOR



The LED bar indicates the operation status by lighting and blinking with different colors and brightness (High/Low), or by turning off. Multiple operation status indicators include blue (Cooling), light blue (Drying), yellow (Fan), white (Auto), green (Setback), red (Heating) and lime (Energy Save). Advanced settings are available for selecting desired color per mode, LED brightness (in conjunction with room brightness sensor), and temperature range indicator.

ENERGY SAVE FUNCTION

The Energy Save function reduces energy consumption during vacancy. The user can select a mode for the Energy Save function which is activated based on vacancy detection in a room, including the following:

- Thermo-off: Puts the unit into the Thermo-off state.
- Set temperature offset: Offsets the set temperature.
- Fan speed down: Sets the fan speed to Low.
- ON/OFF: Turns off the unit.
- Operation mode: Sets the operation mode to Setback.

OCCUPANCY SENSOR

The built-in Occupancy Sensor is used to detect movement in a room. If the sensor detects no movement (or "vacancy") it will activate the selected Energy saving function mode. The Occupancy Sensor returns the system to original operating status after detecting movement. The user can adjust the away time and detection sensitivity threshold level for the Occupancy Sensor. Brightness can also be used in conjunction with motion to determine occupancy.



ZONE CONTROLLERS

Easy-to-use hand-held remote for temperature and operation mode control for CITY MULTI* and P-Series systems



PAR-FL32MA

WIRELESS MA REMOTE CONTROLLER AND MA RECEIVER

KEY FEATURES

- Hand held wireless remote control of up to 16 indoor units.
- Operation modes of Cool, Heat, Dry, Fan, Auto, Ventilation.
- Fan speed, airflow direction settings.
- Compatible with P-Series and CITY MULTI systems.
- Requires PAR-FA32MA Wireless Receiver.
- Dimensions–Remote: 2-5/16" x 3/4" x 5-1/4" Receiver: 2-3/4" x 7/8" x 4-12/16".

Easy to use remote for temperature and operation mode control



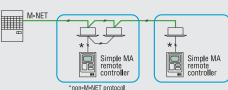
SIMPLE MA

KEY FEATURES

- Controls up to 16 zones.
- Backlit LCD.
- Operation modes of Cool, Heat,
 Dry, Fan, Auto, Ventilation, Setback
 (depending on connected equipment).



- Controls air direction.
- Dimensions: 2-3/4" x 1-5/8" x 4-3/4".
- Dual set point functionality.



WIRED MA

Wired remote controller ideal for easy operation, convenience, and energy savings



PAR-31MAA

WIRED MA REMOTE CONTROLLER

KEY FEATURES

- Controls up to 16 zones.
- Large easy-to-see backlit LCD with two display modes:
 Full or Basic.
- Interlock and control Lossnay units.
- Operation modes: Auto, Cool, Heat, Dry, Fan.
- Fan speed settings.
- Controls air direction.
- Dimensions: 4-3/4" x 3/4" x 4-3/4"
- Dual set point functionality.

IOS MOBILE APPLICATION

The Zone Control App allows monitoring and control of Mitsubishi Electric systems. Zone Control can be utilized by building or campus managers, maintenance personnel, building owners and homeowners

Zone Control can control CITY MULTI® systems and M- and P-Series systems units connected to the M-NET and controlled from one of Mitsubishi Electric's Central Controllers, the AE-200A, AE-50A or EW-50A. The iPhone or iPod Touch's Wi–Fi connection allows Zone Control to communicate to the central controller across a Local Area Network (LAN). Network settings may vary by location, so check with your administrator for any login information that might be needed to access the LAN.



FEATURES OF INDOOR UNITS THAT ZONE CONTROL CAN CONTROL:

- On/Off
- Set Temperature
- Fan Speed
- Mode
- Space Temperature Display
- Vane Direction

henefits

ZONE CONTROL IS CONFIGURED THROUGH MENU-DRIVEN SETTINGS THAT SUPPORT:

- Multiple locations.
- Multiple controllers per location.
- · Customizable names for indoor units.

Set up may need to be done with support from the installing contractor to create the network access point or assign the indoor unit location names.



SYSTEM INTEGRATION

The CMCN supports integration with Building Management Systems (BMS) via our LonWorks* and BACnet* interfaces

The Mitsubishi Electric LonWorks® interface, LMAP04U, supports up to 50 indoor units with a variety of network variables on a per indoor unit basis. Input variables include, but are not limited to: On/Off, Operation Mode, Fan Speed, Prohibit Remote Controller, and Filter Sign Reset. Output variables include but are not limited to: Model Size, Alarm State, Error Code, and Error Address.



LONWORKS* INTERFACE

KEY FEATURES

- Up to 50 units (CITY MULTI, M-Series, P-Series and/or Lossnay) can be connected with one LonWorks interface.
- Operation/Setting: Request On/Off, Set Point, Request Lossnay Mode, Request Fan Speed, Request Local Prohibit On/Off and Set Point, Request Forced Thermostat Off, Filter Sign Reset, Time Stamp, Request Limit Temperature Setting Range, Request Simplified Locking.
- Features a built-in power supply (208/230 VAC).
- Dimensions: 13-7/16" x 14-3/16" x 2-3/8".

The BAC-HD150 BACnet controller is BTL* (BACnet Testing Laboratories) listed proving its compliance with ASHRAE standards and its compatibility with building management systems supporting the BACnet/IP protocol



BACNET INTERFACE

KEY FEATURES

- · Handles up to 50 Indoor units.
- Supports the monitoring and operation of CITY MULTI indoor units, M-Series and P-Series indoor units (adapter required), and Lossnay ERV.
- BACnet/IP.
- Features a built-in power supply (100/240 VAC).

MAINTENANCE TOOL SOFTWARE

Easy-to-use, Windows'-based Maintenance Tool software

Use Maintenance Tool software to monitor pressure and temperature readings from CITY MULTI system sensors, display and control system LEV settings and display and remotely control all connected indoor units. Maintenance Tool software also allows the technician to record and save system monitor data for the purposes of trending and system analysis off site as well as display malfunction logs and email error reports to personnel responsible for servicing the system.



CMS-MNG-E

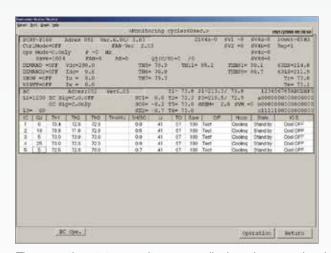
MN CONVERTER

KEY FEATURES

- Allows technicians to monitor and collect CITY MULTI system data and control various functions.
- System monitoring accomplished through direct connection between your PC and the M-NET bus line using the MN-Converter.



The mode select screen allows the user to select the method for connection to the CITY MULTI system, whether direct or remotely, or choose to analyze previously recorded data offline.



The operation status monitor screen displays the operational data for the connected system, including system pressures, temperatures, LEV settings, compressor frequency, current operational mode, and more. Pre–recorded data can also be viewed in and off–line version of this screen.



A branded, bundled, and seamless building controls solution packaged with our variable refrigerant flow (VRF).

Mitsubishi Electric's Diamond Controls is powered by the industry leading NiagaraAX Framework®, the industry's first software technology designed to integrate diverse building systems and devices into one seamless system. Niagara supports a wide range of protocols including LonWorks™, BACnet™, Modbus®, oBIX and Internet standards. The AX Framework also includes integrated network management tools to support the design, configuration, installation and maintenance of interoperable networks.



DC-600E

The Mitsubishi Electric DC-600-E is an embedded controller/ server platform that

combines integrated control, supervision, data logging, alarming, scheduling and network management functions into a small, compact platform with Internet connectivity and web serving capabilities. The DC-600E makes it possible to control and manage external devices over the Internet, presenting real-time information to users in web-based graphical views.



DCPro

The Mitsubishi Electric
DCPro is a flexible network
server for all connected
DC-600E stations. The

DCPro harnesses the power of the Internet to provide efficient integration of standard open protocols. The DCPro creates a powerful network environment with comprehensive database management functionality, alarm management, and messaging services. DCPro can manage global control functions, support data passing over multiple networks, connect to enterprise level software applications, and host multiple, simultaneous client workstations connected over a local network or the Internet.

OPTIONAL CONTROL ACCESSORIES





10-16

10-34

Optional: 16 point IO module directly connects to DC-600E IO connector with 8 universal inputs, 4 relay outputs, and 4 analog outputs.

Optional: 34 point IO module directly connects to DC-600E IO connector with 16 universal inputs, 10 relay outputs, and 8 analog outputs.

Optional: Remote 16 point IO module and RS-485 bus connected to DC-600E with 8 universal inputs, 4 relay outputs, and 4 analog outputs.

Optional: 24 Volt AC/DC power supply module.

DIAMOND CONTROLS APPLICATIONS



HIGH-RESOLUTION 3D GRAPHICS

Diamond Controls enables a new graphical user experience for variable refrigerant flow (VRF) zoning systems with the inclusion of high resolution three-dimensional floor plan graphics of your building.



DEMAND RESPONSE COMPLIANCE

Demand Response programs help utilities maintain grid reliability and enable customers to realize significant value. Diamond Controls provides Demand Response compliance to a building owner through OpenADR.



LIGHTING CONTROL

Diamond Controls can manage a building's lighting system without requiring integration with third party equipment. Lighting control provides a building manager the ability to set lighting schedules, which can be overridden by local switches if necessary.



CENTRAL PLANT CONTROL

Diamond Controls can monitor, control, and schedule a central plant to provide chilled or hot water for the buildings needs without requiring additional third party controls.



ADVANCED ALARMING

Diamond Controls advanced logic enables superior alarming capabilities for building awareness, as well as VRF zoning systems. The building owner can set-up multiple alarm conditions ranging from simple out-of-range alarms to advanced condition alarms.



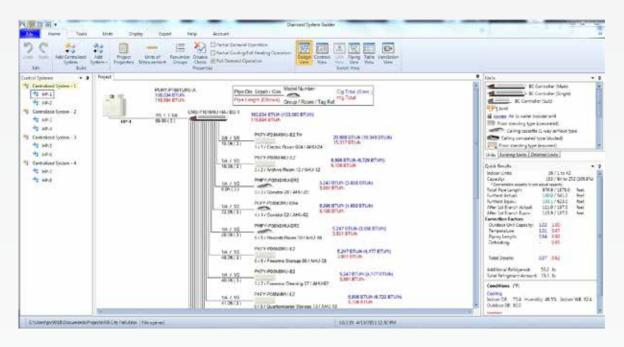
HVAC EQUIPMENT INTEGRATION

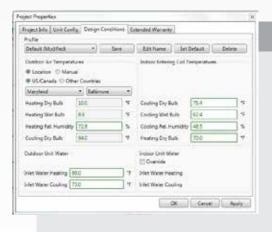
Diamond Controls can schedule, monitor, control, and integrate advanced logic within various HVAC manufacturer's equipment. Diamond Controls can also easily integrate into an existing building management system (BMS).

DIAMOND SYSTEM BUILDER

Diamond System Builder is an interactive system layout tool that speeds up the system design process

Diamond System Builder (DSB) helps users determine the cooling and heating output of selected equipment for project-specific conditions. The program has error indicators and built-in safeguards against exceeding limitations, assuring line lengths, maximum connected capacities, component selections, control schemes, etc. are within the system requirements.

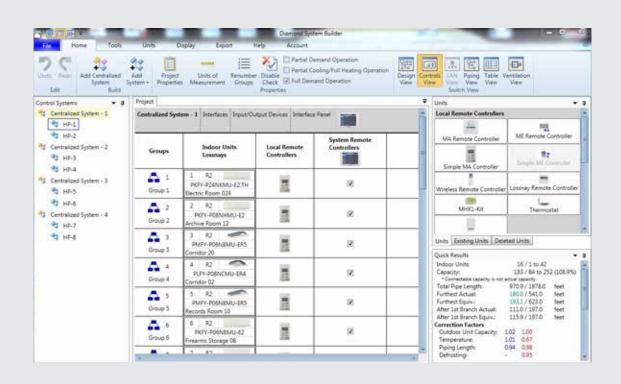




PROJECT PROPERTIES

System design conditions, such as indoor and outdoor design conditions, are easily entered for both cooling and heating. Customer and project names can be entered to identify the job on the outputs.

DSB INTERFACE



Optional functions to customize the system layout to your project are available, such as labeling groups with a room name, adding equipment tags to pieces of equipment, and giving each system a project-specific name. Other features, like a custom equipment schedule, submittal packages, and AutoCAD drawings are available once the system layout has been finalized.

REVIT AND AUTOCAD OUTPUTS

KEY FEATURES

- Allows technicians to monitor and collect CITY MULTI system data and control various functions.
- System monitoring accomplished through direct connection between your PC and the M-NET bus line using the MN-Converter.









PURY-P** (T/Y) LMU

Model Na	ame	208V /230V	PURY-P72TLMU-A (-BS)	PURY-P96TLMU-A (-BS)	PURY-P120TLMU-A (-BS)	PURY-P144TLMU-A (-BS)	PURY-P168TLMU-A (-BS)			
		460V	PURY-P72YLMU-A (-BS)	PURY-P96YLMU-A (-BS)	PURY-P120YLMU-A (-BS)	PURY-P144YLMU-A (-BS)	PURY-P168YLMU-A (-BS)			
D 0				I.	208 / 230V, 3-Phase, 60Hz	I	Į.			
Power Source					460V, 3-Phase, 60Hz					
	Cooling	Btu/h Capacity	72,000	96,000	120,000	144,000	168,000			
Capacity (Nominal) *1	Heating	Btu/h Capacity	80,000	108,000	135,000	160,000	188,000			
	MCA	А	24 / 22	33 / 30	42 / 39	52 / 48	68 / 63			
Electrical Supply	MCA	^	11	15	19	24	31			
Liectrical Supply	MOP	A	35 / 35	50 / 50	60 / 60	80 / 70	110 / 100			
	WOF	^	20	25	30	35	50			
	Type X Quantity	1	Propelle	r Fan x 1		Propeller Fan x 2				
Fan	Airflow Rate	CFM	6,5	550		11,300				
	External Static Pr	ressure		Selectable	0, 0.12 or 0.24"W.G.; factory set	to 0"W.G.				
	Type X Quantity			IN	VERTER-driven Scroll Hermetic x					
Compressor	Operating Range		13% to	0 100%	15% to	5% to 100% 12% to 100%				
	Lubricant				MEL32					
Refrigerant	Туре		R410A							
External Finish	1	1	Pre	e-coated galvanized steel sheet	(Plus Powder Coating for -BS type	pe) <munsell 1="" 5y="" 8="" or="" simila<="" td=""><td>r></td></munsell>	r>			
	Height	ln.			64-31/32					
Dimensions H x W x D	Width	ln.	36-1/4	48-1/16		68-29/32				
	Depth	ln.			29-5/32					
Net Weight		Pounds	444 474	503 534	69 73		702 730			
Sound Pressure Level			_				•			
(Measured In Anechoic	Room)	dB(A)	58	3.0	60.0	61	.0			
	High Pressure Pro	otection		High	pressure sensor, High pressure s	witch				
Protection Devices	Inverter Circuit				Over current pretection					
	(Compressor / Fa	ın)		T	Over-current protection	I				
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.	5/8	;	3/4	7.	78			
Dimensions	Gas (Low Pressure) (Brazed)	ln.	3/4	1-1/8	7/8	1	1/8			
Indoor Unit	Total Capacity	1		50'	% to 150% of outdoor unit capac	rity				
Connectable	Model / Quantity		P06 - P72 / 1 to 18							
Operating	Cooling	D.B.			**Outdoor: 23° to 126° F					
Temperature Range	Heating W.B. Outdoor: -4° to 60° F									
Efficiency Ratings *2										
EER (Ducted/Non-Du	cted) *2		13.5 / 14.8	12.0 / 14.1	12.8 / 14.7	.8/14.7 12.2/14.0 10.6/11.2				
IEER (Ducted/Non-Du	icted) *2		23.1 / 28.1	24.1 / 27.0	19.9 / 24.6	19.7 / 24.3 15.9 / 19.6				
COP (Ducted/Non-Du	icted) *2		3.65 / 4.30	3.53 / 4.00	3.52 / 3.99	3.38 / 3.72	3.24 / 3.49			
SCHE (Ducted/Non-D	oucted) *2		25.9 / 28.4	23.5 / 31.5	25.3 / 30.3	24.8 / 27.7	24.7 / 28.3			
			l	L.	<u> </u>					

-BS indicates Seacoast Protection option.

LIMITED WARRANTY | Seven-year warranty on compressor. One-year warranty on parts. See our website for details on specific additional application installation coverage.

Notes:
*1 Rating Conditions:
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB; Outdoor: 95° F (35° C) DB.
Heating | Indoor: 70° F (21° C) DB; Outdoor: 47° F (8° C) DB / 43° F (6° C) WB.
*2. Efficiency values based on AHRI 1230 test method

^{**} Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.



PURY-P** (T/Y) LMU

			PURY-P144TSLMU (-BS) *2	PURY-P168TSLMU (-BS) *2	PURY-P192TSLMU (-BS) *2	PURY-P216TSLMU (-BS) *2	PURY-P240TSLMU-A (-BS) *2	
N	Model Name	208V /230V	With 2 PURY-P72TLMU-A (-BS) *3	With 1 PURY-P72TLMU-A (-BS) and 1 PURY-P96TLMU-A (-BS) *3	With 2 PURY-P96TLMU-A (-BS) *3	With 1 PURY-P96TLMU-A (-BS) and 1 PURY-P120TLMU-A (-BS) *3	With 2 PURY-P120TLMU-A (-BS) *3	
			PURY-P144YSLMU-A (-BS) *2	PURY-P168YSLMU-A (-BS) *2	PURY-P192YSLMU-A (-BS) *2	PURY-P216YSLMU-A (-BS) *2	PURY-P240YSLMU-A (-BS) *2	
		460V	With 2 PURY-P72YLMU-A (-BS) *3	With 1 PURY-P72YLMU-A (-BS) and 1 PURY- P96YLMU-A (-BS) *3	With 2 PURY-P96YLMU-A (-BS) *3	With 1 PURY-P96YLMU-A (-BS) and 1 PURY- P120YLMU-A (-BS) *3	With 2 PURY-P120YLMU-A (-BS) *3	
Power Source					208V / 230V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz			
Capacity	Cooling	Btu/h Capacity	144,000	168,000	192,000	216,000	240,000	
(Nominal) *1	Heating	Btu/h Capacity	160,000	188,000	215,000	243,000	270,000	
	Type X Quantity		Refer to: PURY-P72TLMU-A (-BS)	Refer to: PURY-P72TLMU-A (-BS) /	Refer to: PURY-P96TLMU-A (-BS)	Refer to: PURY-P96TLMU-A (-BS) /	Refer to: PURY-P120TLMU-A (-BS)	
Fan	External Static Pressure Type X Quantity			PURY-P96TLMU-A (-BS)	PURY-P96YLMU-A (-BS)	PURY-P120TLMU-A (-BS)	PURY-P120YLMU-A (-BS)	
			PURY-P72YLMU-A (-BS)	PURY-P72YLMU-A (-BS) / PURY-P96YLMU-A (-BS)	7 6 7 66.26 7. (2.6)	PURY-P96YLMU-A (-BS) / PURY-P120YLMU-A (-BS)	. e	
Compressor	Operating Range			6% to 100%	5% to 100%	7% to 100%		
·	Lubricant							
Refrigerant	Туре							
External Finish			Refer to:	Refer to: PURY-P72TLMU-A (-BS) /	Refer to:	Refer to: PURY-P96TLMU-A (-BS) /	Refer to:	
	Height	In.	PURY-P72TLMU-A (-BS)	PURY-P96TLMU-A (-BS)	PURY-P96TLMU-A (-BS)	PURY-P120TLMU-A (-BS)	PURY-P120TLMU-A (-BS)	
Dimensions	Width	In.	PURY-P72YLMU-A (-BS)	PURY-P72YLMU-A (-BS) /	PURY-P96YLMU-A (-BS)	PURY-P96YLMU-A (-BS) /	PURY-P120YLMU-A (-BS)	
HxWxD	Depth	ln.		PURY-P96YLMU-A (-BS)		PURY-P120YLMU-A (-BS)		
Net Weight		Pounds						
Sound Pressur	re Level	dB(A)		61.0		62.0	63.0	
Protection	High Pressure Protection			High r	pressure sensor, High pressure	ewitch		
Devices	Inverter Circuit (Compres			riigii k	Over-current protection	SWITCH		
Refrigerant	Gas (Low Pressure)	In.		7/8	Over-current protection	1-	1/8	
Pipe Dimensions	(Brazed) Liquid (High Pressure)	ln.		1-	1/8		1-3/8	
	(Brazed)						1 3/3	
Indoor Unit	Total Capacity			50%	6 to 150% of outdoor unit cap	acity		
Connectable	Model / Quantity		P06-P96 / 1 to 36	P06-P96 / 1 to 42	P06-P96 / 1 to 48	P06-P96 / 2 to 50 *4	P06-P96 / 2 to 50 *4	
Operating	Cooling	D.B.			**Outdoor: 23° to 126° F			
Temperature Range	Heating	W.B.	Outdoor: -4° to 60° F					
Efficiency Rat	ings *5							
EER (Ducted	/Non-Ducted) *5		12.3 / 14.2	11.0 / 12.6	11.4 / 12.1	11.7 / 12.4	11.8 / 12.9	
IEER (Ducted	ed/Non-Ducted) *5 21.2 / 26.6 19.9 / 24.8 23.5 / 23.9 21.5 / 22.9 19.0 / 22.3						19.0 / 22.3	
· ·	d/Non-Ducted) *5		3.58 / 4.07	3.39 / 3.77	3.53 / 3.59	3.52 / 3.59	3.45 / 3.64	
SCHE (Ducte	ed/Non-Ducted) *5		25.0 / 28.8	24.9 / 29.4	23.0 / 28.0	22.7 / 26.9	22.9 / 26.8	

- Notes: *1 Rating Conditions:

- *1 Rating Conditions:
 Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB; Outdoor: 95° F (35° C) DB.
 Heating | Indoor: 70° F (21° C) DB; Outdoor: 47° F (8° C) DB / 43° F (6° C) WB.
 *2 Twinning Kit is required for combining two individual outdoor units in the field for PURY-7-T(Y)SLMU combined systems.
 *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.
 *4 Maximum connectable number of branch pipes is 48.
 *5 Efficiency values based on AHRI 1230 test method

- ** Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required. NOTES: In systems with considerably long piping runs, the outdoor units may exhibit slightly louder

than normal sound pressure levels when in heating mode.

The outdoor twinning kit (low pressure) should be connected to the low pressure side of the outdoor unit. If the connected units are different capacities, the outdoor twinning kit (low pressure) should be installed in the unit with the largest capacity.

- -BS indicates Seacoast Protection option.
- LIMITED WARRANTY | Seven-year warranty on compressor. One-year warranty on parts. See our website for details on specific additional application installation coverage.



PURY-P** (T/Y) LMU

		208V /230V	PURY-P264TSLMU-A (-BS) *2 With 1 PURY-P120TLMU-A (-BS) and 1 PURY-P144TLMU-A (-BS) *3	PURY-P288TSLMU-A (-BS) *2 With 2 PURY-P144TLMU-A (-BS) *3	PURY-P312TSLMU-A (-BS)*2 With 1 PURY-P144TLMU-A (-BS) and 1 PURY-P168TLMU-A (-BS) *3	PURY-P336TSLMU-A (-BS)*2 With 2 PURY-P168TLMU-A (-BS) *3			
Mo	odel Name		PURY-P264YSLMU-A (-BS) *2	PURY-P288YSLMU-A (-BS) * *2	PURY-P312YSLMU-A (-BS) * *2	PURY-P336YSLMU-A (-BS) * *			
		460V	With 1 PURY-P120YLMU-A (-BS)* and 1 PURY-P144YLMU-A (-BS) *3	With 2 PURY-P144YLMU-A (-BS) *3	With 1 PURY-P144YLMU-A (-BS) and 1 PURY-P168YLMU-A (-BS) *3	With 2 PURY-P168YLMU-A (-BS) *3			
Power Source			208 / 230V 3-Phase, 60Hz 460V, 3-Phase, 60Hz						
		Btu/h		400V, 0-11	1836, 00112				
Capacity	Cooling	Capacity	264,000	288,000	312,000	336,000			
Nominal) *1		Btu/h							
	Heating	Capacity	295,000	323,000	350,000	378,000			
	Type X Quantity	Oupdoity							
an	Airflow Rate	CFM	Refer to:		Refer to:				
ar .	External Static Pressure	OI IVI	- PURY-P120TLMU-A (-BS) /	Refer to:	PURY-P144TLMU-A (-BS)	Refer to:			
	External Glade Fredouic		PURY-P144TLMU-A (-BS)	PURY-P144TLMU-A (-BS)	PURY-P168TLMU-A	PURY-P168TLMU-A (-BS)			
Compressor	Type X Quantity		PURY-P120YLMU-A (-BS) / PURY-P144YLMU-A (-BS)	PURY-P144YLMU-A (-BS)	PURY-P144YLMU-A (-BS) PURY-P168YLMU-A	PURY-P168YLMU-A (-BS)			
	Operating Range			7% to 100%	I.	6% to 100%			
	Lubricant								
Refrigerant	Туре		Refer to:		Refer to:	Refer to: PURY-P168TLMU-A (-BS)			
xternal Finish			PURY-P120TLMU-A (-BS) / PURY-P144TLMU-A (-BS)	Refer to: PURY-P144TLMU-A (-BS)	PURY-P144TLMU-A (-BS) PURY-P168TLMU-A				
Dimensions H x	Height	ln.	PORT-F1441EMO-A (-BS)	FUNT-F1441LINIU-A (-B3)	PORT-P1061LWO-A	PORT-P1001LIVIO-A (-BS)			
N x D	Width	ln.	PURY-P120YLMU-A (-BS) /	PURY-P144YLMU-A (-BS)	PURY-P144YLMU-A (-BS)	PURY-P168YLMU-A (-BS)			
	Depth	ln.	PURY-P144YLMU-A (-BS)		PURY-P168YLMU-A				
Net Weight		Pounds							
Sound Pressure Le Measured In Anec		dB(A)	63.5						
Protection	High Pressure Protection		High pressure sensor, High pressure switch						
Devices	Inverter Circuit (Compress	sor / Fan)	Over-current protection						
Refrigerant Pipe	Gas (Low Pressure) (Brazed)	ln.		1-	1/8				
Dimensions	Liquid (High Pressure) (Brazed)	ln.	1-:	3/8	1	5/8			
ndoor Unit	Total Capacity			50% to 150% of or	utdoor unit capacity				
Connectable	Model / Quantity		P06-P96 / 2 to 50 *4						
Operating	Cooling	D.B.		**Outdoor: 2	23° to 126° F				
Temperature Range	Heating	W.B.		Outdoor: -	4° to 60° F				
Efficiency Rating	ıs * 5								
EER (Ducted/No	on-Ducted) *5		11.5 / 12.5	11.3 / 12.2	10.5 / 11.0	9.9 / 9.7			
IEER (Ducted/N	on-Ducted) *5		18.7 / 21.9	18.5 / 21.9	16.9 / 19.7	15.3 / 17.6			
00D /Dt1/N	on-Ducted) *5	3.24 / 3.27	3.19 / 3.23						
COP (Ducted/N									

*1 Rating Conditions:
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB; Outdoor: 95° F (35° C) DB.
Heating | Indoor: 70° F (21° C) DB; Outdoor: 47° F (8° C) DB / 43° F (6° C) WB.
*2 Twinning Kit is required for combining two individual outdoor units in the field for PURY-P-T(Y)SLMU combined systems.
*3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.
*4 Maximum connectable number of branch pipes is 48.
*5 Efficiency values based on AHRI 1230 test method

** Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.

NOTES: In systems with considerably long piping runs, the outdoor units may exhibit slightly louder than normal sound pressure levels when in heating mode.

The outdoor twinning kit (low pressure) should be connected to the low pressure side of the outdoor unit. If the connected units are different capacities, the outdoor twinning kit (low pressure) should be installed in the unit with the largest capacity.

-BS indicates Seacoast Protection option.

LIMITED WARRANTY | Seven-year warranty on compressor. One-year warranty on parts. See our website for details on specific additional application installation coverage.



PUHY-P** (T/Y) LMU

Model Na	me	208V/ 230V	PUHY-P72TLMU-A (-BS)	PUHY-P96TLMU-A (-BS)	PUHY-P120TLMU-A (-BS)	PUHY-P144TLMU-A (-BS)	PUHY-P168TLMU-A (-BS)			
		460V	PUHY-P72YLMU-A (-BS)	PUHY-P96YLMU-A (-BS)	PUHY-P120YLMU-A (-BS)	PUHY-P144YLMU-A (-BS)	PUHY-P168YLMU-A (-BS)			
Power Source					208 / 230V, 3-Phase, 60Hz / 460V, 3-Phase, 60Hz					
Capacity (Nominal) *1	Cooling	Btu/h Capacity	72,000	96,000	120,000	144,000	168,000			
Capacity (Norminal)	Heating	Btu/h Capacity	80,000	108,000	135,000	160,000	188,000			
	MCA	А	24 / 22 11	32 / 29 14	42 / 39 19	46 / 43 21	58 / 54 26			
Electrical Supply	MOP	A	35 / 35 15	50 / 45 20	60 / 60 30	70 / 70 35	90 / 80 40			
	Type X Quantity		Propelle	r Fan x 1		Propeller Fan x 2				
Fan	Airflow Rate	CFM	6,200	6,700	11,	300	12,700			
	External Static P	ressure		Selectable;	0, 0.12 or 0.24"WG; factory s	et to 0"W.G.				
	Type X Quantity				ERTER-driven Scroll Hermetic					
Compressor	Operating Range	e	13% to	100%	15% to 100% 12% to 100%					
	Lubricant			MEL32						
Refrigerant	Туре				R410A					
External Finish			Pre-co	oated galvanized steel sheet (Plus Powder Coating for -BS	type) <munsell 1="" 5y="" 8="" or="" si<="" td=""><td>imilar></td></munsell>	imilar>			
	Height	ln.			64-31/32					
Dimensions H X W X D	Width	ln.	36-1/4 48-1/16			68-29/32				
	Depth	ln.	29-5/32"							
Net Weight		Pounds	435 468	499 532	67		673 702			
Sound Pressure Level (Measured In Anechoic	Room)	dB(A)	58	3.0	60.0	61.0	62.0			
	High Pressure P	rotection		High p	ressure sensor, High pressure	switch				
Protection Devices	Inverter Circuit (Compressor / F	an)			Over-current protection					
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.	3/8	3/8 (1/2", length to first joint≥ 295')	3/8 (1/2", length to first joint≥ 131')	1/2	5/8			
Dimensions	Gas (Low Pressure) (Brazed)	ln.	7.	/8		1-1/8				
Indoor Unit	Total Capacity			50%	to 130% of outdoor unit cap	acity				
Connectable	Model / Quantity	,	P06 - P72 / 1 to 15	P06 - P96 / 1 to 20	P06 - P96 / 1 to 26	P06 - P96 / 1 to 31	P06 - P96 / 1 to 36			
Operating	Cooling	D.B.			**Outdoor: 23° to 126° F		·			
Temperature Range	Heating	W.B.		Outdoor: -4° to 60° F						
System Efficiencies *2				1						
EER (Ducted/Non-Du			13.7 / 16.4	13.1 / 15.5	13.2 / 14.9 12.5 / 14.0 11.6 / 12.5					
IEER (Ducted/Non-Du			23.1 / 28.1	23.1 / 28.2	21.9 / 25.3	21.2 / 24.7	18.7 / 22.2			
COP (Ducted/Non-Du	icted) *2		3.84 / 4.44	3.79 / 4.27	3.71 / 4.17	3.55 / 3.88	3.47 / 3.77			

LIMITED WARRANTY | Seven-year warranty on compressor. One-year warranty on parts. See our website for details on specific additional application installation coverage.

Notes:
*1 Rating Conditions:
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB; Outdoor: 95° F (35° C) DB.
Heating | Indoor: 70° F (21° C) DB; Outdoor: 47° F (8° C) DB / 43° F (6° C) WB.
*2 Efficiency values based on AHRI 1230 test method.

^{**} Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.

⁻BS indicates Seacoast Protection option.



PUHY-P** (T/Y) LMU

Model Name				PUHY-P144TSLMU-A (-BS) *2	PUHY-P168TSLMU-A (-BS) *2	PUHY-P192TSLMU-A (-BS) *2	PUHY-P216TSLMU-A (-BS) *2	PUHY-P240TSLMU-A (-BS) *2		
Puth-Pierry Musical City Puth-Pierry Musical	Model No	·mo			(-BS) and 1 PUHY-	(-BS) and 1 PUHY-	(-BS) and 1 PUHY-			
Power Source	Model Na	irrie								
Capacity (Naminal) Capacity			460V		(-BS) and 1 PUHY-	(-BS) and 1 PUHYP120YLMU-	(-BS) and 1 PUHY-			
Capacity Maintain Maintain Capacity Maintain Maintain	Power Source									
Heating Start Topo To	Canacity (Naminal) *1	Cooling		144,000	168,000	192,000	216,000	240,000		
Fame	Capacity (Nominal) "1	Heating		160,000	160,000 188,000 215,000		243,000	270,000		
Refer to: PUHY-P72TLMU-A (-BS) PUHY-P72		Type X Quantity								
Refer to:	Fan	Airflow Rate	CFM		Refer to:	Refer to:	Refer to:			
Type Compressor Compresso		External Static F	Pressure		PUHY-P72TLMU-A (-BS) /	PUHY-P72TLMU-A (-BS) /	PUHY-P96TLMU-A (-BS) /			
Merigerant Type	Compressor	•••		PUHY-P72YLMU-A (-BS)				PUHY-P120YLMU-A (-BS)		
Merigerant Type		Operating Range	e	6% to	100%	5% to	100%	7% to 100%		
Refrigerant Refrigerant Refrigerant Refrigerant Refer to: PUHY-P72TLMU-A (-BS)		, ,		0,0 10	10075	078.10	10075	1 / 5 15 150 / 5		
Refer to: PUHY-P72TLMU-A (-BS) PUHY-P72	Refrigerant									
Height In. PUHY-P72TLMU-A (-BS) PUHY-P120TLMU-A (-BS) PUHY-P120TLMU		-54-5		Defende				Defeates		
Dimensions H X W X D Width In. Depth In. Dept		Height	In							
Depth In.				· · ·	`	<u> </u>	`			
Net Weight Founds Found	WXD			PUHY-P/2YLMU-A (-BS)				PUHY-P120YLMU-A (-BS)		
Sound Pressure Level (Measured In Anechoi- Room) dB(A) 61.0 62.5 63.0		Ворит			1 0111 1 0012.110 71 (20)		1 0111 1 12012.110 71 (20)			
Measured In Anechoic Room Anechoic										
Protection Devices Inverter Circuit (Compressor / Fan)		Room)	dB(A)	61	.0	62	2.5	63.0		
Compressor / Fan Compressor		High Pressure P	rotection		High p	ressure sensor, High pressure	switch			
Refrigerant Pipe Dimensions Gas (Low Pressure) (Brazed) In. 1/2	Protection Devices		an)			Over-current protection				
Indoor Unit Connectable Indoor Unit Connectable Total Capacity Tot	Refrigerant Pipe	(High Pressure)	ln.	1/2		5.	/8			
Model / Quantity	Dimensions	(Low Pressure)	In.			1-1/8				
Operating Temperature Range Cooling Heating D.B. **Outdoor: 23° to 126° F System Efficiencies *4 Utdoor: 4 to 60° F EER (Ducted/Non-Ducted) *4 12.6 / 14.6 12.0 / 14.0 12.4 / 13.5 12.1 / 13.3 12.1 / 13.1 IEER (Ducted/Non-Ducted) *4 21.3 / 26.0 21.0 / 25.0 21.1 / 24.5 21.0 / 24.5 20.8 / 23.5	Indoor Unit	Total Capacity		50% to 130% of outdoor unit capacity						
Heating Heating W.B. Outdoor: -4 to 60° F	Connectable	Model / Quantity	У	P06 - P96 / 1 to 31	P06 - P96 / 1 to 36	P06 - P96 / 1 to 41	P06 - P96 / 2 to 46	P06 - P96 / 2 to 50		
System Efficiencies *4 EER (Ducted/Non-Ducted) *4 12.6 / 14.6 12.0 / 14.0 12.4 / 13.5 12.1 / 13.3 12.1 / 13.1 IEER (Ducted/Non-Ducted) *4 21.3 / 26.0 21.0 / 25.0 21.1 / 24.5 21.0 / 24.5 20.8 / 23.5	Operating	Cooling	D.B.			**Outdoor: 23° to 126° F				
EER (Ducted/Non-Ducted) *4 12.6/14.6 12.0/14.0 12.4/13.5 12.1/13.3 12.1/13.1 IEER (Ducted/Non-Ducted) *4 21.3/26.0 21.0/25.0 21.1/24.5 21.0/24.5 20.8/23.5	Temperature Range	Heating	W.B.	3. Outdoor: -4 to 60° F						
IEER (Ducted/Non-Ducted) *4 21.3 / 26.0 21.0 / 25.0 21.1 / 24.5 21.0 / 24.5 20.8 / 23.5	System Efficiencies *4									
	EER (Ducted/Non-D	ucted) *4		12.6 / 14.6	12.0 / 14.0	12.4 / 13.5	12.1 / 13.3	12.1 / 13.1		
COP (Ducted/Non-Ducted) *4 3.60 / 4.10 3.50 / 3.90 3.61 / 3.70 3.56 / 3.64 3.52 / 3.67	IEER (Ducted/Non-D	Oucted) *4		21.3 / 26.0	21.0 / 25.0	21.1 / 24.5	21.0 / 24.5	20.8 / 23.5		
	COP (Ducted/Non-D	oucted) *4		3.60 / 4.10	3.50 / 3.90	3.61 / 3.70	3.56 / 3.64	3.52 / 3.67		

-BS indicates Seacoast Protection option.

LIMITED WARRANTY | Seven-year warranty on compressor. One-year warranty on parts. See our website for details on specific additional application installation coverage.

Notes:

*1 Rating Conditions:
Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB; Outdoor: 95° F (35° C) DB.
Heating | Indoor: 70° F (21° C) DB; Outdoor: 47° F (8° C) DB / 43° F (6° C) WB.

*2 Twinning Kit is required for combining two or three individual outdoor units in the field for PUHY-P(T)YSLMU combined systems.

*3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

*4 Efficiency values based on AHRI 1230 test method.

^{**} Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.



PUHY-P** (T/Y) LMU

			PUHY-P264TSLMU-A (-BS) *2	PUHY-P288TSLMU-A (-BS) *2	PUHY-P312TSLMU-A (-BS) *2	PUHY-P336TSLMU-A (-BS) *2	PUHY-P360TSLMU-A (-BS) *2				
Model	None	208V/ 230V	With 2 PUHY-P72TLMU-A (-BS) and 1 PUHY- P120TLMU-A (-BS) *3	With PUHY-P72TLMU-A (-BS) / PUHY-P96TLMU-A (-BS) / PUHY-P120TLMU-A (-BS) *3	With 1 PUHY-P72TLMU-A (-BS) and 2 PUHY- P120TLMU-A (-BS) *3	With 1 PUHY-P96TLMU-A (-BS) and 2 PUHY- P120TLMU-A (-BS) *3	With 3 PUHY-P120TLMU-A (-BS) *3				
Model	iname		PUHY-P264YSLMU-A (-BS) *2	PUHY-P288YSLMU-A (-BS) *2	PUHY-P312YSLMU-A (-BS) *2	PUHY-P336YSLMU-A (-BS) *2	PUHY-P360YSLMU-A (-BS) *2				
		460V	With 2 PUHY-P72YLMU-A (-BS) and 1 PUHY- P120YLMU-A (-BS) *3	With PUHY-P72YLMU-A (-BS) / PUHY-P96YLMU-A (-BS) / PUHY-P120YLMU-A (-BS) *3	With 1 PUHY-P72YLMU-A (-BS) and 2 PUHY- P120YLMU-A (-BS) *3	With 1 PUHY-P96YLMU-A (-BS) and 2 PUHY- P120YLMU-A (-BS) *3	With 3 PUHY-P120YLMU-A (-BS) *3				
Power Source					208 / 230V, 3-Phase, 60Hz 208/230v						
Capacity	Cooling	Btu/h Capacity	264,000	288,000	312,000	336,000	360,000				
(Nominal) *1	Heating	Btu/h Capacity	295,000	323,000	350,000	378,000	405,000				
	Type X Quantity		Refer to:	Refer to:	Refer to:	Refer to:	Refer to:				
Fan	Airflow Rate	CFM	PUHY-P72TLMU-A (-BS) / PUHY-P120TLMU-A (-BS)	PUHY-P72TLMU-A (-BS) /	PUHY-P72TLMU-A (-BS) / PUHY-P120TLMU-A (-BS)	PUHY-P96TLMU-A (-BS) / PUHY-P120TLMU-A (-BS)	PUHY-P120TLMU-A (-BS)				
	External Static F	ressure	PUH 1-P 120 I LIVIU-A (-BS)	PUHY-P96TLMU-A (-BS) /	PUH 1-P 1201 LINIU-A (-BS)		PUHY-P120YLMU-A (-BS)				
			PUHY-P72YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)	PUHY-P120TKMU (-BS	PUHY-P72YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)	PUHY-P96YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)					
	Type X Quantity			PUHY-P72YLMU-A (-BS)/							
				PUHY-P96YLMU-A (-BS) /							
Compressor				PUHY-P120YLMU-A (-BS)							
	Operating Range	9		100%	3% to		5% to 100%				
	Crankcase Heater	W	Refer to: PUHY-P72TLMU-A (-BS) / PUHY-P120TLMU-A (-BS)	Refer to: PUHY-P72TLMU-A (-BS) /	Refer to: PUHY-P72TLMU-A (-BS) / PUHY-P120TLMU-A (-BS)	Refer to: PUHY-P96TLMU-A (-BS) / PUHY-P120TLMU-A (-BS)	Refer to: PUHY-P120TLMU-A (-BS)				
	Lubricant			PUHY-P96TLMU-A (-BS) /) í	` ′	PUHY-P120YLMU-A (-BS)				
Refrigerant External Finish	Туре		PUHY-P72YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)	PUHY-P120TKMU (-BS	PUHY-P72YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)	PUHY-P96YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)					
External Finish	Height	In.	1 0111-1 1201EMO-A (-BO)		TOTTT IZOTZINO X (BO)	TOTTT IZOTEMO A (BO)					
Dimensions	Width	In.		PUHY-P72YLMU-A (-BS) /							
HXWXD	Depth	In.		PUHY-P96YLMU-A (-BS) / PUHY-P120YLMU-A (-BS)							
Net Weight	-1-	Pounds		PUH1-P1201LWU-A (-B5)							
		1 ounus									
Sound Pressure L (Measured In Ane	choic Room)	dB(A)	63.5	64.0	64		65.0				
Protection	High Pressure P	rotection		High p	ressure sensor, High pressure	switch					
Devices	(Compressor / F	an)			Over-current protection						
Refrigerant Pipe	(High Pressure) (Brazed)	ln.			3/4						
Dimensions	Gas (Low Pressure) (Brazed)	ln.		1-3/8		1-	5/8				
Indoor Unit	Unit Total Capacity 50 to 130% of outdoor unit capacity										
Connectable	Model / Quantity	/			P06 - P96 / 2 to 50						
Operating	Cooling	D.B.			**Outdoor: 23° to 126° F						
Temperature Range	Heating	W.B.		Outdoor: -4° to 60° F							
System Efficienci	es *4										
EER (Ducted/N	on-Ducted) *4		12.4 / 13.6	12.0 / 13.5	12.0 / 13.4	12.0 / 13.4					
IEER (Ducted/N	lon-Ducted) *4		21.1 / 24.0	20.4 / 24.0	20.3 / 23.4	20.3 / 23.4	20.1 / 22.7				
COP (Ducted/N	on-Ducted) *4		3.60 / 3.75	3.47 / 3.70	3.45 / 3.66	3.43 / 3.52	3.41 / 3.51				

- Notes:

 *1 Rating Conditions:
 Cooling | Indoor: 80° F (27° C) DB / 67° F (19° C) WB; Outdoor: 95° F (35° C) DB.
 Heating | Indoor: 70° F (21° C) DB; Outdoor: 47° F (8° C) DB / 43° F (6° C) WB.

 *2 Twinning Kit is required for combining two or three individual outdoor units in the field for PUHY-P(T)YSLMU combined systems.

 *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

- *4 Efficiency values based on AHRI 1230 test method.
- ** Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required. -BS indicates Seacoast Protection option.

LIMITED WARRANTY | Seven-year warranty on compressor. One-year warranty on parts. See our website for details on specific additional application installation coverage. Specifications are subject to change.



PURY-P***T(Y)SKMU-A

Model Na	amo	208V /230V	PURY-P72TKMU-A (-BS)	PURY-P96TKMU-A (-BS)	PURY-P120TKMU-A (-BS)	PURY-P144TKMU-A (-BS)			
Model Na	ame	460V	PURY-P72YKMU-A (-BS)	PURY-P96YKMU-A (-BS)	PURY-P120YKMU-A (-BS)	PURY-P144YKMU-A (-BS)			
Power Source				208 / 230V, 3-Phase, 60Hz	/ 460V, 3-Phase, 60Hz				
		Btu/h Capacity	72,000	96,000	120,000	144,000			
	Cooling	kW Power Input	4.4	7.05	9.44	11.2			
Capacity		A Current Input	13.5 / 12.2 / 6.1	21.7 / 19.6 / 9.8	29.1 / 26.3 / 13.1	34.5 / 31.2 / 15.6			
(Nominal) *1		Btu/h Capacity	80,000	108,000	135,000	160,000			
	Heating	kW Power Input	5.92	8.28	10.86	13.54			
		A Current Input	18.2 / 16.5 / 8.2	25.5 / 23.0 / 11.5	33.4 / 30.7 / 15.1	41.7 / 37.7 / 18.8			
	MCA	Α	23 / 21 / 11	34 / 31 / 15	45 / 42 <mark>/ 21</mark>	53 / 48 / 24			
Electrical Supply	Recommended Fuse Size	Α	25 / 15	25 / 15 35 / 20 50 / 25		60 / 25			
	Type X Quantity		Propeller	Fan x 1	Propeller F	an x 2			
Fan	Airflow Rate	CFM	6,2	00	11,300	11,300			
	External Static P	ressure		Selectable; 0, 0.12 or 0.24"W.G.; factory set to 0"W.G.					
	Type X Quantity		INVERTER-driven Scroll Hermetic x 1						
	Operating Range	•	17% to 100% 16% to 100% 15%		15% to 1	100%			
Compressor	Crankcase Heater	w		-					
	Lubricant			MELS	32				
Refrigerant	Туре			R410	A				
External Finish			Pre-coated galv	anized steel sheet (Plus Powder Co	pating for -BS type) <munsell 5y="" 8="" <="" td=""><td>1 or similar></td></munsell>	1 or similar>			
	Height	In.	64-31/32						
Dimensions H x W x D	Width	In.	48-1/16			/32			
	Depth	In.		29-5/32					
Net Weight		Pounds	503 / 534	538 / 574	715 / 7	743			
Sound Pressure Level (As Measured in an An	echoic Room)	dB(A)	58	.0	60.0	61.0			
	High Pressure Pr	rotection		High pressure sensor, F	ligh pressure switch				
Protection Devices	Inverter Circuit (Compressor / Fa	an)	Over-current protection						
	Fan Motor			Thermal s	switch				
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	5/8	3	1/4	7/8			
Dimensions	Gas (Low Pressure) (Brazed)	In.	3/4	7/8	1-1/	8			
Indoor Unit	Total Capacity			50% to 150% of outo	door unit capacity				
Connectable	Model / Quantity		P06 - P96 / 1 to 18	P06 - P96 / 1 to 24	P06 - P96 / 1 to 30	P06 - P96 / 1 to 36			
Operating Cooling D.B.				**Outdoor: 23	° to 115° F				
Temperature Range	Heating	W.B.		Outdoor: -4°	to 60° F				
Efficiency Ratings *2									
EER (Ducted/Non-Duc	ted) *2		13.9 / 15.5	12.2 / 13.6	11.7 / 12.2	11.7 / 12.7			
IEER (Ducted/Non-Duc	oted) *2		21.1 / 22.1	19.7 / 20.9	18.6 / 20.8	18.0 / 20.9			
COP (Ducted/Non-Duc	eted) *2		3.81 / 3.72	3.64 / 3.71	3.45 / 3.61	3.41 / 3.28			
SCHE (Ducted/Non-Du	icted) *2		23.6 / 24.48	17.4 / 23.5	16.8 / 19.7	18.2 / 20.2			
(Daotea/11011-Dt			20.0 / 27.70	17.47 20.0	10.0 / 10.1	10.2 / 20.2			

Notes:

**T Rating Conditions:

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B. / 43° F (6° C) W.B.

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

^{*2.} Efficiency values based on AHRI 1230 test method.

 $^{^{**}}$ Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.

⁻BS indicates Seacoast Protection option.



PURY-P***T(Y)SKMU-A

		208V		PURY-P168TSKMU-A (-BS) *2	PURY-P192TSKMU-A (-BS) *2	PURY-P216TSKMU-A (-BS) *2	
N	Model Name	/230V		With 1 PURY-P72TKMU-A (-BS) and 1 PURY-P96TKMU-A (-BS) *3	With 2 PURY-P96TKMU-A (-BS) *3	With 1 PURY-P96TKMU-A (-BS) and 1 PURY- P120TKMU-A (-BS) *3	
			PURY-P144YSKMU-A (-BS) *2	PURY-P168YSKMU-A (-BS) *2	PURY-P192YSKMU-A (-BS) *2	PURY-P216YSKMU-A (-BS) *2	
	460V		With 2 PURY-P72YKMU-A (-BS) *3	With 1 PURY-P72YKMU-A (-BS) and 1 PURY-P96YKMU-A (-BS) *3	With 2 PURY-P96YKMU-A (-BS) *3	With 1 PURY-P96YKMU-A (-BS) and 1 PURY- P120YKMU-A (-BS) *3	
Power Source			460V, 3-Phase, 60Hz	208V / 230V,	3-Phase, 60Hz / 460V, 3-Phase	, 60Hz	
		Btu/h Capacity	144,000	168,000	192,000	216,000	
	Cooling	kW Power Input	10.31	12.8 *3	15.61 *3	18.22 *3	
Capacity		A Current Input	14.3 *3	39.4 / 35.7 / 17.8 *3	48.1 / 43.5 / 15.61 *3	56.1 / 50.8 <mark>/ 25.4</mark> *3	
(Nominal) *1		Btu/h Capacity	160,000	188,000	215,000	243,000	
	Heating	kW Power Input	12.54 *3	14.91 *3	17.2 *3	19.89 *3	
	A Current Input		17.4	45.9 / 41.5 / 20.7 *3	53.9 / 47.9 / 23.9 *3	61.3 / 55.4 / 27.7 *3	
	Type X Quantity			Refer to:		Refer to:	
	Airflow Rate	CFM	Refer to:	PURY-P72TKMU-A (-BS) /	Refer to:	PURY-P96TKMU-A (-BS) / PURY-P120TKMU-A (-BS)	
	External Static Pressure		PURY-P72YKMU-A (-BS)	PURY-P96TKMU-A (-BS)	PURY-P96TKMU-A (-BS)	PURY-P1201KWIU-A (-B5)	
	Type X Quantity		, ,	PURY-P72YKMU-A (-BS) / PURY-P96YKMU-A (-BS)	PURY-P96YKMU-A (-BS)	PURY-P96YKMU-A (-BS) / PURY-P120YKMU-A (-BS)	
Compressor	Operating Range		15% to 100%	7% to 100%	8% to	100%	
	Crankcase Heater	W					
	Lubricant			Refer to:		Refer to:	
Refrigerant External Finish	Туре		Refer to:	PURY-P72TKMU-A (-BS) / PURY-P96TKMU-A (-BS)	Refer to: PURY-P96TKMU-A (-BS)	PURY-P96TKMU-A (-BS) / PURY-P120TKMU-A (-BS)	
	Height	In.	PURY-P72YKMU-A (-BS)	PONT-POTRIMO-A (-BS)	FORT-F90TRINO-A (-DO)	FORT-FIZOTRINO-A (-DS)	
Dimensions	Width	In.	-	PURY-P72YKMU-A (-BS) /	PURY-P96YKMU-A (-BS)	PURY-P96YKMU-A (-BS) /	
HxWxD	Depth	In.	-	PURY-P96YKMU-A (-BS)		PURY-P120YKMU-A (-BS)	
Net Weight		Pounds	-				
	re Level (As Measured in	dB(A)	61.0	61.0		62.5	
1	High Pressure Protection	n		High pressure sensor, High	ah pressure switch		
Protection	Inverter Circuit (Compre			Over-current pr	•		
Devices	Fan Motor			Thermal sw	vitch		
neirigerani	Liquid (High Pressure) (Brazed)	In.		7/8		1-1/8	
Pipe Dimensions	Gas (Low Pressure) (Brazed)	In.		1-1/8			
Indoor Unit	Total Capacity			50% to 150% of outdo	oor unit capacity		
Connectable	Model / Quantity		P06-P96 / 1 to 36	P06-P96 / 1 to 42	P06-P96 / 1 to 48	P06-P96 / 2 to 50 *4	
Operating Temperature	Cooling	D.B.		**Outdoor: 23°	to 115° F		
	Heating	W.B.		Outdoor: -4° t	o 60° F		
Efficiency Rati	ngs *5						
EER (Ducted/N	lon-Ducted) *5		12.0 / 14.4	12.1 / 12.9	11.6 / 11.9	11.4 / 11.3	
IEER (Ducted/I	Non-Ducted) *5		18.8 / 20.6	19.4 / 19.1	19.3 / 18.2	18.7 / 18.3	
			3.54 / 3.65	3.63 / 3.52	3.64 / 3.47	3.54 / 3.43	
COP (Ducted/N	Von-Ducted) *5 VNon-Ducted) *5		21.8 / 24.0	20.0 / 22.6	17.4 / 21.81	17.1 / 20.11	

Notes:

- *1 Rating Conditions:
 - Cooling | Indoor: 80° F (27° C) D.B./67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (6° C) D.B./43° F (6° C) W.B.
- *2 Twinning Kit is required for combining two individual outdoor units in the field for PURY-P-T(Y)SKMU combined systems.
- *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.
- *4 Maximum connectable number of branch pipes is 48.
- *5 Efficiency values based on AHRI 1230 test method.
- ** Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.

In systems with considerably long piping runs, the outdoor units may exhibit slightly louder than normal sound pressure levels when in heating mode.

The outdoor twinning kit (low pressure) should be connected to the low pressure side of the outdoor unit. If the connected units are different capacities, the outdoor twinning kit (low pressure) should be installed in the unit with the largest capacity.

-BS indicates Seacoast Protection option.

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.



PURY-P***T(Y)SKMU

		208V		PURY-P240TSKMU (-BS) *2		PURY-P264TKMU (-BS) *2	PURY-P288TSKMU (-BS) *2		
	lodel Name	/230 V	Witl	h 2 PURY-P120TKMU (-BS) *3		Y-P120TKMU (-BS) and 1 PURY- P144TKMU (-BS) *3	With 2 PURY-P144TKMU (-BS) *3		
IV	lodei Name	460V		PURY-P240YSKMU (-BS) *2		PURY-P264YKMU (-BS) *2	PURY-P288YSKMU (-BS) * *2		
		4000	With	1 2 PURY-P120YKMU (-BS) *3		JRY-P120YKMU (-BS)* and 1 RY-P144YKMU (-BS) *3	With 2 PURY-P144YKMU (-BS) *3		
Power Source				20	08 / 230V 3-Pha	ase, 60Hz / 460V, 3-Phase, 60Hz			
Capacity	Cooling	Btu/h Capacity		240,000		264,000	288,000		
(Nominal) *1	Heating	Btu/h Capacity	270,000			295,000	320,000		
	Type X Quantity				Refer to:				
Fan	Fan Airflow Rate		Refer to:	PURY-P120TKMU (-BS)		URY-P120TKMU (-BS) / URY-P144TKMU (-BS)	Refer to: PURY-P144TKMU (-BS)		
	External Static Pressure	9		PURT-P1201KIVIO (-BS)	P	URY-P1441KWIU (-B5)	PURY-P1441KMU (-BS)		
	Type X Quantity		PURY-P120YKMU (-BS)			JRY-P120YKMU (-BS) / URY-P144YKMU (-BS)	PURY-P144YKMU (-BS)		
Compressor	Operating Range					7% to 100%			
	Crankcase Heater	W							
	Lubricant				Refer to:				
Refrigerant	Туре		Refer to: PURY-P120TKMU (-BS)			URY-P120TKMU (-BS) /	Refer to: PURY-P144TKMU (-BS)		
External Finish					P	URY-P144TKMU (-BS)	PURY-P1441KMU (-BS)		
Dimensions	Height	In.		PURY-P120YKMU (-BS)		JRY-P120YKMU (-BS) /	PURY-P144YKMU (-BS)		
H x W x D	Width	In.			PI	URY-P144YKMU (-BS)			
Net Weight	Depth	In. Pounds							
	E Level (As Measured in om)	dB(A)		63.0		63.5	64.0		
Protection	High Pressure Protection	on	High pressure sensor, High pressure switch						
Devices	Inverter Circuit (Compre	essor / Fan)	Over-current protection						
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	1-1/8						
Dimensions	Gas (Low Pressure) (Brazed)	In.				1-3/8			
Indoor Unit	Total Capacity			50% to 150% of outdoor unit capacity					
Connectable	Model / Quantity				P00	6-P96 / 2 to 50 *4			
Operating Temperature	Cooling	D.B.			**Out	tdoor: 23° to 115° F			
Range Heating W.B.					Out	tdoor: -4° to 60° F			
Efficiency Ratio	ngs* 5								
EER (Ducted/Non-Ducted) *5			10.9 / 10.9			11.0 / 11.0	11.2 / 11.3		
IEER (Ducted	d/Non-Ducted) *5			17.8 / 18.5		17.7 / 18.4	17.6 / 18.6		
COP (Ducted	/Non-Ducted) *5			3.38 / 3.42		3.4 / 3.25	3.41 / 3.20		
SCHE (Ducte	ed/Non-Ducted) *5			16.5 / 18.6		17.3 / 18.7	18.2 / 19.0		

- *1 Rating Conditions:
 - Tooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B. / 43° F (6° C) W.B.
- *2 Twinning Kit is required for combining two individual outdoor units in the field for
- PURY-P-T(Y)SKMU combined systems.

 *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.
- *4 Maximum connectable no. of branch pipes is 48.
 *5 Efficiency values based on AHRI 1230 test method.
 * 264 and 288 require use -HA, BC controller
- ** Extended ambient cooling operation range down to -10° F DB Low Ambient Kit required.

In systems with considerably long piping runs, the outdoor units may exhibit slightly louder than normal sound pressure levels when in heating mode.

The outdoor twinning kit (low pressure) should be connected to the low pressure side of the

outdoor unit. If the connected units are different capacities, the outdoor twinning kit (low pressure) should be installed in the unit with the largest capacity. -BS indicates Seacoast Protection option.

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

PURY-HP***T(S)KMU

Model Na		208/230V	PURY-HP72TKMU-H	PURY-HP96TKMU-H	PURY-HP144TSKMU-H *2 With 2 PURY-HP72TKMU-H*3	PURY-HP192TSKMU-H *2 With 2 PURY-HP96TKMU-H *3
Miodel Na	ame	460 V	PURY-HP72YKMU	PURY-HP96YKMU	PURY-HP144YSKMU *2 With 2 PURY-HP72YKMU *3	PURY-HP192YSKMU *2 With 2 PURY-HP96YKMU *3
Electrical Power Requirements	Voltage, Phase, Hert	z			/, 3-phase, 60Hz -phase, 60Hz	
Nominal Cooling	Capacity *1	Btu/h	72,000	96,000	144,000	192,000
Nominal Heating	Capacity *1	Btu/h	80,000	108,000	160,000	215,000
	MCA	А	44 / 40 26	60 / 54 <mark>32</mark>	Refer to:	Refer to:
Electrical Supply	Recommended Fuse/Breaker Size	А	50 30	65 35	PURY-HP72TKMU-H PURY-HP72YKMU	PURY-HP72TKMU-H PURY-HP72YKMU
	Maximum Fuse Size	А	60 30	80 35		
Fan	Type x Quantity		Propeller	Fan x 1		
T un	Airflow Rate	CFM	6,20	0		
	Operating Range	Cooling	30% to 100%	23% to 100%	15% to 100%;	12% to 100%;
Compressor	Operating mange	Heating	15% to 100%	13% to 100%	7% to 100%	6% to 100%
Compressor	Type x Quantity		Inverter-driven Scr	oll Hermetic x 1	Refer to:	Refer to:
	Lubricant		MEL	32	PURY-HP72TKMU-H	PURY-HP72TKMU-H
Refrigerant	Туре		R410)A	FORT-TIF / ZTRIVIO-TI	FORT-TIF/ZTRIVIO-TI
External Finish			Pre-coated galvan	ized steel sheet	PURY-HP72YKMU	PURY-HP72YKMU
	Height		64-31			
Dimensions	Weight	In.	48-1,			
	Depth		29-5/32			
Net Weight		Lbs.	552 574	552 576		
Sound Pressure Levels		dB(A)	58		61	
Protection Devices	High-pressure		Hi	gh pressure sensor, High pr	essure switch at 4.15 MPa (601 p	si)
	Inverter circuit (CON	IP./FAN)		Over-cur	rent protection	
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	5/8	3/4	7/8	3
Dimensions	Gas (Low Pressure) (Brazed)		3/4	7/8	1-1/	/8
In death I half Comment III	Total Capacity			50 to 150% of 0	Outdoor Unit Capacity	
Indoor Unit Connectable Model / Quantity *4			P06 to P96 / 1 to 18	P06 to P96 / 1 to 24	P06 ~ P96 / 1 to 36	P06 ~ P96 / 1 to 48
Operating Temperature	Cooling (Outdoor) **			23 ~ 115° F	(-5 ~ +46° C) D.B.	
Range	Heating (Outdoor)			-13 ~ +60° F (-	-25 ~ +15.5° C) W.B.	
	EER		12.9 / 13.0	11.4 / 12.5	12.5 / 12.6	11.1 / 12.1
Efficiency Ratings	IEER		17.2 / 18.4	16.5 / 17.1	16.7 / 17.9	16.1 / 16.6
(Ducted / Non-Ducted) *5	COP		3.61 / 3.55	3.46 / 3.44	3.47 / 3.41	3.32 / 3.31
	SCHE *2		22.7 / 22.6	17.4 / 22.0	22.1 / 22.0	16.9 / 21.4

Notes:

- *1 Rating Conditions:
 - Cooling | Indoor: 80° F (27° C) D.B./67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B./43° F (6° C) W.B.
- *2 Twinning Kit is required for combining two individual outdoor units in the field for PURY-HP-T(Y)SKMU combined systems.
- *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.
- *4 Maximum connectable number of branch pipes is 48.
- *5 Efficiency values based on AHRI 1230 test method.
- ** Low Ambient Kit is required for extended ambient cooling operation range down to -10° F DB.

In systems with considerably long piping runs, the outdoor units may exhibit slightly louder than normal sound pressure levels when in heating mode.

The outdoor twinning kit (low pressure) should be connected to the low pressure side of the outdoor unit. If the connected units are different capacities, the outdoor twinning kit (low pressure) should be installed in the unit with the largest capacity.

Specifications are subject to change without notice.

CMB-P-NU-G1 (Single BC)

Model Name			CMB-P105NU-G1	CMB-P106NU-G1	CMB-P108NU-G1	CMB-P1010NU-G1	CMB-P1013NU-G1	CMB-P1016NU-G1
Number of Branc	hes		5	6	8	10	13	16
Power Source					208 / 230V, 1	-phase, 60 Hz		
Danier Innut	Cooling	W	73	86	112	138	178	217
Power Input	Heating	W	33	40	53	66	86	106
Current	Cooling	Α	0.35 / 0.32	0.41 / 0.37	0.54 / 0.49	0.66 / 0.60	0.86 / 0.77	1.04 / 0.94
(208/230V)	Heating	Α	0.16 / 0.14	0.19 / 0.17	0.25 / 0.23	0.32 / 0.29	0.41 / 0.37	0.51 / 0.46
External Finish			Unit: Galvanized steel plate; Drain pan: Pre-coated galvanized sheets plus powder coating					ting
	Height	Inches			11	-3/16		
Dimensions	Width	Inches	25-17/32 43-1/4					
	Depth	Inches			17	-1/32		
Net Weight		Pounds	72	76	84	94	126	138
Refrigerant Pipe	To Indoor Unit *1	Liquid Pipe (In.)			3/8 E	razed		
Dimensions	TO INGOOF OTHE T	Gas Pipe (In.)			5/8 (E	razed)		
Max. Connected All Branches	Capacity for	Btu/h	/h 189,000 189,000 189,000 189,000 189,000 189,000					189,000
Indoor Unit Capa	acity Connectable to	One Branch			54,000 Btu/h or	less per branch		
Drain Pipe					O.D.	1-1/4"		

Specifications are subject to change without notice.

CMB-P-NU-GA1/HA1 (Main BC)

Model Name			CMB-P1013NU-GA1	CMB-P108NU-HA1	CMB-P1010NU-HA1	CMB-P1016NU-HA1		
Number of Brancl	nes		13	8	10	16		
Power Source				208 / 230V, 1	-phase, 60 Hz			
Danier Innist	Cooling W		178	152 / 196	183 / 236	274 / 353		
Power Input	Heating	W	86	76 / 98	92 / 118	137 / 177		
Current	Cooling	Α	0.86 / 0.77	0.074 / 0.086	0.88 / 1.03	1.32 / 1.54		
(208/230V)	Heating	Α	0.41 / 0.37	0.66 / 0.77				
External Finish			Unit: Galvanized steel plate; Drain pan: Pre-coated galvanized sheets plus powder coating					
	Height	Inches	11-13/32 11-7/16					
Dimensions	Width	Inches	Inches 43-3/4					
	Depth	Inches		20)-1/2			
Net Weight		Pounds	148	124	131	172		
Refrigerant Pipe	To Indoor Unit *1	Liquid Pipe (In.)	3/8 Brazed					
Dimensions	TO IIIGOOF OHIL T	Gas Pipe (In.)	5/8 (Brazed)					
Max. connected branches	capacity for all	Btu/h	360,000	360,000	360,000	432,000		
Max. Connected Sub BC Controlle		Btu/h	126,000 126,000 126,000 126,000					
Indoor Unit Capa	city Connectable to O	ne Branch		54,000 Btu/h or	less per branch			
Drain Pipe				O.D.	1-1/4"			

Notes:

Specifications are subject to change without notice.

^{*1} BC controller includes reducers for all branches. 5/8" flare to 1/2" braze, 3/8" flare to 1/4" braze.

^{*1} BC controller includes reducers for all branches. 5/8" flare to 1/2" braze, 3/8" flare to 1/4" braze.

 $^{^*2}$ If two sub BC controllers are connected and at least one is a CMB-P1016NU-HB, the maximum connected capacity is 168,000 Btu/h.

CMB-P-NU-GB1/HB1 (Sub BC)

Model Name			CMB-P104NU-GB1	CMB-P108NU-GB1	CMB-P1016NU-HB1			
Number of Branc	ches		4	8	16			
Power Source				208 / 230V, 1-phase, 60 Hz				
Power Input Cooling		W	53	106	314			
Tower input	Heating	W	27	53	157			
Current	Cooling	Α	0.25 / 0.23	0.51 / 0.46	1.17 / 1.37			
(208/230V)	Heating	Α	0.13 / 0.12	0.25 / 0.23	0.59 / 0.69			
External Finish			Unit: Galvanized steel p	Unit: Galvanized steel plate; Drain pan: Pre-coated galvanized sheets plus powder coating				
	Height	Inches	11-3/16					
Dimensions	Width	Inches	25-1	43-1/4				
	Depth	Inches						
Net Weight		Pounds	62	82	136			
Refrigerant Pipe	To Indoor Unit *1	Liquid Pipe (In.)		3/8 Brazed				
Dimensions	10 indoor Unit "1	Gas Pipe (In.)		5/8 Brazed				
Max. Connected Capacity for All Branches Btu/h			126,000	126,000	126,000			
Indoor Unit Capa	city Connectable to 0	One Branch	54,000 Btu/h or less per branch					
Drain Pipe			O.D. 1-1/4"					

Specifications are subject to change without notice.

Refrigerant Line Sizes from Main BC Controller to Sub BC Controller(s)

<u> </u>		` '	
	Liquid (High Pressure)	Gas (Low Pressure)	Liquid Pipe
Total downstream capacity < 72,000 Btu/h (nominal cooling capacity)	5/8" (Brazed)	3/4" (Brazed)	3/8" (Brazed)
Total downstream capacity between 73,000 - 108,000 Btu/h (nominal cooling capacity)	3/4" (Brazed)	7/8" (Brazed)	3/8" (Brazed)
Total downstream capacity between 109,000 - 126,000 Btu/h (nominal cooling capacity)	3/4" (Brazed)	1-1/8" (Brazed)	1/2" (Brazed)
Total downstream capacity between 127,000 - 144,000 Btu/h (nominal cooling capacity)	7/8" (Brazed)	1-1/8" (Brazed)	1/2" (Brazed)
Total downstream capacity between 145,000 - 168,000 Btu/h (nominal cooling capacity)	7/8" (Brazed)	1-1/8" (Brazed)	5/8" (Brazed)

Specifications are subject to change without notice.





Model numbers:

BB14BBSI/ BB38BBSI/ BB12BBSI/ BB58BBSI

- Size available: 1/4"; 3/8"; 5/8".
- Fully factory assembled.
- Furnace brazed and pressure tested.
- Each ball valve is equipped with 1/4" Schrader® Valve for refrigerant service.
- Design working pressure: 700 PSIG.
- Temperature range: -40° F to $+325^{\circ}$ F (-40° C to $+149^{\circ}$ C).
- Forged and machined brass unibody designed with forged brass seal cap.
- Polytetrafluoroethylene (PTFE) seals and gaskets (no synthetic O-rings).
- Seal cap design permits valve operation without removal of seal cap.
- One year limited materials and workmanship warranty on Ball Valves.

Schrader® is a registered trademark of Schrader-Bridgeport Inc.



- Engineered for Mini-split and Multi-split HVAC Units.
- Full Port Design.
- 700 PSIG Rated.
- R-410A Compatible.
- Brazed Connections.

Part Number	SAE Braze	А	В	С	D	Е
BB14BBSI	1/4"	6.5	3.06	1.81	1.81	1.42
BB38BBSI	3/8"	6.5	3.06	1.81	1.81	1.42
BB12BBSI	1/2"	6.5	3.06	1.81	1.81	1.42
BB58BBSI	5/8"	6.5	3.06	1.81	1.81	1.42

*Ball valves come with an insulation piece.

^{*1} BC controller includes reducers for all branches. 5/8" flare to 1/2" braze, 3/8" flare to 1/4" braze.





Model N	ame	208V/ 230V	PUHY-P72TKMU (-BS)	PUHY-P96TKMU (-BS)	PUHY-P120TKMU (-BS)	PUHY-P144TKMU (-BS				
		460V	PUHY-P72YKMU (-BS)	PUHY-P96YKMU (-BS)	PUHY-P120YKMU (-BS)	PUHY-P144YKMU (-BS				
Power Source			208 / 230V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz							
Capacity (Nominal)	Cooling	Btu/h Capacity	72,000	96,000	120,000	144,000				
*1	Heating	Btu/h Capacity	80,000	108,000	135,000	160,000				
	MCA	Α	25 / 23 12	34 / 31 15	45 / 42 20	53 / 49 24				
Electrical Supply	Recommended Fuse Size	А	30 15	35 20	50 25	60 25				
	Type X Quantity		Propelle	r Fan x 1	Propelle	r Fan x 2				
Fan	Airflow Rate	CFM	6,2	200	11,	300				
	External Static Pr	essure		Selectable; 0, 0.12 or 0.24"	W.G.; factory set to 0" W.G.					
	Type X Quantity			INVERTER-driven	Scroll Hermetic x 1					
	Operating Range		15% to 100%	16% to 100%	15% to 100%	14% to 100%				
Compressor Crankcase Heater W			-							
	Lubricant			MEL32						
Refrigerant	Туре			R4	10A					
External Finish			Pre-coated galvanized steel sheet (Plus Powder Coating for -BS type) <munsell 1="" 5y="" 8="" or="" similar=""></munsell>							
	Height	ln.	64-31/32							
Dimensions H X W X D	Width	ln.	36-1/4 48-1/16		68-2	9/32				
	Depth	In.	29-5/32							
Net Weight		Pounds	430 532 697 463 558 726							
Sound Pressure Leve (As Measured in an A		dB(A)	58.0	58.0	60.0	61.0				
	High Pressure Pr	otection	High pressure sensor, High pressure switch							
Protection Devices	Inverter Circuit (Compressor / Fa	ın)		Over-curren	t protection					
	Fan Motor			Therma	l switch					
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	3/8	3/8 (1/2", length to first joint ≥ 295')	3/8 (1/2", length to first joint ≥ 131')	1/2				
Dimensions	Gas (Low Pressure) (Brazed)	In.	7.	/8	1-	1/8				
Indoor Unit	Total Capacity			50% to 130% of ou	utdoor unit capacity					
Connectable	Model / Quantity		P06 - P96 / 1 to 15	P06 - P96 / 1 to 20	P06 - P96 / 1 to 26	P06 - P96 / 1 to 31				
Operating	Cooling	D.B.		**Outdoor: 2	3° to 115° F					
Temperature Range	Heating	W.B.		Outdoor: -	4° to 60° F					
Efficiency Ratings	EER		13.0 / 14.2	12.6 / 13.7	12.5 / 12.7	11.6 / 11.8				
(Ducted /	IEER		19.8 / 21.3	19.7 / 20.7	19.1 / 19.1	19.3 / 20.2				
Non-Ducted) *2	COP		3.83 / 4.19	3.95 / 4.22	3.66 / 3.83	3.56 / 3.72				

Notes:

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B./43° F (6° C) W.B.

-BS indicates Seacoast Protection option.

Specifications are subject to change without notice.

^{*1} Rating Conditions:

^{*2} Efficiency values based on AHRI 1230 test method.

 $^{^{**}}$ Low Ambient Kit is required for extended ambient cooling operation range down to $\mbox{-}10\mbox{\,}^{\circ}$ F DB.



PUHY-P**T(Y)SKMU

				PUHY-P168TSKMU (-BS) *2	PUHY-P192TSKMU (-BS) *2	PUHY-P216TSKMU (-BS) *2	PUHY-P240TSKMU (-BS) *2		
Model N	lame	208V/ 230V		With 1 PUHY-P72TKMU (-BS) and 1 PUHY-P96TKMU (-BS) *3	With 1 PUHY-P72TKMU (-BS) and 1 PUHY-P120TKMU (-BS)	With 1 PUHY-P96TKMU (-BS) and 1 PUHY-P120TKMU (-BS) *3	With 2 PUHY-P120TKMU -BS) *3		
Model Name			PUHY-P144YSKMU (-BS) *2	PUHY-P168YSKMU (-BS) *2	PUHY-P192YSKMU (-BS) *2	PUHY-P216YSKMU (-BS) *2	PUHY-P240YSKMU (-BS) *2		
		With 2 PUHY-P72YKMU (-BS) *3	With 1 PUHY-P72YKMU (-BS) and 1 PUHY-P96YKMU (-BS) *3	With 1 PUHY-P72YKMU (-BS) and 1 PUHY-P120YKMU- A (-BS) *3	With 1 PUHY-P96YKMU (-BS) and 1 PUHY-P120YKMU (-BS) *3	With 2 PUHY-P120YKMU (-BS) *3			
Power Source			460V, 3-Phase, 60Hz			-Phase, 60Hz nase, 60Hz			
Capacity	Cooling	Btu/h Capacity	144,000	168,000	192,000	216,000	240,000		
(Nominal) *1	Heating	Btu/h Capacity	160,000	188,000	215,000	243,000	270,000		
Fan	Type X Quantity Airflow Rate CFM External Static Pressure		Refer to: PUHY-P72YKMU (-BS	Refer to: PUHY-P72TKMU (-BS) / PUHY-P96TKMU (-BS)	Refer to: PUHY-P72TKMU (-BS) / PUHY-P120TKMU (-BS)	Refer to: PUHY-P96TKMU (-BS) / PUHY-P120TKMU (-BS)	Refer to: PUHY-P120TKMU (-BS) PUHY-P120YKMU (-BS)		
Type X Quantity		ty		PUHY-P72YKMU (-BS) / PUHY-P96YKMU (-BS)		PUHY-P96YKMU (-BS) / PUHY-P120YKMU (-BS)			
Compressor	Operating Ran	ge	9% to 100%	6% to 100%	6% to 100%	8% to 100%	8% to 100%		
	Crankcase W Heater Lubricant		Refer to: PUHY-P72YKMU (-BS)	Refer to: PUHY-P72TKMU (-BS) / PUHY-P96TKMU (-BS)	Refer to: PUHY-P72TKMU (-BS) / PUHY-P120TKMU (-BS)	Refer to: PUHY-P96TKMU (-BS) /	Refer to: PUHY-P120TKMU (-BS)		
Refrigerant	Туре			T GITT T GOTTAWO (BO)	TOTTI IZOTIMIO (BO)	PUHY-P120TKMU (-BS)	TOTT TESTIMO (BO)		
External Finish				PUHY-P72YKMU (-BS) /		PUHY-P96YKMU (-BS) /	PUHY-P120YKMU (-BS)		
Dimensions	Height	In.		PUHY-P96YKMU (-BS)		PUHY-P120YKMU (-BS)	FOITI-F 120 TRIVIO (-BS)		
HXWXD	Width	In.							
	Depth	In.							
Net Weight Sound Pressure Le	val (Ao	Pounds							
Measured in an And	echoic Room)	dB(A)	61.0	61.0	62.5	62.5	63.0		
Protection	High Pressure			High pr	ressure sensor, High pressure	switch			
Devices	(Compressor /		Over-current protection						
	Fan Motor			Thermal switch					
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.	1/2		<i>'</i> 8				
Dimensions Gas (Low Pressure) (Brazed)		ln.	1-1/8						
Indoor Unit Total Capacity					to 130% of outdoor unit cap				
Connectable	Model / Quanti	_	P06 - P96 / 1 to 31	P06 - P96 / 1 to 36	P06 - P96 / 1 to 41	P06 - P96 / 2 to 46	P06 - P96 / 2 to 50		
Operating Temperature	Cooling Heating	D.B. W.B.			**Outdoor: 23 to 115° F Outdoor: -4 to 60° F				
Range			10.0 / 10.0	10.6 / 10.0	1	10.0 / 10.0	10.1 / 10.0		
Efficiency Ratings (Ducted /	EER IEER		12.8 / 13.2 19.3 / 20.3	12.6 / 12.9	12.4 / 12.5 18.9 / 19.1	12.3 / 12.3 18.9 / 18.6	12.1 / 12.0 18.6 / 18.1		
Non-Ducted) *4	COP		3.79 / 3.95	3.78 / 3.83	3.63 / 3.61	3.65 / 3.56	3.55 / 3.53		
	COP		3.787 3.85	3./0/3.03	3.03 / 3.01	3.03 / 3.30	3.33 / 3.33		

Notes:

*1 Rating Conditions:

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B. / 43° F (6° C) W.B.

- *2 Twinning Kit is required for combining two or three individual outdoor units in the field for PUHY-P(T)YSKMU combined systems.
- *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.
- *4 Efficiency values based on AHRI 1230 test method.

- ** Low Ambient Kit is required for extended ambient cooling operation range down to $\mbox{-}10^{\circ}\,\mbox{F DB}.$
- -BS indicates Seacoast Protection option.

Specifications are subject to change without notice.



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			PUHY-P264TSKMU (-BS) *2	PUHY-P288TSKMU (-BS) *2	PUHY-P312TSKMU (-BS) *2	PUHY-P336TSKMU (-BS) *2	PUHY-P360TSKMU (-BS) *2
		208V/ 230V	With 2 PUHY-P72TKMU (-BS) and 1 PUHY-P120TKMU (-BS) *3	With 1 PUHY-P72TKMU (-BS) 1 PUHY-P96TKMU (-BS) and PUHY-P120TKMU (-BS) *3	With 1 PUHY-P72TKMU (-BS) and 2 PUHY-P120TKMU (-BS) *3	With 1 PUHY-P96TKMU (-BS) and 2 PUHY-P120TKMU (-BS) *3	With 3 PUHY-P120TKMU (-BS) *3
Model I	Name		PUHY-P264YSKMU (-BS) *2	PUHY-P288YSKMU (-BS) *2	PUHY-P312YSKMU (-BS) *2	PUHY-P336YSKMU (-BS) *2	PUHY-P360YSKMU (-BS) *2
460V		With 2 PUHY-P72YKMU (-BS) and 1 PUHY-P120YKMU (-BS) *3	With 1 PUHY-P72YKMU (-BS) 1 PUHY-P96YKMU (-BS) and 1 PUHY-P120YKMU (-BS) *3	With 1 PUHY-P72YKMU (-BS) and 2 PUHY-P120YKMU (-BS) *3	With 1 PUHY-P96YKMU (-BS) and 2 PUHY-P120YKMU (-BS) *3	With 3 PUHY-P120YKMU (-BS) *3	
Power Source					208 / 230V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz		
Capacity	Cooling	Btu/h Capacity	264,000	288,000	312,000	336,000	360,000
(Nominal) *1	Heating	Btu/h Capacity	295,000	323,000	350,000	378,000	405,000
F	Type X Quar Airflow	otity	Refer to: PUHY-P72TKMU (-BS) / PUHY-P120TKMU (-BS)	Refer to: PUHY-P72TKMU (-BS) / PUHY-P96TKMU (-BS) /	Refer to: PUHY-P72TKMU (-BS) / PUHY-P120TKMU (-BS)	Refer to: PUHY-P96TKMU (-BS) / PUHY-P120TKMU (-BS)	Refer to: PUHY-P120TKMU (-BS)
Fan	External Sta		PUHY-P72YKMU (-BS) /	PUHY-P120TKMÙ (-BS	PUHY-P72YKMU (-BS) /	PUHY-P96YKMU (-BS) /	PUHY-P120YKMU (-BS)
	Type X Quantity		PUHY-P120YKMU (-BS)	PUHY-P72YKMU (-BS) / PUHY-P96YKMU (-BS) / PUHY-P120YKMU (-BS)	PUHY-P120YKMU (-BS)	PUHY-P120YKMU (-BS)	
Compressor	Operating Range		5% to 100%	4% to 100%	4% to 100%	5% to 100%	5% to 100%
	Crankcase Heater	W	Refer to:	Refer to:	Refer to:	Refer to:	Refer to:
D (1)	Lubricant		PUHY-P72TKMU (-BS) /	PUHY-P72TKMU (-BS) /	PUHY-P72TKMU (-BS) /	PUHY-P96TKMU (-BS) /	PUHY-P120TKMU (-BS)
Refrigerant External Finish	Туре		PUHY-P120TKMU (-BS)	PUHY-P96TKMU (-BS) / PUHY-P120TKMU (-BS)	PUHY-P120TKMU (-BS)	PUHY-P120TKMU (-BS)	
Dimensions H X W X D	Height In. Width In. Depth In.		PUHY-P72YKMU (-BS) / PUHY-P120YKMU (-BS)	PUHY-P72YKMU (-BS) / PUHY-P96YKMU (-BS) /	PUHY-P72YKMU (-BS) / PUHY-P120YKMU (-BS)	PUHY-P96YKMU (-BS) / PUHY-P120YKMU (-BS)	PUHY-P120YKMU (-BS)
Net Weight		Pounds		PUHY-P120YKMU (-BS)			
Sound Pressur Measured in ar Room)		dB(A)	63.5	64.0	64.5		65.0
Protection	High Pressu Protection			High p	ressure sensor, High pressure	switch	
Devices	Inverter Circ (Compresso				Over-current protection		
	Fan Motor				Thermal switch		
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.			3/4		
Dimensions				1-3/8		1-	5/8
Indoor Unit	Total Capac			50	to 130% of outdoor unit capa	city	
Connectable	Model / Qua				P06 - P96 / 2 to 50		
Operating Temperature Range	Cooling	D.B. W.B.			*Outdoor: 23° to 115° F Outdoor: -4° to 60° F		
Efficiency	EER		12.5 / 12.5	12.4 / 12.4	12.1 / 12.1	11.9 / 12.0	11.7 / 11.8
Ratings	IEER		19.0 / 18.7	19.0 / 18.7	18.4 / 18.1	18.2 / 17.8	17.8 / 17.2
(Ducted / Non-Ducted) *4	COP		3.68 / 3.6	3.68 / 3.59	3.54 / 3.45	3.5 / 3.36	3.39 / 3.22
	50.		0.007 0.0	0.00 / 0.00	0.04 / 0.40	0.07 0.00	0.00 / 0.22

Notes:
*1 Rating Conditions:
Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B. / 43° F (6° C) W.B.

Specifications are subject to change without notice.

^{*2} Twinning Kit is required for combining two or three individual outdoor units in the field for PUHY-P(T)YSKMU combined systems.

^{*3} Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

^{*4} Efficiency values based on AHRI 1230 test method.

^{**} Low Ambient Kit is required for extended ambient cooling operation range down to

⁻BS indicates Seacoast Protection option.





Mod	el Name		PUHY-HP72TJMU (-BS)	PUHY-HP96TJMU (-BS)	PUHY-HP144TSJMU (-BS) *2	PUHY-HP192TSJMU (-BS) *2	
					With 2 PUHY-HP72TJMU (-BS)	With 2 PUHY-HP96TJMU (BS)	
Power Source				208/230V,	3-Phase, 60Hz	'	
O-markhatt	Cooling	Btu/h	72,000	96,000	144,000	192,000	
Capacity *1	Heating	Btu/h	80,000	108,000	160,000	216,000	
	MCA	Α	59 / 54	74 / 68	59 + 59 / 54 + 54 *3	74 + 74 / 68 + 68 *3	
Electrical Supply	Recommended Fuse/Breaker Size	Α	60 / 60	75 / 75	60 + 60 *3	75 + 75 *3	
	Maximum Fuse Size	Α	100 / 90	120 / 110	100 + 100 / 90 + 90 *3	120 + 120 / 110 + 110 *3	
	Type x Quantity		Propelle	er Fan x 1	Refer to	Refer to	
Fan	Airflow Rate	CFM	6,180	7,950	PUHY-HP72TJMU (-BS) Specifications	PUHY-HP96TJMU (-BS) Specifications	
	Motor Output	kW	0.	.92	Specifications	(-D3) Specifications	
	Operating Range	Cool- ing	30% to 100%	23% to 100%	15% to 100%	12% to 100%	
	operating name	Heat- ing	16% to 100%	13% to 100%	8% to 100%	6% to 100%	
Compressor	Туре		Inverter Sc	roll Hermetic			
	Motor Output	kW	5.3	6.7			
	Crankcase Heater W		45				
	Lubricant		ME	EL32			
Refrigerant	Туре		R4	10A	Refer to	Refer to PUHY-HP96TJMU (-BS) Specifications	
External Finish				eets (Plus Powder-coating for No. 5Y 8/1 or Similar>	PUHY-HP72TJMU (-BS) Specifications		
	Height	ln.	65				
Dimensions	Width	In.	36-1/4	48-1/16			
	Depth	In.	29-15/16				
Net Weight		Lbs.	497	585			
Sound Pressure Level (As Measured in an Anechoic I	Room)	dB(A)	56 (61 in Heating at -5° F Outdoor Temperature)	57 (62 in Heating at -5° F Outdoor Temperature)	59 (64 in Heating at -5° F Outdoor Temperature)	60 (65 in Heating at -5° F Outdoor Temperature)	
	High Pressure Protecti	on		High-pressure Sens	sor, High-pressure Switch		
Protection Devices	Compressor/Fan			Overheat Prote	ection/Thermal Switch		
	Inverter			Overheat and C	Overcurrent Protection		
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.		1/2		5/8	
Dimensions	Gas (Low Pressure) (Brazed)	In.	3/4	7/8		1-1/8	
In decoration	Total Capacity			50 to 130% of 0	Outdoor Unit Capacity		
Indoor Unit Quantity			P06-P72/1-15	P06-P96/1-20	P06-P96/1-31	P06-P96/1-41	
Operating Temperature Cooling				**Outdoor: 23°	F D.B. to 109° F D.B.		
Range	Heating			Outdoor: -13° F	W.B. to +60° F W.B.		
	EER		11.70 / 11.30	11.35 / 11.30	11.30 / 10.90	10.90 / 10.90	
Efficiency Ratings (Ducted / Non-Ducted) *4	IEER		16.80 / 16.20	16.00 / 15.40	14.40 / 13.85	13.60 / 13.10	
	COP		3.66 / 3.35	3.39 / 3.35	3.56 / 3.25	3.29 / 3.25	

Notes:

- *1 Rating Conditions:
- Cooling | Indoor: D.B. 26.7° C (80° F), W.B. 19.4° C (67° F); Outdoor: D.B. 35° C (95° F). Heating | Indoor: D.B. 21.1° C (70° F); Outdoor: D.B. 8.3° C (47° F), W.B. 6.1° C (43° F).
- *2 Twinning Kit CMY-Y100VBK2 is required for combining two individual outdoor units in the field for PUHY-HP-TSJMU combined systems.
- *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

- *4 Efficiency values based on AHRI 1230 test method.
- ** For details on extended ambient cooling operation range down to 0° FDB see Low Ambient Cooling section.
- -BS indicates Seacoast Protection option.

Specifications are subject to change without notice.





PUMY-P**NHMU/NKMU

Model Name			PUMY-P36NHMU(-BS)	PUMY-P48NHMU(-BS)	PUMY-P60NKMU(-BS)	
Power Source				208 / 230V, 1-phase, 60Hz		
0	Cooling	Btu/h	36,000	48,000	60,000	
Capacity *1	Heating	Btu/h	40,000	54,000	66,000	
	MCA	Α	26	26	35	
Electrical Supply	Maximum Fuse Size	Α	40	40	42	
Fan	Type x Quantity			Propeller Fan x 2		
raii	Airflow Rate	CFM	3,5	530	4,940	
	Туре			INVERTER-driven Scroll Hermetic		
Compressor	Motor Output	kW	2	.4	3.0	
	Lubricant			FV50S		
Refrigerant				R410A		
External Finish			Galvanized Sheet	s (plus Powder Coating for -BS Model) N	/lunsell 3Y 7.8/1.1	
	Height	Inches	53-	3/16	52-11/16	
Dimensions	Width	Inches	37-	41-5/16		
	Depth	Inches		13 (+1-3/16)		
Net Weight		Pounds	28	313		
Sound Pressure Levels (As Measur Room)	ed in an Anechoic	dB(A)	49 / 51	49 / 51 50 / 52		
	High Pressure Protect	ction	High Pressure Switch			
Protection Devices	Compressor/Fan		Discharge Thermo and	Compressor Thermo/Over-current Detection		
	Inverter		Over-current/Over-	Over-current/Voltage Protection		
Refrigerant Pipe	Liquid (High Pressure) (Flare)	Inches	3	/8	3/8	
Dimensions	Gas (Low Pressure) (Flare)	Inches	5	3/4		
Indoor Unit	Total Capacity		50 - 130% of Out	door Unit Capacity	50 - 130% of Outdoor Unit Capacity	
	Quantity		P06-36/1-6	P06-P54/1-8	P06-P72/1-12	
Operating Temperature Range	Cooling		50°FDB ~	Outdoor: 23° FDB ~ 115° FDB; 115°F D.B. if connecting PKFY-P06/08 Ir	ndoor Unit	
	Heating		Outdoor: 0° FV	/B ~ 60° F W.B.	Outdoor: -4° FWB ~ 60° F W.B.	
	EER		10.75 / 11.20	8.40 / 9.00	11.3 / 12.5	
Efficiency Ratings (Ducted / Non-Ducted) *2	SEER		14.3 / 14.3	14.5 / 15.5	16.5 / 16.7	
	COP		3.56 / 3.14	3.26 / 2.84	3.70 / 3.14	

Notes:

Specifications are subject to change without notice.

^{*1} Rating Conditions:
Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B./ 43° F (6° C) W.B.

^{*2} Efficiencies values based in AHRI 210/240 test method.

⁻BS indicates Seacoast Protection option.





PQRY-P**T(Y)LMU-A

Model Na		208/230 V	PQRY-P72TLMU-A	PQRY-P96TLMU-A	PQRY-P120TLMU-A	PQRY-P144TLMU-A			
Model Na	ime	460V	PQRY-P72YLMU-A	PQRY-P96YLMU-A	PQRY-P120YLMU-A	PQRY-P144YLMU-A			
Power Source				208 / 230V, 3- 460V, 3-Ph					
Capacity (Nominal)	Cooling	Btu/h	72,000	96,000	120,000	144,000			
*1	Heating	Btu/h	69,000	92,000	114,000	137,000			
	MCA	A	13 / 12	19 / 17	29 / 26	35 / 32			
Electrical Supply	IVICA	A	6	9	13	16			
Electrical Supply	MOP		20 / 20	30 / 25	50 / 45	60 / 50			
	MOP	A	15	15	20	25			
	Type x Quantit	у		INVERTER-driven	Scroll Hermetic x 1				
Compressor	Operating Ran	ge	24 % to 100%	18 % to 100%	14 % to 100%	19 % to 100%			
Lubricant				ME	L32				
	Water Flow Rate	GPM	25.4	25.4	25.4	31.7			
Circulating Water	Pressure Drop	Ft. (psi)	0 (0 40)	0 (0 40)	0 (0 40)	45 (0.00)			
	Max Water Pre PSI / 2 MPA	essure 290	8 (3.48)	8 (3.48)	8 (3.48)	15 (6.38)			
Refrigerant	Туре		R410A						
External Finish			Galvanized steel sheets						
Height		In.		43-5/16		57-1/8			
Dimensions	Width	In.							
	Depth	In.							
			380 479						
Net Weight		Pounds			505				
Sound Pressure Levelin an Anechoic Room		dB(A)	46 48 54						
	High Pressure	Protection	High pressure sensor, High pressure switch						
Protection Devices	Compressor		Over-heat protection, Over-current protection						
	Inverter		Over-heat protection						
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	5/8	3/	/4	7/8			
Dimensions	Gas (Low Pressure) (Brazed)	In.	3/4	7,	/8	1-1/8			
Indoor Unit	Total Capacity	,		50 to 150% of water-	-source unit capacity				
Connectable	Model / Quant	ity	P06~P96/1~18	P06~P96/1~24	P06~P96/1~30	P06~P96/1~36			
Operating	Cooling	W.B.		Indoor: 59	9 to 75° F				
Temperature Range	Heating	D.B.		Indoor: 50	to 113° F				
Inlet Water	Cooling			*50 to	113° F				
Temperature Range	Heating			*50 to	113° F				
Felialanau Batinana	EER		16.7 / 20.1	15.2 / 18.7	13.4 / 15.6	12.1 / 15.4			
Efficiency Ratings (Ducted /	IEER		24.2 / 28.1	25.0 / 30.4	23.2 / 29.0	19.5 / 23.1			
Non-Ducted) *2	СОР		5.51 / 6.05	5.77 / 5.93	5.51 / 5.60	4.90 / 5.50			

Notes:

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

^{*1} Rating Conditions:

Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor:: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

^{*2} Efficiency values based on AHRI 1230 test method.

Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to on. When dip switch 3-9 is on a glycol solution should always be used to







MadelNe	mo	208/230 V	PQRY-P168TLMU-A	PQRY-P192TLMU-A	PQRY-P216TLMU-A	PQRY-P240TLMU-A			
Model Na	me	460V	PQRY-P168YLMU-A	PQRY-P192YLMU-A	PQRY-P216YLMU-A	PQRY-P240YLMU-A			
Power Source									
Capacity (Nominal)	Cooling	Btu/h	168,000	192,000	216,000 240,000				
*1	Heating	Btu/h	161,000	183,000	206,000	228,000			
	MCA	A	44 / 39	54 / 49	69 / 63	79 / 71			
Electrical Supply	WICA	A	20	25	31	36			
Liectrical Supply	MOP	A	70 / 70	90 / 80	110 / 110	125 / 125			
MOP		A	35	40	50	60			
	Type x Quantit	у		INVERTER-driven	Scroll Hermetic x 1				
Compressor	Operating Ran	ge	16 % to 100%	14 % to 100%	13 % to 100%	12 % to 100%			
	Lubricant			ME	:L32				
	Water Flow Rate	GPM	31.7	31.7	50.7	50.7			
Circulating Water	Pressure Drop	Ft. (psi)	15 (6.38)	15 (6.38)	15 (6.53)	15 (6.53)			
	Max Water Pre PSI / 2 MPA	ssure 290	10 (0.00)	10 (0.00)	10 (0.00)	10 (0.00)			
Refrigerant	Туре			R4	10A				
External Finish				Galvanized	steel sheets				
	Height	In.	57-1/8						
Dimensions	Width	In.		34-1	11/16				
	Depth	In.	21-11/16						
Net Weight		Pounds	3/	80	55	56			
		1 oundo	404 571						
Sound Pressure Level in an Anechoic Room)		dB(A)	56 58						
	High Pressure	Protection	High pressure sensor, High pressure switch						
Protection Devices	Compressor		Over-heat protection, Over-current protection						
	Inverter		Over-heat protection						
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.	7	/8	7/8 (1-1/8 for the part that exceeds 65 m)				
Dimensions	Gas (Low Pressure) (Brazed)	In.		1-1/8		1-3/8			
	Total Capacity			50 to 150% of water	-source unit capacity				
Indoor Unit Connectable	Model / Quant	ity	P06~P96/1~42	P06~P96/1~48	P06~P96/2~50 (Connectable branch pipe number is max. 48.)	P06~P96/2~50 (Connectable branch pipe number is max. 48.)			
Operating	Cooling	W.B.		Indoor: 5	9 to 75° F	1			
Temperature Range	Heating	D.B.		Indoor: 50) to 113° F				
Inlet Water	Cooling	1		*50 to	113° F				
Temperature Range	Heating			*50 to	113° F				
	EER		15.1 / 18.6	11.9 / 13.5	14.8 / 17.1	11.5 / 12.4			
Efficiency Ratings (Ducted /	IEER		22.5 / 26.1	18.0 / 21.8	23.6 / 25.8	18.4 / 21.7			
Non-Ducted) *2	COP								

Notes:

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

^{*1} Rating Conditions: Raung Conditions: Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor:: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

^{*2} Efficiency values based on AHRI 1230 test method.

Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to on. When dip switch 3-9 is on a glycol solution should always be used to







			PQRY-P144TSLMU-A *2	PQRY-P168TSLMU-A *2	PQRY-P192TSLMU-A *2	PQRY-P216TSLMU-A *2	PQRY-P240TSLMU-A *2		
Model Name		208/230 V	With 2 PQRY-P72TLMU-A *3	With 1 PQRY-P72TLMU-A and 1 PQRY-P96TLMU-A *3	With 2 PQRY-P96TLMU-A *3	With 1 PQRY-P96TLMU-A and 1 PQRY-P120TLMU-A *3	With 2 PQRY-P120TLMU-A *3		
			PQRY-P144YSLMU-A *2	PQRY-P168YSLMU-A *2	PQRY-P192YSLMU-A *2	PQRY-P216YSLMU-A *2	PQRY-P240YSLMU-A *2		
460V		With 2 PQRY-P72YLMU-A *3	With 1 PQRY-P72YLMU-A and 1 PQRY-P96YLMU-A *3	With 2 PQRY-P96YLMU-A *3	With 1 PQRY-P96YLMU-A and 1 PQRY-P120YLMU-A *3	With 2 PQRY-P120YLMU-A *3			
Power Source					208 / 230V, 3-Phase, 60H 460V, 3-Phase, 60Hz	dz			
Capacity (Nominal)	Cooling	Btu/h	144,000	168,000	192,000	216,000	240,000		
*1	Heating	Btu/h	160,000	188,000	215,000	243,000	270,000		
	Operating Ra	ange	12 % to 100%	10 % to 100%	9 % to 100%	8 % to 100%	7 % to 100%		
Compressor	Type x Quan	tity	Refer to:	Refer to:	Refer to:	Refer to:	Refer to:		
•	Lubricant								
	Water Flow Rate	GPM (L/s)			PQRY-P96TLMU-A				
Circulating Water	Pressure Drop	Ft. (psi)	PQRY-P72TLMU-A	PQRY-P72TLMU-A PQRY-P96TLMU-A		PQRY-P96TLMU-A PQRY-P120TLMU-A	PQRY-P120TLMU-A		
Operation Volume Range		GPM (L/m)							
Refrigerant	Туре								
External Finish									
	Height	ln.	PQRY-P72YLMU-A	PQRY-P72YLMU-A	PQRY-P96YLMU-A	PQRY-P96YLMU-A PQRY-P120YLMU-A	PQRY-P120YLMU-A		
Dimensions	Width	In.		PQRY-P96YLMU-A					
	Depth	In.							
Net Weight		Pounds							
Sound Pressure Leve Measured in an Aneo	choic Room)	dB(A)	50.0	51.0	52.0	53.0	54.0		
Protection Devices	High Pressur Protection	re	High pressure sensor, High pressure switch						
Protection Devices	Compressor	/ Fan	Overheat protection / Thermal switch						
	Inverter			C	verheat and Overcurrent Pro	tection			
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.		7/8		7/8 (1-1/8 for the p	art that exceeds 65 m)		
Dimensions	Gas (Low Pressure) (Brazed)	In.		1-	-1/8		1-3/8		
	Total Capaci	ity			0 to 150% of outdoor unit ca	apacity			
Indoor Unit Connectable	Model / Qua	ntity	P06~P96/1~36	P06~P96/1~42	P06~P96/1~48	P06~P96/2~50 (Connectable branch pipe number is max. 48.)	P06~P96/2~50 (Connectable branch pipe number is max. 48.)		
Inlet Water	Cooling				*50 to 113° F	· · · · · · · · · · · · · · · · · · ·	-		
Temperature Range	Heating				*50 to 113° F				
Efficiency Ratings	EER		14.4 / 16.2	11.2 / 10.9	13.5 / 14.9	10.8 / 11.0	12.5 / 13.8		
(Ducted /	IEER		24.4 / 26.4	19.0 / 21.2	23.5 / 25.9	18.8 / 21.2	22.4 / 25.7		
Non-Ducted) *4	COP		5.77 / 5.53	4.75 / 5.23	5.64 / 5.40	4.52 / 5.05	5.46 / 5.32		

Notes:

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

*2 Twinning kit is required for combining two individual outdoor units in the field for

PQRY-P-T(Y)SLMU.

^{*3} Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

^{*4} Efficiency values based on AHRI 1230 test method.

^{*} Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to ON. When dip switch 3-9 is on a glycol solution should always be used to prevent freezing.





PQRY-P**T(Y)SHMU-A

			PQRY-P288TSLMU-A *2	PQRY-P312TSLMU-A *2	PQRY-P336TSLMU-A *2			
Model Na		208/230 V	With 2 PQRY-P144TLMU-A *3	With 1 PQRY-P72TLMU-A and 1 PQRY-P96TLMU-A *3	With 2 PQRY-P168TLMU-A *3			
Model Nai	me		PQRY-P288YSLMU-A *2	PQRY-P312YSLMU-A *2	PQRY-P336YSLMU-A *2			
		460V	With 2 PQRY-P144YLMU-A *3	With 1 PQRY-P72YLMU-A and 1 PQRY-P96YLMU-A *3	With 2 PQRY-P168YLMU-A *3			
Power Source				208 / 230V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz				
Capacity (Nominal)	Cooling	Btu/h	288,000	312,000	336,000			
*1	Heating	Btu/h	275,000	297,000	320,000			
	Operating Ra	ange	9 % to 100%	9 % to 100%	8 % to 100%			
Compressor	Type x Quan		Refer to:	Refer to:	Refer to:			
	Lubricant							
	Water Flow Rate	GPM (L/s)						
Circulating Water	Pressure Drop	Ft. (psi)	PQRY-P144TLMU-A	PQRY-P168TLMU-A PQRY-P144TLMU-A	PQRY-P168TLMU-A			
	Operation Volume Range	GPM (L/m)						
Refrigerant	Туре							
External Finish			DODY B440/4 MILA	DODY/ D400Y/ M414 A	PQRY-P168YLMU-A			
	Height	ln.	PQRY-P144YLMU-A	PQRY-P168YLMU-A	PQRY-P168YLMU-A			
Dimensions	Width	ln.		PQRY-P144YLMU-A				
	Depth	ln.						
Net Weight		Pounds						
Sound Pressure Leve Measured in an Anec	choic Room)	dB(A)	57	58	59			
Protection Devices	High Pressur Protection		High pressure sensor, High pressure switch					
Trottotion Bevices	Compressor	/ Fan	Overheat protection / Thermal switch					
	Inverter		Over	heat and Overcurrent Prote	ction			
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	1-1/8					
Dimensions	Gas (Low Pressure) (Brazed)	In.		1-3/8				
	Total Capaci	ty		150% of outdoor unit cap	acity			
Indoor Unit Connectable	Model / Qua	ntity	P06~P96/2~50 (Connectable branch pipe number is max. 48.)	P06~P96/2~50 (Connectable branch pipe number is max. 48.)	P06~P96/2~50 (Connectable branch pip number is max. 48.)			
Inlet Water	Cooling			*50 to 113° F				
Temperature Range	Heating			*50 to 113° F				
Efficiency Ratings	EER		11.4 / 13.7	11.2 / 13.0	11.1 / 12.3			
(Ducted /	IEER		18.5 / 20.6	17.6 / 20.4	16.8 / 20.1			
Non-Ducted) *4	COP		4.90 / 5.25	4.78 / 5.24	4.66 / 5.23			

Notes:

- Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

 *2 Twinning kit is required for combining two individual outdoor units in the field for
- PQRY-P-T(Y)SLMU.
- *3 Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

*4 Efficiency values based on AHRI 1230 test method.

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to ON. When dip switch 3-9 is on a glycol solution should always be used to prevent freezing.





PQHY-P**T(Y)LMU-A

		208/230V	PQHY-P72TLMU-A	PQHY-P96TLMU-A	PQHY-P120TLMU-A	PQHY-P144TLMU-A		
Model Na	me	460V	PQHY-P72YLMU-A	PQHY-P96YLMU-A	PQHY-P120YLMU-A	PQHY-P144YLMU-A		
Power Source				208 / 230V, 3	-Phase, 60Hz nase, 60Hz			
Capacity (Nominal)	Cooling	Btu/h	72,000	96,000	120,000	144,000		
*1	Heating	Btu/h	69,000	92,000	114,000	137,000		
			13 / 12	19 / 17	29 / 26	35 / 32		
	MCA	Α	6	9	13	16		
Electrical Supply			20 / 20	30 / 25	50 / 45	60 / 50		
	MOP	Α	15	15	20	25		
	Type x Quantit	y		INVERTER-driven	Scroll Hermetic x 1			
Compressor Operating		ige	24 % to 100%	18 % to 100%	14 % to 100%	19 % to 100%		
	Lubricant			ME	L32	l.		
	Water Flow Rate	GPM	25.4	25.4	25.4	31.7		
Circulating Water	Pressure Drop	Ft. (psi)	2.5.13		2.6.10	17 (7.2.2)		
	Max Water Pre	essure 290	8 (3.48)	8 (3.48)	8 (3.48)	15 (6.38)		
Refrigerant	Туре		R410A					
External Finish				Galvanized	steel sheets			
	Height	In.		43-5/16		57-1/8		
_	Width	In.		34-1	1/16			
	Depth	In.		21-1	1/16			
				384		481		
Net Weight		Pounds			508			
Sound Pressure Level in an Anechoic Room		dB(A)	46	54				
	High Pressure	Protection	High pressure sensor, High pressure switch					
Protection Devices	Compressor			Over-heat protection,	Over-current protection			
	Inverter			Over-heat	protection			
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	3/8	3/8 (1/2, total I	3/8 (1/2, total length >= 90 m)			
Dimensions	Gas (Low Pressure) (Brazed)	In.	3/4	7.	/8	1-1/8		
Indoor Unit	Total Capacity	,		50 to 150% of water	-source unit capacity			
Connectable	Model / Quant	ity	P06~P96/1~15	P06~P96/1~20	P06~P96/1~26	P06~P96/1~31		
Operating	Cooling	W.B.		Indoor: 5	9 to 75° F			
Temperature Range	Heating	D.B.		Indoor: 50) to 113° F			
Inlet Water	Cooling			*50 to	113° F			
Temperature Range	Heating			*50 to	113° F			
Efficiency Policy	EER		17.4 / 20.7	15.3 / 19.4	13.5 / 15.9	12.1 / 15.6		
Efficiency Ratings (Ducted /	IEER		24.2 / 28.1	25.0 / 30.4	23.2 / 29.0	19.5 / 23.1		
Non-Ducted) *2	COP		5.62 / 6.15	5.80 / 6.02	5.55 / 5.66	4.92 / 5.56		

Notes:

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

^{*1} Rating Conditions:

Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor:: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

^{*2} Efficiency values based on AHRI 1230 test method.

Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to ON. When dip switch 3-9 is on a glycol solution should always be used to





PQHY-P**T(Y)LMU-A

		208/230 V	PQHY-P168TLMU-A	PQHY-P192TLMU-A	PQHY-P216TLMU-A	PQHY-P240TLMU-A			
Model Nar	me	460 V	PQHY-P168YLMU-A	PQHY-P192YLMU-A	PQHY-P216YLMU-A	PQHY-P240YLMU-A			
Power Source									
Capacity (Nominal)	Cooling	Btu/h	168,000	192,000	216,000	240,000			
*1	Heating	Btu/h	161,000	183,000	206,000	228,000			
	MCA		44 / 39	54 / 49	69 / 63	79 / 71			
Electrical Occupa	MCA	Α	20	25	31	36			
Electrical Supply	MOD		70 / 70	90 / 80	110 / 110	125 / 125			
	MOP	A	35	40	50	60			
	Type x Quantit	у		INVERTER-driven	Scroll Hermetic x 1				
Compressor	Operating Ran	ge	16 % to 100%	14 % to 100%	13 % to 100%	12 % to 100%			
	Lubricant			ME	L32				
	Water Flow Rate	GPM	31.7	31.7	50.7	50.7			
Circulating Water	Pressure Drop	Ft. (psi)	15 (6.38)	15 (6.38)	15 (6.53)	15 (6.53)			
	Max Water Pre PSI / 2 MPA	essure 290	13 (0.36)	13 (0.36)	15 (0.55)	15 (6.55)			
Refrigerant	Туре		R410A						
External Finish			Galvanized steel sheets						
	Height	In.		57-	1/8				
_	Width	In.	34-11/16						
	Depth	In.		21-1	1/16				
Net Weight		Pounds	4	81	5	58			
ivet weight		1 ounus	5	08	5	74			
Sound Pressure Level in an Anechoic Room)	(As Measured	dB(A)	56 58						
	High Pressure	Protection	High pressure sensor, High pressure switch						
Protection Devices	Compressor			Over-heat protection, 0	Over-current protection				
	Inverter			Over-heat	protection				
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.		5,	/8				
Dimensions	Gas (Low Pressure) (Brazed)	In.		1-	1/8				
Indoor Unit	Total Capacity	,		50 to 150% of water	-source unit capacity				
Connectable	Model / Quant	ity	P06~P96/1~36	P06~P96/1~41	P06~P96/2~46	P06~P96/2~50			
Operating	Cooling	W.B.		Indoor: 5	9 to 75° F				
Temperature Range	Heating	D.B.		Indoor: 50	50 to 113° F				
Inlet Water	Cooling			*50 to	113° F				
Temperature Range	Heating			*50 to	113° F				
Efficiency Patients	EER		15.2 / 19.0	12.0 / 13.6	15.0 / 17.3	11.5 / 12.5			
Efficiency Ratings (Ducted /	IEER		22.5 / 26.1	18.0 / 21.8	23.6 / 25.8	18.4 / 21.7			
Non-Ducted) *2									

Notes:

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

^{*1} Rating Conditions: Raung Conditions: Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor:: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

^{*2} Efficiency values based on AHRI 1230 test method.

Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to ON. When dip switch 3-9 is on a glycol solution should always be used to







			PQHY-P144TSLMU-A *2	PQHY-P168TSLMU-A *2	PQHY-P192TSLMU-A *2	PQHY-P216TSLMU-A *2	PQRY-P240TSLMU-A *2		
Model Na	me	208/230 V	With 2 PQHY-P72TLMU-A *3	With 1 PQHY-P72TLMU-A and 1 PQHY-P96TLMU-A *3	With 2 PQHY-P96TLMU-A *3	With 1 PQHY-P96TLMU-A and 1 PQHY-P120TLMU-A *3	With 2 PQHY-P120TLMU-A *3		
Woder Name			PQHY-P144YSLMU-A *2	PQHY-P168YSLMU-A *2	PQHY-P192YSLMU-A *2	PQHY-P216YSLMU-A *2	PQHY-P240YSLMU-A *2		
	460V		With 2 PQHY-P72YLMU-A *3	With 1 PQHY-P72YLMU-A and 1 PQHY-P96YLMU-A *3	With 2 PQHY-P96YLMU-A *3	With 1 PQHY-P96YLMU-A and 1 PQHY-P120YLMU-A *3	With 2 PQHY-P120YLMU-A *3		
Power Source					208 / 230V, 3-Phase, 60H 460V, 3-Phase, 60Hz	łz			
Capacity (Nominal)	Cooling	Btu/h	144,000	168,000	192,000	216,000	240,000		
*1	Heating	Btu/h	160,000	188,000	215,000	243,000	270,000		
	Operating Ra	ange	12 % to 100%	10 % to 100%	9 % to 100%	8 % to 100%	7 % to 100%		
Compressor	Type x Quan	tity	Refer to:	Refer to:	Refer to:	Refer to:	Refer to:		
-	Lubricant								
	Water Flow Rate	GPM (L/s)							
	Pressure		PQHY-P72TLMU-A	PQHY-P72TLMU-A	PQHY-P96TLMU-A	PQHY-P96TLMU-A	PQHY-P120TLMU-A		
Circulating Water	Drop Operation	Ft. (psi)		PQHY-P96TLMU-A		PQHY-P120TLMU-A			
	Volume Range	GPM (L/m)							
Refrigerant Type									
External Finish			DOUBLE DESCRIPTION	DOLIN (D70) (LAU L A	DOUBLE DOOM AND A	DODY/ DOOY/ 14/1 4	DOLLY DAGOV AND A		
	Height	ln.	PQHY-P72YLMU-A	PQHY-P72YLMU-A	PQHY-P96YLMU-A	PQRY-P96YLMU-A	PQHY-P120YLMU-A		
Dimensions	Width	ln.		PQHY-P96YLMU-A		PQRY-P120YLMU-A			
	Depth	ln.							
Net Weight		Pounds							
Sound Pressure Leve		dB(A)	49	50	51	55	57		
Measured in an Aneo	High Pressu	` ′							
Donto di co Donto co	Protection		High pressure sensor, High pressure switch						
Protection Devices	Compressor	/ Fan		0	verheat protection / Thermal	mal switch			
	Inverter			C	verheat and Overcurrent Pro	tection			
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.	1/2	5/8					
Dimensions	Gas (Low Pressure) (Brazed)	In.			1-1/8				
Indoor Unit	Total Capaci	ty		5	60 to 150% of outdoor unit ca	apacity			
Connectable	Model / Qua	ntity	P06~P96/1~31	P06~P96/1~36	P06~P96/1~41	P06~P96/2~46	P06~P96/2~50		
Inlet Water	Cooling				*50 to 113° F				
Temperature Range	Heating				*50 to 113° F				
Efficiency Ratings	EER		14.5 / 16.4	11.3 / 10.9	13.6 / 15.0	10.8 / 11.0	12.5 / 13.9		
(Ducted /	IEER		24.4 / 26.4	19.0 / 21.2	23.5 / 25.9	18.8 / 21.2	22.4 / 25.7		
Non-Ducted) *4	COP		5.80 / 5.57	4.77 / 5.26	5.68 / 5.43	4.54 / 5.08	5.49 / 5.35		

Notes:

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor: 68° F (20° C) D.B.; Water Temperature: 68° F (20° C).

*2 Twinning kit is required for combining two individual outdoor units in the field for

PQRY-P-T(Y)SLMU.

^{*3} Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

^{*4} Efficiency values based on AHRI 1230 test method.

^{*} Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to ON. When dip switch 3-9 is on a glycol solution should always be used to prevent freezing.



PQHY-P**T(Y)SHMU-A

		208/230V	PQHY-P288TSLMU-A *2 With	PQHY-P312TSLMU-A *2 With	PQHY-P336TSLMU-A *2 With	PQHY-P360TSLMU-A *2 With			
Model Nan		200/230¥	2 PQHY-P144TLMU-A *3	1 PQHY-P144TLMU-A and 1 PQHY-P168TLMU-A *3	2 PQHY-P168TLMU-A *3	1 PQHY-P168TLMU-A and 1 PQHY-P192TLMU-A *3			
Model Nan	ne		PQHY-P288YSLMU-A *2	PQHY-P312YSLMU-A *2	PQHY-P336YSLMU-A *2	PQHY-P360YSLMU-A *2			
	460V		With 2 PQHY-P144YLMU-A *3	With 1 PQHY-P144YLMU-A and 1 PQHY-P168YLMU-A *3	With 2 PQHY-P168YLMU-A *3	With 1 PQHY-P168YLMU-A and 1 PQHY-P192YLMU-A *3			
Power Source			208 / 230V, 3-Phase, 60Hz 460V, 3-Phase, 60Hz						
	Cooling	Btu/h	288,000	312,000	336,000	360,000			
*1	Heating	Btu/h	323,000	350,000	378,000	405,000			
	Operating Ra	ange	9 % to 100%	9 % to 100%	8 % to 100%	8 % to 100%			
Compressor	Type x Quan	tity	Refer to:	Refer to:	Refer to:	Refer to:			
	Lubricant								
	Water Flow Rate	GPM (L/s)	DOUBLE DATA ATTEMENT	DOLLY DZOTI MILLA	DOLLY DAGGTI MILLA	DOLLY DAGOTI MILLA			
Circulating Water	Pressure Drop	Ft. (psi)	PQHY-P144TLMU-A	PQHY-P72TLMU-A PQHY-P96TLMU-A	PQHY-P168TLMU-A	PQHY-P168TLMU-A PQHY-P192TLMU-A			
	Operation Volume Range	GPM (L/m)							
Refrigerant Type									
External Finish									
	Height	ln.	PQHY-P144YLMU-A	PQHY-P72YLMU-A	PQHY-P168YLMU-A	PQRY-P168YLMU-A			
Dimensions	Width	In.		PQHY-P96YLMU-A		PQRY-P192YLMU-A			
	Depth	ln.							
Net Weight		Pounds							
Sound Pressure Leve Measured in an Anec		dB(A)	57	58	59	60			
	High Pressur Protection	re	High pressure sensor, High pressure switch						
Protection Devices	Compressor	/ Fan		Overheat protecti	ion / Thermal switch				
	Inverter			Overheat and Overcurrent Protection					
	Liquid (High Pressure) (Brazed)	In.		3/4					
	Gas (Low Pressure) (Brazed)	In.	1-	3/8	1-	-5/8			
Indoor Unit	Total Capaci	ity		50 to 150% of ou	utdoor unit capacity				
Connectable	Model / Qua	ntity	P06~P96/2~50	P06~P96/2~50	P06~P96/2~50	P06~P96/2~50			
	Cooling			*50 to	113° F				
Temperature Range	Heating			*50 to	113° F				
Efficiency Ratings	EER		11.4 / 13.8	11.2 / 13.0	11.1 / 12.3	11.2 / 12.1			
(Ducted /	IEER		18.5 / 20.6	17.6 / 20.4	16.8 / 20.1	17.5 / 20.3			
Non-Ducted) *4	COP		4.92 / 5.27	4.80 / 5.26	4.67 / 5.25	4.64 / 5.14			

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage.

Notes:
*1 Rating Conditions:

Cooling | Indoor: 81° F (27° C) D.B. / 66° F (19° C) W.B.; Water Temperature: 86° F (30° C) Heating | Indoor: 88° F (20° C) D.B.; Water Temperature: 68° F (20° C).

Twinning kit is required for combining two individual outdoor units in the field for PQRY-P-T(Y)SLMU.

^{*3} Each individual outdoor unit requires a separate electrical connection. Reference electrical data for each individual outdoor unit.

^{*4} Efficiency values based on AHRI 1230 test method.

Inlet water temperature range can be extended down to 23° F by flipping dip switch 3-9 to ON. When dip switch 3-9 is on a glycol solution should always be used to prevent freezing.



HYDRONIC HEAT EXCHANGER

PWFY-P**NMU-E-AU/BU

Model Name				PWFY-P36NMU-E-AU	PWFY-P72NMU-E-AU	PWFY-P36NMU-E-BU	
Power Source					208 / 230V, 1-phase, 60Hz		
Cooling Capacity	*1		Btu/h	36,200	72,000	-	
Heating Capacity	*1		Btu/h	39,900	79,800	39,900	
Power	Coolir	Cooling kW		0.0	015	N/A	
Consumption	Heatir	Heating		0.0	015	2.48	
Current	Cooling		Α	0.072	/ 0.065	N/A	
Current	Heating		Α	0.072	/ 0.065	12.30 /11.12	
External Finish					Galvanized-steel Sheet		
	Heigh	t	In.		31-1/2		
Dimensions	Width		In.		17-3/4		
	Depth		In.	11-13/16			
Net Weight	Unit		Pounds	78	84	133	
		Cooling			PUHY/PURY-HP/PQRY/PQHY) D.B. (PUHY-HP)	-	
Operating Outdoor Temperature Range Heating			-4° F to 90° F W -4° F to 60° F W -13° F to 60° F	-4 ° F to 90° F W.B.			
Circulating Water Range	Operation	on Volume	GPM (L/m)	4.8-9.4 (18-36)	7.9-18.9 (30-72)	2.6-9.6 (10-36)	
Circulating Water	Design	Pressure	MPa (psi)	1 (145)			
Water Piping	Inlet		In.	3/4 FPT	1 FPT	3/4 FPT	
Dimensions	Outlet		In.	3/4 FPT	1 FPT	3/4 FPT	
Refrigerant Pipe	Liquid (Braze	(High Pressure) ed)	In.	3/8	3/8	3/8	
Dimensions	Gas (L (Braze	ow Pressure) ed)	In.	5/8	3/4	5/8	
Drainpipe Dimens	ions (O.I	D.)	In.		1-1/4		
Sound Pressure L	.evels		dB(A)	2	29	44	
Connectable Outdoor Units				PURY-P72~288 PURY-P72~288 PURY-HP72~19; PORY-P72~240 PUHY-P72~360 PUHY-P72~360 PQHY-P72~360	PURY-P72-288T/Y(S)KMU (-BS) PURY-P72-288T/Y(S)JMU (-BS) PURY-HP72-192T/Y(S)KMU (-BS) PQRY-P72-240T/Y(S)HMU (-BS)		

*1 Nominal heating conditions (PWFY conditions are indicated in the parentheses).

(R2-Series)

Outdoor Temp.: 47° F D.B. / 43° F W.B. (8.3° C D.B./6.1° C W.B.)

Pipe length: 25 ft (7.6 m) Level difference: 0 ft (0 m)

(Inlet water Temp.: 149° F (65°C) Water flow rate: 9.2 gpm (2.15 m³/h))

(WR2-Series)

Circulating water Temp.: 70° F (21.1° C) Pipe length: 25 ft (7.6 m)

Level difference: 0 ft (0 m) (Inlet water Temp.: 149° F (65° C) Water flow rate 9.2 gpm (2.15 m³/h))

Note: Consult Application Note 2014 - Designing with PWFY for additional design assistance.

Note: The design water pressure drop and flow. Note that the pressure drop doesn't

Specifications are subject to change without notice.



WALL-MOUNTED INDOOR UNIT

PKFY-P**N(H,K)MU-E2

Model Name			PKFY- P06NBMU-E2	PKFY- P08NHMU-E2	PKFY- P12NHMU-E2	PKFY- P15NHMU-E2	PKFY- P18NHMU-E2	PKFY-P24NK- MU-E2.TH	PKFY-P30NK- MU-E2.TH	
Power Source					20	3 / 230V, 1-Phase, 60)Hz			
Cooling Capacity	/	Btu/h *1	6,000	8,000	12,000	15,000	18,000	24,000	30,000	
Heating Capacity	У	Btu/h *1	6,700	9,000	13,500	17,000	20,000	27,000 34,000		
Power	Cooling	W	8		3	0		70		
Consumption	Heating	W	30		3	0		7	0	
Current	Cooling	Α	.15		.3	0		0.	50	
Current	Heating	Α	.15	.30					50	
External Finish	Munsell No.			1.0Y 9.2 / 0.2						
	Height	In.		11-5/8 32-1/8 35-3/8				14-	3/8	
Dimensions	Width	In.	32-1/8					46-1/16		
	Depth	In.	8-7/8	8-7/8 9-13/16				11-5/8		
Net Weight	Unit	Pounds	22	22 29 46					6	
Heat Exchanger					Cross Fin (Alu	minum Plate Fin and	Copper Tube)			
	Type x Quantit	ty	Line Flow Fan x 1							
Fan	Airflow Rate *2	CFM	170 - 180 - 200 - 210	320-370-413 320-370-425			570-920	710-920		
	Motor Type		Single-phase Induction Motor							
Air Filter			Polypropylene Honeycomb							
Refrigerant Pipe	Liquid (High Pressure) (Flare)	In.			1/4			3.	/8	
Dimensions	Gas (Low Pressure) (Flare)	In.		1/2					5/8	
Drain Pipe Dime	nsion (I.D.)	In.				5/8				
Sound Pressure Levels *2		dB(A)	32 - 33 - 35 - 36		34 - 39 - 43		36 - 41 - 45	39 - 49	43 - 49	

Notes:

Specifications are subject to change without notice.

^{*1} Cooling/Heating Capacity indicates the maximum value at operation under the following conditions: Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 45° F (7° C) D.B. / 43° F (6° C) W.B.

 $^{^{\}star}2~$ Airflow Rate/Sound Pressure Levels are at Lo-Mid1-Mid2-Hi, Lo-Mid-Hi, or Lo-Hi.



SPECIFICATIONS: PLFY \(\neg \)

CEILING-RECESSED INDOOR UNIT

PLFY-P**NBMU-E2

Model Name			PLFY-P08NBMU-E2	PLFY-P12NBMU-E2	PLFY-P15NBMU-E2	PLFY-P18NBMU-E2	
Power Source			208 / 230V, 1-phase, 60Hz				
Cooling Capacity		Btu/h *1	8,000	12,000	15,000	18,000	
Heating Capacity		Btu/h *1	9,000	13,500	17,000	20,000	
Power Consumption	Cooling	W		30		40	
Power Consumption	Heating	W	2	0	3	0	
Current	Cooling	Α		0.31		0.33	
Current	Heating	Α		0.24		0.26	
External Finish Color (Munsell No	0.)			Grille 6.4	Y 8.9/0.4		
	Height	In.		10-3	3/16		
Dimensions	Width	In.	33-3/32				
	Depth	In.		33-0	3/32		
Net Weight *2	Unit/Panel	Pounds	51/13				
Heat Exchanger			Cross Fin (Aluminum Plate Fin and Copper Tube)				
	Type x Quantity		Turbo Fan x 1				
Fan	Airflow Rate *3	CFM		494 - 530 - 547 - 565		494-530-565-636	
	Motor Type		DC Motor				
Air Filter			Polypropylene Honeycomb				
Refrigerant Pipe Dimensions	Liquid (High Pressure) (Flare)	In.		1,	/4		
Tremgerant i pe Dimensions	Gas (Low Pressure) (Flare)	In.		1,	/2		
Drain Pipe Dimension (O.D.)		Inches	1-1/4				
Sound Pressure Levels (As Measured in an Anechoic Room)*3	(Low-Mid1-Mid2- High)	dB(A)	27-28-29-31		28-29-30-32		

Model Name			PLFY-P24NBMU-E2	PLFY-P30NBMU-E2	PLFY-P36NBMU-E2		
Power Source				208 / 230, 1-phase, 60Hz			
Cooling Capacity		Btu/h *1	24,000	30,000	36,000		
Heating Capacity	Heating Capacity Btu/h *1			34,000	40,000		
Power Consumption	Cooling	W	5	90			
Fower Consumption	Heating	W	4	10	80		
Current	Cooling	Α	0.47	0.50	0.87		
Current	Heating	A	0.40	0.43	0.80		
External Finish Color (Munsell No.)				Grille 6.4Y 8.9/0.4			
	Height	In.	11-3/4				
Dimensions	Width	In.		33-3/32			
	Depth	In.	33-3/32				
Net Weight *2	Unit/Panel	Pounds	60/13				
Heat Exchanger			Cross Fin (Aluminum Plate Fin and Copper Tube)				
	Type x Quantity		Turbo Fan x 1				
Fan	Airflow Rate *3	CFM	565-636-706-777	565-636-742-812	777-883-989-1,059		
	Motor Type		DC Motor				
Air Filter			Polypropylene Honeycomb				
Refrigerant Pipe Dimensions	Liquid (High Pressure) (Flare)	In.		3/8			
Tremgerant Lipe Dilliensions	Gas (Low Pressure) (Flare)	In.		5/8			
Drain Pipe Dimension (O.D.)		In.	1-1/4				
Sound Pressure Levels (As Measured in an Anechoic Room)*3	(Low-Mid1-Mid2-High)	dB(A)	28-30-32-34	30-32-35-37	35-38-41-43		

Ventilation Air: Providing sufficient ventilation air is an important part of every building design. ASHRAE Standard 62 provides the minimum ventilation air requirements. Also check local

Specifications are subject to change without notice.

 $\label{limited warranty | Seven-year compressor and one year parts. See our website for details on specific additional application installation coverage. \\$

^{*1} Cooling / Heating capacity indicates the maximum value at operation under the

Gollowing conditions:

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) DB / 43° F (6° C) W.B.

 $^{^{*}2}$ Net weight is shown for unit / grille.

^{*3} Airflow rate / sound pressure levels are at (Low-Mid1-Mid2-High).





CEILING-RECESSED INDOOR UNIT

Model Name			PLFY-P08NCMU-ER2	PLFY-P12NCMU-ER2	PLFY-P15NCMU-ER2		
Power Source				208 / 230V, 1-phase, 60Hz			
Cooling Capacity		Btu/h *1	8,000	12,000	15,000		
Heating Capacity		Btu/h *1	9,000	13,500	17,000		
Power Consumption	Cooling	W	50	60			
Power Consumption	Heating	W	50	60			
Current	Cooling	Α	0.23	0.	28		
Current	Heating	Α	0.23	0.	28		
External Finish (Munsell No.)				Grille: White (6.4Y 8.9/0.4)			
	Height	In.		8-3/16			
Dimensions	Width	In.	22-7/16				
	Depth	In.	22-7/16				
Net Weight *2	Unit/Panel	Pounds	34/7 37/7				
Heat Exchanger			Cross Fin (Aluminum Plate Fin and Copper Tube)				
	Type x Quantity		Turbo Fan x 1				
Fan	Airflow Rate *3	CFM	280-320-350	320-35	50-390		
	Motor Type		Single-phase Induction Motor				
Air Filter			Polypropylene Honeycomb				
Refrigerant Pipe Dimensions	Liquid (High Pressure) (Flare)	In.	1/4				
	Gas (Low Pressure) (Flare)	In.		1/2			
Condensate Lift Mechanism (Sta	ndard)	In.	19-11/16				
Drain Pipe Dimension (O.D.)		In.	1-1/4				
Sound Pressure Levels (As Measured in an Anechoic Room) *3	(Low-Mid-High)	dB(A)	29-32-38	30-34-39	31-35-40		

Ventilation Air: Providing sufficient ventilation air is an important part of every building design. ASHRAE Standard 62 provides the minimum ventilation air requirements. Also check local

Specifications are subject to change without notice.

^{*1} Cooling / Heating capacity indicates the maximum value at operation under the following conditions:
Cooling | Indoor: 80° F (27° C) D.B. / 67°F (19° C) W.B.; Outdoor: 95°F (35° C) D.B.
Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B. / 43°F (6° C) W.B.

^{*2} Net weight is shown for unit / grille.

^{*3} Airflow rate / sound pressure levels are at (Low-Mid-High).



PMFY-P**NBMU-ER5

CEILING-RECESSED INDOOR UNIT

Model Name			PMFY-P06NBMU-ER5	PMFY-P08NBMU-ER5	PMFY-P12NBMU-ER5	PMFY-P15NBMU-ER5	
Power Source			208 / 230V, 1-phase, 60Hz				
Cooling Capacity		Btu/h *1	6,000	8,000	12,000	15,000	
Heating Capacity		Btu/h *1	6,700	9,000	13,500	17,000	
	Cooling	W		40		50	
Power Consumption	Heating	W		40		50	
Command	Cooling	Α	0.	20	0.21	0.26	
Current	Heating	A	0.	20	0.21	0.26	
External Finish Color (Munsell No	o.)			Grille: 6.4	Y 8.9/0.4		
	Height	In.		9-1	/16		
Dimensions	Width	In.	31-31/32				
	Depth	In.	15-9/16				
Net Weight	Unit	Pounds	31				
Heat Exchanger			Cross Fin				
	Type x Quantity		Line flow fan x 1				
Fan	Airflow Rate *2	CFM	230-254-283-307	258-283-304-328	258-283-304-328	272-307-343-378	
	Motor Type		DC Brushless Motor				
Air Filter			Polypropylene Honeycomb				
	Liquid (High Pressure) (Flare)	In.		1.	/4		
Refrigerant Pipe Dimensions	Gas (Low Pressure) (Flare)	In.		1.	/2		
Condensate Lift Mechanism (Sta	ndard)	In.	23-5/8				
Drain Pipe Dimension (O.D.)		In.	1				
Sound Pressure Levels (As Measured in an Anechoic Room) *2	(Low-Mid1-Mid2- High)	dB(A)	27-30-33-35	32-34-36-37	32-34-36-37	33-35-37-39	

Notes:

following conditions:
Cooling | Indoor: 80° F (27° C) D.B./67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B.
Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) DB/43° F (6° C) W.B.

Ventilation Air: Providing sufficient ventilation air is an important part of every building design.

ASHRAE standard 62 provides the minimum ventilation air requirements. Also check

Specifications are subject to change without notice.

^{*1} Cooling/Heating capacity indicates the maximum value at operation under the

^{*2} Airflow rate/sound levels are at (Low-Mid1-Mid2-High).





PCFY-P**NKMU-ER1

Model Name			PCFY-P15NKMU-ER1	PCFY-P24NKMU-ER1	PCFY-P30NKMU-ER1	PCFY-P36NKMU-ER1		
Power Source				208 / 230V, 1	Phase, 60Hz			
Cooling Capacity		Btu/h *1	15,000	24,000	30,000	36,000		
Heating Capacity		Btu/h *1	17,000	27,000	34,000	40,000		
D	Cooling	W	30	40	90	110		
Power Consumption	Heating	W	30	40	90	110		
Current	Cooling	Α	0.35	0.41	0.83	0.97		
Current	Heating	Α	0.35	0.41	0.83	0.97		
External Finish	Munsell No.			6.4Y 8.	9 / 0.4			
	Height	In.		9-1	/16			
Dimensions	Width	In.	37-13/16	37-13/16 50-3/8 63				
	Depth	In.						
Net Weight	Unit	Pounds	53	71	79	84		
Heat Exchanger			Cross Fin (Aluminum Plate Fin and Copper Tube)					
	Type x quantity		Sirocco Fan x 2	Sirocco Fan x 3	Sirocco	Fan x 4		
Fan	Airflow Rate *2	CFM	353-388-424-459	494-530-565-636	703-777-883-989	742-847-953-1,095		
	Motor Type			Direct-drive	n DC Motor			
Air Filter			Polypropylene Honeycomb					
Refrigerant Pipe	Liquid (High Pressure) (Flare)	In.	1/4					
Dimensions	Gas (Low Pressure) (Flare)	In.	1/2		5/8			
Drain Pipe Dimension	(O.D.)	In.	1					
Sound Pressure Levels *2	Lo-Mid1-Mid2-Hi	dB(A)	29-32-34-36	31-33-35-37	34-37-40-43	36-39-42-44		

*1 Cooling/Heating Capacity indicates the maximum value at operation under the following conditions:

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 45° F (7° C) D.B. / 43° F (6° C) W.B.

Ventilation Air: Providing sufficient ventilation air is an important part of very building design ASHRAE Standard 62 provides the minimum air requirements. Also check local codes.

Specifications are subject to change without notice.

^{*2} Airflow rate/sound pressure levels are at Low-Mid1-Mid2-Hi.



CEILING-CONCEALED INDOOR UNIT

PEFY-P**NMSU-ER2

Model Name			PEFY-P06NM- SU-ER2* 1	PEFY-P08NM- SU-ER2	PEFY-P12NM- SU-ER2	PEFY-P15NM- SU-ER2	PEFY-P18NM- SU-ER2	PEFY-P24NM- SU-ER2		
Power Source					208 / 230V, 1	-phase, 60Hz				
Cooling Capacity *	2	Btu/h	6,000	8,000	12,000	15,000	18,000	24,000		
Heating Capacity '	*2	Btu/h	6,700	9,000	13,500	17,000	20,000	27,000		
Power	Cooling	W	50 / 50	60 / 60	70 .	/ 70	90 / 90	120 / 120		
Consumption	Heating	W	30 / 30	40 / 40	50	/ 50	70 / 70	100 / 100		
Q	Cooling	А	0.42 / 0.41	0.51 / 0.49	0.56 / 0.53	0.57 / 0.55	0.74 / 0.70	0.98 / 0.93		
Current	Heating	А	0.32 / 0.31	0.41 / 0.39	0.46 / 0.43	0.47 / 0.45	0.64 / 0.60	0.88 / 0.83		
External Finish					Galvanized :	Steel Sheets				
	Height	ln.		7-7/8						
Dimensions	Width	ln.		31-1/8 39						
	Depth	ln.			27-9	9/16				
Net Weight	Unit	Pounds	4	-2	46	5	4	62		
Heat Exchanger				(Cross Fin (Aluminum Pla	te Fin and Copper Tube	e)			
	Type x Quantity			Sirocco Fan x 2	co Fan x 2 Sirocco Fan x 3			Sirocco Fan x 4		
	Airflow Rate *3	CFM	176-212-247	194-247-317	211-282-370	282-335-388	353-441-529	423-565-706		
Fan	External Static Pressure *4	In. W.G.			0.02-0.06	-0.14-0.20				
	Motor Type				DC Brush	less Motor				
Air Filter					Polypropylene Honeyo	omb Fabric (washable)				
	Liquid (High Pressure) (Brazed)	In.			1/4			3/8		
Refrigerant Pipe Dimensions	Gas (Low Pressure) (Brazed)	ln.	1/2 5/8							
Condensate Lift M (standard)	Condensate Lift Mechanism (standard)			21-4/16						
Drain Pipe Dimens	sions (O.D.)	ln.			1-	1/4				
Sound Pressure Levels *3	Low-Mid-High	dB(A)	22-24-28	23-26-30	23-28-35	28-30-33	30-34-37	30-35-40		

Ventilation Air: Providing sufficient ventilation air is an important part of very building design ASHRAE Standard 62 provides the minimum air requirements. Also check local codes.

Specifications are subject to change without notice.

^{*1} Not compatible with PUHY/PURY-P-TGMU or PQHY/PQRY-P-TGMU units.

^{*2} Cooling/Heating capacity indicates the maximum value at operation under the Cooling | Indoor: 80° F (27° C) D.B./67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B./43°F (6° C) W.B.

^{*3} Airflow rate/sound pressure levels are at (Low-Mid-High).

^{*4} External static pressure is factory set to 0.06" W.G.

PEFY-P**NMAU-E3

CEILING-CONCEALED INDOOR UNIT

Model Name			PEFY-P06NMAU-E3	PEFY-P08NMAU-E3	PEFY-P12NMAU-E3	PEFY-P15NMAU-E3	PEFY-P18NMAU-E3	PEFY-P24NMAU-E3			
Power Source					208 / 230V, 1	-Phase, 60Hz					
Cooling Capacity		Btu/h *1	6,000	8,000	12,000	15,000	18,000	24,000			
Heating Capacity		Btu/h *1	6,700	9,000	13,500	17,000	20,000	27,000			
Power	Cooling	W	6	0	90		110	170			
Consumption	Heating	W	4	0	7	0	90	150			
	Cooling	Α	0.56	/ 0.52	0.66 / 0.62	0.67 / 0.63	0.77 / 0.73	1.31 / 1.27			
Current	Heating	Α	0.45	/ 0.41	0.55 / 0.51	0.56 / 0.52	0.66 / 0.62	1.20 / 1.16			
External Finish				Galvanized Steel Sheet							
	Height	In.			9-	7/8					
Dimensions	Width	In.		27-9/16		35-	7/16	43-5/16			
	Depth	In.			28-	-7/8					
Net Weight	Unit	Pounds		49		5	8	67			
Heat Exchanger					Cross Fin (Aluminum pl	ate fin and copper tube)					
	Type x Quantity			Sirocco Fan x 2							
	Airflow Rate *2	CFM	212-20	65-300	265-318-371	353-424-494	424-512-600	618-742-883			
Fan	External Static Pressure	In. W.G.			0.14 - 0.20 - 0.	28 - 0.40 - 0.60					
	Motor Type				Direct-driven DC	Brushless Motor					
Air Filter					Polypropylen	e Honeycomb					
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.			1/4			3/8			
Dimensions	Gas (Low Pressure) (Brazed)	In.	1/2				5/8				
Drain Pipe Dimen	Drain Pipe Dimension (O.D.) In.			1-1/4"							
Sound Pressure Levels	Lo-Mid-Hi dB(A) 26 - 28 - 29 28 - 30 - 34 26 - 28 - 29					8 - 29					

Model Name			PEFY-P27NMAU-E3	PEFY-P30NMAU-E3	PEFY-P36NMAU-E3	PEFY-P48NMAU-E3	PEFY-P54NMAU-E3			
Power Source				•	208 / 230V, 1-Phase, 60Hz					
Cooling Capacity		Btu/h *1	27,000	30,000	36,000	48,000	54,000			
Heating Capacity		Btu/h *1	30,000	34,000	40,000	54,000	60,000			
Power	Cooling	W	1	70	240	340	360			
Consumption	Heating	W	1:	150 220 320		340				
0	Cooling	Α	1.31	/ 1.27	1.50 / 1.46	2.08 / 2.04	2.24 / 2.2			
Current	Heating	Α	1.20	/ 1.16	1.39 / 1.35	1.97 / 1.93	2.13 / 2.09			
External Finish			Galvanized Steel Sheet							
	Height	In.			9-7/8					
Dimensions	Width	In.	43-	43-5/16 55-1/8 63						
	Depth	In.			28-7/8					
Net Weight	Unit	Pounds	6	57	8	6	93			
Heat Exchanger				Cross Fi	n (Aluminum plate fin and cop	pper tube)				
	Type x Quantity	у								
	Airflow Rate *2	CFM	618 - 7	42 - 883	812 - 989 - 1,165	989 - 1,201 - 1,412	1,042 - 1,254 - 1,483			
Fan	External Static Pressure	In. W.G.		ı	0.14 - 0.20 - 0.28 - 0.40 - 0.6	0				
	Extended Stati Type	c Motor		Di	rect-driven DC Brushless Mo	tor				
Air Filter					Polypropylene Honeycomb					
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	In.			3/8					
Dimensions	Gas (Low Pressure) (Brazed)	In.			5/8					
Drain Pipe Dimen	sion (O.D.)	In.			1-1/4					
Sound Pressure Levels	Lo-Mid-Hi	dB(A)	28 - 3	0 - 34v	32 - 37 - 41	35 - 40 - 44	36 - 41 - 45			

*2 Airflow rate/sound pressure levels are at Low-Mid-Hi.

Ventilation Air: Providing sufficient ventilation air is an important part of very building design ASHRAE Standard 62 provides the minimum air requirements. Also check local codes.

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. Extended warranty of up to 10 years is available. See our website for details on specific additional application installation coverage.

Notes:

*1 Cooling/Heating Capacity indicates the maximum value at operation under the following conditions:

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B.; Outdoor 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 45° F (7° C) D.B. / 43° F (6° C) W.B.



PEFY-P**NMHU-E2



CEILING-CONCEALED INDOOR UNIT

Model Name			PEFY-P15NMHU-E2	PEFY-P18NMHU-E2	PEFY-P24NMHU-E2	PEFY-P27NMHU-E2	PEFY-P30NMHU-E2
Power Source					208 / 230V, 1-phase, 60Hz		
Cooling Capacity	*1	Btu/h	15,000	18,000	24,000	27,000	30,000
Heating Capacity	*1	Btu/h	17,000	20,000	27,000	30,000	34,000
Power	Cooling	W	270 / 280	270 / 280	330 / 320	390	450
Consumption	Heating	W	250 / 260	250 / 260	310 / 300	370	430
	Cooling	А	1.32 / 1.25	1.32 / 1.25	1.61 / 1.43	1.90 / 1.73	2.20 / 2.00
Current	Heating	Α	1.21 / 1.14	1.21 / 1.14	1.50 / 1.32	1.79 / 1.62	2.09 / 1.89
External Finish					Unit: Galvanized Steel Plate	e	
	Height	In.	15	15	15	15	15
Dimensions	Width	In.	29-3/8	29-3/8	29-3/8	40-9/16	40-9/16
Net Weight	Depth	In.	35-7/16	35-7/16	35-7/16	35-7/16	35-7/16
Net Weight	Unit	Pounds	98	98	100	124	124
Heat Exchanger				Cross Fin (Aluminum Plate Fin and Co	opper Tube)	
	Type x Quantity		Sirocco Fan x 1	Sirocco Fan x 1	Sirocco Fan x 1	Sirocco Fan x 1	Sirocco Fan x 2
	Airflow Rate *2	CFM	353-494	353-494	477-671	547-777	636-883
Fan	Ext. Static Pressure (208/230V)	In. W.G.			0.40-1.00 / 0.60-1.00		
	Motor Type			S	ingle-phase Induction Mot	or	
Air Filter					Optional Part		
Refrigerant Pipe	Liquid (High Pressure) (Flare)	In.	1/4	1/4	3/8	3/8	3/8
Dimensions	Gas (Low Pressure) (Flare)	In.	1/2	1/2	5/8	5/8	5/8
Drain Pipe Dimer	nsion (O.D.)	In.	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4
Sound Pressure I	Levels (Low-High) *2	dB(A) at 230V	39-45	39-45	40-46	38-44	38-43

Model Name			PEFY-P36NMHU-E2	PEFY-P48NMHU-E2	PEFY-P54NMHU-E2	PEFY-P72NMHSU-E2	PEFY-P96NMHSU-E2
Power Source					208 / 230V, 1-phase, 60Hz		
Cooling Capacity	*1	Btu/h	36,000	48,000	54,000	72,000	96,000
Heating Capacity	*1	Btu/h	40,000	54,000	60,000	80,000	108,000
Power	Cooling	W	620 / 610	620 / 610	630 / 620	63	82
Consumption	Heating	W	600 / 590	600 / 590	610 / 600	63	82
_	Cooling	Α	3.10 / 2.74	3.10 / 2.74	3.11 / 2.78	3.67 / 3.32	4.89 / 4.43
Current	Heating	Α	2.99 / 2.63	2.99 / 2.63	3.00 / 2.67	3.67 / 3.32	4.89 / 4.43
External Finish					Unit: Galvanized Steel Plate	e	
	Height	In.	15	15	15	18-	9/16
Dimensions	Width	In.	47-1/16	47-1/16	47-1/16	49-	1/4
	Depth	In.	35-7/16	35-7/16	35-7/16	44-	1/8
Net Weight	Unit	Pounds	153	153	157	214	221
Heat Exchanger				Cross Fin (Aluminum Plate Fin and Co	opper Tube)	
	Type x Q	uantity	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2
	Airflow Rate *2	CFM	936-1,342	936-1,342	989-1,412	1,766 - 2,154 - 2,542	2,048 - 2,507 - 2,966
Fan	Ext. Static Pressure (208/230V)	In. W.G.		0.40-1.00 / 0.60-1.00		0.20 - 0.40 - 0.	60 - 0.80 - 1.00
	Motor *	Гуре	S	Single-phase Induction Mot	or	DC N	/lotor
Air Filter					Optional Part		
Refrigerant Pipe	Liquid (High Pressure)	In.	3/8 (Flare)	3/8 (Flare)	3/8 (Flare)	3/8 (Brazed)	3/8 (Brazed)
Dimensions	Gas (Low Pressure)	In.	5/8 (Flare)	5/8 (Flare)	5/8 (Flare)	3/4 (Brazed)	7/8 (Brazed)
Drain Pipe Dimer	sion (O.D.)	In.	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4
Sound Levels *2 (Low-High or Lov	Levels *2 dlgh or Low-Mid-High) dB(A) at 230V 40-46 40-46 41-47 36 - 39 - 43 39 -						39 - 42 - 46

Notes:

Ventilation Air: Providing sufficient ventilation air is an important part of every building design.

ASHRAE standard 62 provides the minimum ventilation air requirements. Also check

Specifications are subject to change without notice.

^{**1} Cooling/Heating capacity indicates the maximum value at operation under the following conditions:

Cooling | Indoor: 80° F (27° C) D.B./67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47° F (8° C) D.B./43° F (6° C) W.B.

^{*2} Airflow rate/sound levels are at (Low-High or Low-Mid-High).



PFFY-P**N(E,R)MU-E

FLOOR-STANDING INDOOR UNIT

Model			PFFY-P06NEMU-E	PFFY-P08NEMU-E	PFFY-P12NEMU-E	PFFY-P15NEMU-E	PFFY-P18NEMU-E	PFFY-P24NEMU-E					
Power Source			PFFY-P06NEMU-E PFFY-P12NEMU-E PFFY-P15NEMU-E PFFY-P18NEMU-E PFFY-P24NEMU-E 208 / 230V, 1 Phase, 60Hz 6,000 8,000 12,000 15,000 18,000 24,000 6,700 9,000 13,500 17,000 20,000 27,000 51 / 61 51 / 61 55 / 67 65 / 78 78 / 93 96 / 114 51 / 61 51 / 61 55 / 67 65 / 78 78 / 93 96 / 114 0.25 / 0.27 0.25 / 0.27 0.27 / 0.30 0.32 / 0.35 0.38 / 0.42 0.47 / 0.51 0.25 / 0.27 0.25 / 0.27 0.27 / 0.30 0.32 / 0.35 0.38 / 0.42 0.47 / 0.51 0.25 / 0.27 0.25 / 0.27 0.27 / 0.30 0.32 / 0.35 0.38 / 0.42 0.47 / 0.51 0.25 / 0.27 0.25 / 0.27 0.27 / 0.30 0.32 / 0.35 0.38 / 0.42 0.47 / 0.51 24-13/16 24-13/16 24-13/16 24-13/16 24-13/16 24-13/16 24-13/16 41-11/32 41-11/32 46-3/32 46-3/32 55-17/32 55-17/32 <										
Cooling Capacity	1	Btu/h *1	6,000	8,000	12,000	15,000	18,000	24,000					
Heating Capacity	1	Btu/h *1	6,700	9,000	13,500	17,000	20,000	27,000					
Power	Cooling	W	51 / 61	51 / 61	55 / 67	65 / 78	78 / 93	96 / 114					
Consumption	Heating	W	51 / 61	51 / 61	55 / 67	65 / 78	78 / 93	96 / 114					
Current	Cooling	Α	0.25 / 0.27	0.25 / 0.27	0.27 / 0.30	0.32 / 0.35	0.38 / 0.42	0.47 / 0.51					
Current	Heating A		0.25 / 0.27	0.25 / 0.27	0.27 / 0.30	0.32 / 0.35	0.38 / 0.42	0.47 / 0.51					
External Finish (N	/lunsell No.)	•			Acrylic Pain	ted (5Y 8/1)		24-13/16 24-13/16					
	Height	In.	24-13/16	24-13/16	24-13/16	24-13/16	24-13/16	24-13/16					
Dimensions	Width	In.	41-11/32	41-11/32	46-3/32	46-3/32	55-17/32	55-17/32					
	Depth	In.	8-11/16	8-11/16	8-11/16	8-11/16	8-11/16	8-11/16					
Net Weight	Unit	Pounds	67	67	71	73	84	89					
Heat Exchanger				C	ross Fin (Aluminum Pla	te Fin and Copper Tub	e)	0.47 / 0.51 24-13/16 55-17/32 8-11/16 89 2 Sirocco Fan x 2 353-494					
	Type x Quantity		Sirocco Fan x 1	Sirocco Fan x 1	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2					
F	Airflow Rate *2	CFM	194-229	194-229	247-317	300-388	353-459	353-494					
Fan	Motor Type				Single Phase In	nduction Motor							
	Motor Output	W	15	15	18	30	35	63					
Air Filter					Standa	rd Filter							
Refrigerant Pipe			1/4	1/4	1/4	1/4	1/4	3/8					
Dimension	Gas (Low Pressure) (Flare)	In.	1/2	1/2	1/2	1/2	1/2	5/8					
Drain Pipe Dimer	Drain Pipe Dimension In.				O.D. 1	1-3/32							
Sound Levels *2	(Low-High)	dB(A)	36-41	36-41	37-41	38-43	38-43	40-46					

*1 Cooling / Heating capacity indicates the maximum value at operation under the following

Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B. ; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B. ; Outdoor: 45° F (7° C) DB / 43° F (6° C) W.B.

*2 Airflow rate/sound levels are at (Low-High)



Ventilation Air: Providing sufficient ventilation air is an important part of every building design ASHRAE standard 62 provides the minimum ventilation air requirements. Also check local codes.

Specifications are subject to change without notice.

LIMITED WARRANTY | Seven-year compressor and one year parts. Extended warranty of up to 10 years is available. See our website for details on specific additional application installation coverage.

Model			PFFY- P06NRMU-E	PFFY- P08NRMU-E	PFFY- P12NRMU-E	PFFY- P15NRMU-E	PFFY- P18NRMU-E	PFFY- P24NRMU-E
Power Source					208 / 230V, 1	Phase, 60Hz		
Cooling Capac	ity	Btu/h *1	6,000	8,000	12,000	15,000	18,000	24,000
Heating Capac	ity	Btu/h *1	6,700	9,000	13,500	17,000	20,000	27,000
Power	Cooling	W	51/61	51 / 61	55 / 67	65 / 78	78 / 93	96 / 114
Consumption	Heating	W	51/61	51 / 61	55 / 67	65 / 78	78 / 93	96 / 114
Current	Cooling	Α	0.25 / 0.27	0.25 / 0.27	0.27 / 0.30	0.32 / 0.35	0.38 / 0.42	0.47 / 0.51
	Heating	Α	0.25 / 0.27	0.25 / 0.27	0.27 / 0.30	0.32 / 0.35	0.38 / 0.42	0.47 / 0.51
External Finish	(Munsell No.)				Galvanized	Sheet Metal		
	Height	In.	25-3/16	25-3/16	25-3/16	25-3/16	25-3/16	25-3/16
Dimensions	Width	In.	34-29/32	34-29/32	39-5/8	39-5/8	49-1/16	49-1/16
ľ	Depth	In.	8-11/16	8-11/16	8-11/16	8-11/16	8-11/16	8-11/16
Net Weight	Unit	Pounds	51	51	58	60	69	71
Heat Exchange	r			(Pross Fin (Aluminum Pla	te Fin and Copper Tub	e)	
	Type x Quantity		Sirocco Fan x 1	Sirocco Fan x 1	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2	Sirocco Fan x 2
_	Airflow Rate *2	CFM	194-229	194-229	247-317	300-388	353-459	353-494
Fan	Motor Type			'	Sin	gle Phase Induction Me	otor	
	Motor Output	kW	0.015	0.015	0.018	0.030	0.035	0.063
Air Filter				,	Standa	rd Filter		
Refrigerant Pipe	Liquid (High Pressure) (Flare)	In.	1/4	1/4	1/4	1/4	1/4	3/8
Dimension	Gas (Low Pressure) (Flare)	ln.	1/2	1/2	1/2	1/2	1/2	5/8
Drain Pipe Dim	Drain Pipe Dimension In.					O.D. 1-3/32		
Sound Levels *2	(Low-High)	dB(A)	36-41	36-41	37-41	38-43	38-43	40-46

following conditions: Cooling | Indoor: 80° F (27° C) D.B. / 67° F (19° C) W.B. ; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B. ; Outdoor: 45° F (7° C) D.B. / 43° F (6° C) W.B.

*2 Airflow rate/sound levels are at (Low-High).

Ventilation Air: Providing sufficient ventilation air is an important part of every building design ASHRAE standard 62 provides the minimum ventilation air requirements.

Specifications are subject to change without notice.

Also check local codes.

^{*1} Cooling / Heating capacity indicates the maximum value at operation under the

MULTI-POSITION AIR HANDLER

PVFY-P**NAMU-E

Model Name			PVFY-P12NAMU-E	PVFY-P18NAMU-E	PVFY-P24NAMU-E	PVFY-P30NAMU-E	PVFY-P36NAMU-E	PVFY-P48NAMU-E	PVFY-P54NAMU-E	
Power Source				'	208	3 / 230V, 1-phase, 6	OHz	'		
Cooling Capacity		Btu/h *1	12,000	18,000	24,000	30,000	36,000	48,000	54,000	
Heating Capacity		Btu/h *1	13,500	20,000	27,000	34,000	40,000	54,000	60,000	
	Height	In.		50-1/4		54-	1/4	59-	1/2	
Dimensions	Width	In.		17		2	1	2	5	
	Depth	In.				21-5/8				
Net Weight	Unit	Pounds		113		14	11	17	72	
Heat Exchanger					Cross fin (Aluminum fin and co	pper tube)			
	Type x Qty.					Sirocco fan x 1				
_	Airflow Rate *2	CFM	280 - 340 - 400	410 - 497 - 585	515 - 625 - 735	613 - 744 - 875	767 - 931 - 1,095	980 - 1,190 - 1,400	1,040 - 1,262 - 1,485	
Fan	External Static Pressure	In. W.G.	0.30 - 0.50 - 0.80 (selectable)							
	Motor Type	,				DC motor				
Filter					Pol	ypropylene Honeyco	omb			
Refrigerant Pipe	Liquid (High Pressure) (Brazed)	ln.	1.	/4			3/8			
Dimensions	Gas (Low Pressure) (Brazed)	ln.	1,	/2		5/8				
Drain Pipe Dimens	sions	In.				3/4 FPT				
Sound Pressure Levels (As Measured in an Anechoic Room) *2	Pressure	dB(A)	27-31-35	28-32-36	30-34-38	32-36-40	35-39-43	35-39-43	36-40-44	

Cooling Indoor: 80° F (27° C) D.B./67° F (19° C) W.B.; Outdoor: 95° F (35° C) D.B. Heating | Indoor: 70° F (21° C) D.B.; Outdoor: 47°F (8° C) D.B./43°F (6° C) W.B.

Ventilation Air: Providing sufficient ventilation air is an important part of every building design.

ASHRAE standard 62 provides the minimum ventilation air requirements. Also check local codes.

Specifications are subject to change without notice.

Notes:
*1 Cooling/Heating capacity indicates the maximum value at operation under the following conditions:

^{*2} Airflow rate/sound pressure levels are at (Low-Med-High).



ENERGY RECOVERY VENTILATOR (ERV)



LGH-F***RX5-E1

Model Name					LGH-F30	0RX5-E1			
Power source					208 / 230V, 1	-phase, 60Hz			
Ventilation mode			Lossnay	ventilation			Bypass v	ventilation	
Speed		Extra high	High	Low	Extra Low	Extra high	High	Low	Extra Low
Current	Α	1.33 / 1.35	1.12 / 1.18	0.81 / 0.86	0.32 / 0.36	1.33 / 1.35	1.12 / 1.18	0.81 / 0.86	0.32 / 0.36
Input	W	274 / 300	232 / 268	168 / 197	67 / 82	274 / 300	232 / 268	168 / 197	67 / 82
Air volume	CFM	300 / 300	260 / 300	203 / 235	91 / 112	300 / 300	260 / 300	203 / 235	91 / 112
External static pressure	In. W.G.	0.60 / 0.78	0.46 / 0.54	0.28 / 0.33	0.06 / 0.08	0.60 / 0.78	0.46 / 0.54	0.28 / 0.33	0.06 / 0.08
Temperature recovery efficiency	(%)	65.5 / 65.5	67.5 / 65.5	71 / 69	81 / 79	-	-	-	-
Enthalpy recovery efficiency	Heating	63 / 63	65 / 63	68 / 66	79 / 77	-	-	-	-
(%)	Cooling	50 / 50	52 / 50	55 / 53	63 / 61	-	-	-	-
Sound Pressure (Measured at 1.5m under level the center of the unit)	dB(A)	34 / 37	30.5 / 33	25.5 / 27.5	18 / 18	35/37.5	31.5 / 34.5	25.5 / 28.5	18 / 18.5
Weight	Pounds				7	3			
Starting current		2.5A							
Filter Specification					Standard Filter P	rovided (MERV 6)		

Model Name					LGH-F47	'0RX5-E1				
Power source		208 / 230V, 1-phase, 60Hz								
Ventilation mode			Lossnay	ssnay ventilation Bypass ventilation						
Speed		Extra high	High	Low	Extra Low	Extra high	High	Low	Extra Low	
Current	Α	2.40 / 2.50	2.10 / 2.20	1.59 / 1.71	0.60 / 0.64	2.40 / 2.50	2.10 / 2.20	1.59 / 1.71	0.60 / 0.64	
Input	W	485 / 538	425 / 490	330 / 393	120 / 145	485 / 538	425 / 490	330 / 393	120 / 145	
Air volume	CFM	470 / 470	420 / 470	330 / 365	147 / 177	470 / 470	420 / 470	330 / 365	147 / 177	
External static pressure	In. W.G.	0.80 / 0.96	0.54 / 0.66	0.33 / 0.40	0.07 / 0.09	0.80 / 0.96	0.54 / 0.66	0.33 / 0.40	0.07 / 0.09	
Temperature recovery efficiency	(%)	69 / 69	70.5 / 69	74 / 72	82 / 80	-	-	-	-	
Enthalpy recovery	Heating	64 / 64	66 / 64	70 / 68	80 / 78	-	-	-	-	
efficiency (%)	Cooling	51 / 51	53 / 51	58 / 55	69 / 67	-	-	-	-	
Sound Pressure (Measured at 1.5m under level the center of the unit)	dB(A)	36/38 33/35.5 28.5/31 18/18.5 36/39 33/36 28.5/31					28.5 / 31.5	18 / 18		
Weight	Pounds				1	19				
Starting current		4.5A								
Filter Specification					Standard Filter P	rovided (MERV 6)			

 $\label{thm:continuous} \textbf{Specifications} \ \text{are subject to change without notice.}$



ENERGY RECOVERY VENTILATOR (ERV)

LGH-F***RX5-E1

Model					LGH-F60	0RX5-E1			
Power source					208 / 230V, 1	-phase, 60Hz			
Ventilation mode			Lossnay	ventilation			Bypass v	entilation	
Speed		Extra high	High	Low	Extra Low	Extra high	High	Low	Extra Low
Current	Α	2.80 / 2.90	2.50 / 2.70	1.56 / 1.69	0.72 / 0.79	2.80 / 2.90	2.50 / 2.70	1.56 / 1.69	0.72 / 0.79
Input	W	577 / 637	517 / 605	324 / 387	146 / 180	577 / 637	517 / 605	324 / 387	146 / 180
Air volume	CFM	600 / 600	520 / 600	370 / 430	200 / 235	600 / 600	520 / 600	370 / 430	200 / 235
External static pressure	In. W.G.	0.56 / 0.80	0.48 / 0.48	0.24 / 0.24	0.07 / 0.07	0.56 / 0.80	0.48 / 0.48	0.24 / 0.24	0.07 / 0.07
Temperature recovery efficiency	(%)	67 / 67	68 / 67	75 / 73	80 / 78	-	-	-	-
Enthalpy recovery	Heating	64 / 64	65 / 64	71 / 68	79 / 77	-	-	-	-
efficiency (%)	Cooling	50 / 50	53 / 50	59 / 56	68 / 67	-	-	-	-
Sound Pressure (Measured at 1.5m under level the center of the unit)	dB(A)	36 / 38	34 / 36.5	26.5 / 29	19 / 21	37 / 39	35 / 37.5	27 / 30	18.5 / 20
Weight	Pounds				10	32			
Starting current		5.0A							
Filter Specification			St	andard Filter P	rovided (MERV	6)			

Model				LGH-F12	00RX5-E1					
Power source		208 / 230V, 1-phase, 60Hz								
Ventilation mode			Lossnay ventilation			Bypass ventilation				
Speed		Extra high	High	Low	Extra high	High	Low			
Current	A	5.7 / 5.8	5.0 / 5.3	3.1 / 3.4	5.8 / 5.8	5.1 / 5.4	3.1 / 3.4			
Input	W	1185 / 1303	1040 / 1219	639 / 765	1185 / 1303	1040 / 1219	639 / 765			
Air volume	CFM	1200 / 1200	1012 / 1200	695 / 824	1200 / 1200	1012 / 1200	695 / 824			
External static pressure	In. W.G.	0.43 / 0.75	0.43 / 0.43	0.20 / 0.20	0.43 / 0.75	0.43 / 0.43	0.20 / 0.20			
Temperature recovery efficiency	/ (%)	67 / 67	68 / 67	75 / 73						
Enthalpy recovery efficiency	Heating	64 / 64	65 / 64	71 / 68						
(%)	Cooling	50 / 50	53 / 50	59 / 56						
Sound Pressure (Measured at 1.5m under level the center of the unit)	38 / 40.5	36 / 39	29 / 32	40 / 42.5	38 / 41	30.5 / 33.5				
Weight	Pounds			2	65					
Starting current	10.0A									
Filter Specification				Standard Filter P	rovided (MERV 6)					

Specifications are subject to change without notice.



SPECIFICATIONS: DEDICATED OUTDOOR ▼ AIR SYSTEMS

PEFY-AF

Model Name			PEFY-AF1200CFM	PEFY-AF1200CFMR	
Power Source			208 / 230V, 1 Phase, 60Hz		
Cooling Capacity Btu/h *1		Btu/h *1	112,000	112,000	
Heating Capacity Btu/h *		Btu/h *1	61,400	61,400	
Reheat Capacity Btu/h		Btu/h	-	24, 200	
Power Consumption	Cooling	W	660 / 780		
	Heating	W	660 / 780		
Current	Cooling	А	3.19 / 3.45		
	Heating	А	3.19 / 3.45		
External Finish			Galvanized		
	Height	In.	18-9/16		
Dimensions	Width	In.	49-1/4		
	Depth	In.	55-1/8		
Net Weight	Unit	Pounds	287	309	
Heat Exchanger			Cross Fin (Aluminum Plate Fin and Copper Tube)		
	Type x quantity		Sirocco Fan x 2		
Fan	Airflow Rate *2	CFM	1,200		
	External Static Pressure	In. WG	0.40-0.60-0.88 (208V)	0.28-0.48-0.80 (208V)	
			0.64-0.80-1.04 (230V)	0.52-0.72-0.96 (230V)	
	Motor Type		Single-phase Induction Motor		
Air Filter			Field Supply		
Main Coil Refrigerant Pipe Dimensions	Liquid (High Pressure) (Flare)	In.	3/8		
	Gas (Low Pressure) (Flare)	In.	7/8		
Reheat Coil Refrigerant Pipe Dimensions	Liquid (High Pressure) (Flare)	In.	-	7/8	
	Gas (Low Pressure) (Flare)	In.	-	3/8	
Drain Pipe Dimension (O.D.) In.		In.	1-1/4 x 2		
Sound Pressure Level *3	Low-Mid-High	dB(A)	36-38-41 (208V)		
			39-41-43 (230V)		
Operating Temperature Range	Cooling		50° F WB to 95° F WB (109° F DB) (10° C WB to 35° C WB [43° C DB])		
	Heating		-4° F WB to +60° F WB (-20° C WB to +15.5° C WB)		
Connectable Outdoor Unit			PUHY-P120TKMU (-BS), PUHY-P120YKMU (-BS) PUHY-P120TJMU (-BS), PUHY-P120YJMU (-BS)	PURY-P120TKMU (-BS), PURY-P120YKMU (-BS) PURY-P120TJMU (-BS), PURY-P120YJMU (-BS)	
			i i i i i i i i i i i i i i i i i i i		

Notes:

1 Cooling/Heating Capacity indicates the maximum value at operation under the following conditions:

Cooling | Entering Indoor Unit: 87° F (31° C) D.B. / 80° F (27° C) W.B.

Cooling | Outdoor Unit: 87° F (31° C) D.B.

Heating | Entering Indoor Unit: 32° F (0° C) D.B.

Heating | Outdoor Unit: 32° F (0° C) D.B. / 28° F (-2° C) W.B.

Ventilation Air: Providing sufficient ventilation air is an important part of very building design ASHRAE Standard 62 provides the minimum air requirements. Also check local codes.

Specifications are subject to change without notice.

INDUSTRY STANDARDS

Mitsubishi Electric HVAC continues to drive acceptance of VRF technology in the U.S. engineering and regulatory arenas.

LEADING THE VRF INDUSTRY

Mitsubishi Electric HVAC has been at the forefront of the charge to develop proper testing standards and procedures for VRF systems, providing clients the necessary information to properly incorporate these systems into their building designs.

AHRI STANDARDS

Air-conditioning, Heating and Refrigeration Institute (AHRI) Standards 210/240 and 340/360 had been used as the benchmark for establishing the testing methods of traditional unitary HVAC equipment. These standards have formalized the use of such terms as EER, COP, SEER, and HSPF- terms which are recognized and applied throughout the HVAC industry today. The simple testing procedures detailed in these existing AHRI standards, however, were not adequate to appropriately measure efficiency levels within advanced VRF systems, and could not account for such technologies as inverter-driven compressors, simultaneous cooling and heating, and variable-capacity ductless and ducted indoor units.

AHRI STANDARD 1230

Mitsubishi Electric worked with the Department of Energy (DOE) and AHRI to gain regulatory acceptance for VRF systems. Initially, Mitsubishi Electric requested DOE grant waivers from the existing testing standards for VRF systems. It was quickly recognized that waivers weren't a long-term solution, and Mitsubishi Electric immediately assisted in developing a proper testing standard for VRF systems—a standard that is now known as AHRI Standard 1230.

INTEGRATED ENERGY EFFICIENCY RATIO

IEER is the new measure of partial-load cooling performance for unitary equipment and VRF systems. IEER greatly improves the industry methodology for partload testing by collecting data for four different outdoor testing conditions based on load on the system. The formula (shown below) used for testing, more accurately demonstrates the value and capabilities of INVERTER-driven VRF systems at part-load operation.

ASHRAE STANDARD 90.1

ASHRAE Standard 90.1 is synonymous with energy efficiency requirements in commercial buildings. Many city, state, and national codes reference the efficiency levels listed in this standard.

Test Condition "A" = 100% Capacity at 95° FDB
Test Condition "B" = 75% Capacity at 81.5° FDB
Test Condition "C" = 50% Capacity at 68° FDB
Test Condition "D" = 25% Capacity at 65° FDB

IEER = 0.02A + 0.617B + 0.238C + 0.125D

With the development and approval of AHRI Standard 1230, Mitsubishi Electric and other VRF system manufacturers had a platform that supported the introduction of VRF efficiency standards as an addendum to Standard 90.1-2007, and incorporated these standards as a part of Standard 90.1-2010. The minimum VRF efficiency standards are shown in the table on page 99.

ASHRAE STANDARDS 15 and 34

ASHRAE Standard 15 provides requirements for the safe design, construction, installation, and operation of all HVAC&R systems as a way of protecting building occupants and property. ASHRAE Standard 34 assigns reference numbers, safety classifications for flammability and toxicity, and refrigerant concentration limits (RCL) to refrigerants. These standards are referenced by both the International Mechanical Code and the Uniform Mechanical Code, which are typically adopted as part of local code requirements. Mitsubishi Electric VRF systems utilize R-410A refrigerant, which is assigned an A1 safety classification placing it in the lowest toxicity and no flame propagation categories.

Engineers and designers have great flexibility in applying CITY MULTI® VRF systems to ensure the design is compliant with ASHRAE Standard 15. Examining the project spaces and determining the occupied and connected spaces needs to be a primary consideration, and care must be taken in the location and layout of refrigerant lines and indoor units. For more detailed information please refer to the system design manual for the outdoor unit. Guidance is also provided in Application Note 2001 which can be downloaded from mylinkdrive.com.

ELECTRICALLY OPERATED VARIABLE REFRIGERANT FLOW AIR-TO-AIR AND APPLIED HEAT PUMPS-MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category	Heating Section Type	Sub-Category or Rating Condition	Minimum Efficiency	Test Procedure
VRF Air Cooled, (cooling mode)	<65,000 Btu/h	All	VRF Multi-split System	13.0 SEER	AHRI 1230
	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	11.0 EER 12.3 IEER 12.9 IEER (as of 7/1/2012)	
	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System with Heat Recovery	10.8 EER 12.1 IEER 12.7 IEER (as of 7/1/2012)	
	≥135,000 Btu/h and <240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	10.6 EER 11.8 IEER 12.3 IEER (as of 7/1/2012)	
	≥135,000 Btu/h and <240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System with Heat Recovery	10.4 EER 11.6 IEER 12.1 IEER (as of 7/1/2012)	
	≥240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	9.5 EER 10.6 IEER 11.0 IEER (as of 7/1/2012)	
	≥240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System with Heat Recovery	9.3 EER 10.4 IEER 10.8 IEER (as of 7/1/2012)	
VRF Water Source, (cooling mode)	<65,000 Btu/h	All	VRF Multi-split System 86°F entering water	12.0 EER	AHRI 1230
	≥65,000 Btu/h h	All	VRF Multi-split System with Heat Recovery 86°F entering water	11.8 EER	
	≥65,000 Btu/h and <135,000 Btu/h	All	VRF Multi-split systems 86°F entering water	12.0 EER	
	≥65,000 Btu/h and <135,000 Btu/h	All	VRF Multi-split System with Heat Recovery 86°F entering water	11.8 EER	
	≥135,000 Btu/h	All	VRF Multi-split systems 86°F entering water	10.0 EER	
	≥135,000 Btu/h	All	VRF Multi-split System with Heat Recovery 86°F entering water	9.8 EER	
VRF Ground Water Source, (cooling mode)	≥135,000 Btu/h	All	VRF Multi-split System 59°F entering water	16.2 EER	AHRI 1230
	≥135,000 Btu/h	All	VRF Multi-split System with Heat Recovery 59°F entering water	16.0 EER	
	≥135,000 Btu/h	All	VRF Multi-split System 59°F entering water	13.8 EER	
	≥135,000 Btu/h	All	VRF Multi-split System with Heat Recovery 59°F entering water	13.6 EER	
VRF Air Cooled, (heating mode)	<65,000 Btu/h (cooling capacity)	-	VRF Multi-split System	7.7 HSPF	AHRI 1230
	≥65,000 Btu/h and	-	VRF Multi-split System 47° F db/43° F wb outdoor air	3.3 COP	
	<135,000 Btu/h		VRF Multi-split System 17° F db/15° F wb outdoor air	2.25 COP	
	. 405 000 Di #	-	VRF Multi-split System 47° F db/43° F wb outdoor air	3.2 COP	
	≥135,000 Btu/h		VRF Multi-split System 17° F db/15° F wb outdoor air	2.05 COP	
VRF Water Source, (heating mode)	<135,000 Btu/h	-	VRF Multi-split System 68° F entering water	4.2 COP	- AHRI 1230
	≥135,000 Btu/h	-	VRF Multi-split System 68° F entering water	3.9 COP	
VRF Ground Water Source, (heating mode)	<135,000 Btu/h	-	VRF Multi-split System 50° F entering water	3.6 COP	- AHRI 1230
	≥135,000 Btu/h	-	VRF Multi-split System 50° F entering water	3.3 COP	
VRF Ground Source, (heating mode)	≥135,000 Btu/h	-	VRF Multi-split System 32° F entering water	3.1 COP	- AHRI 1230
	<135,000 Btu/h	-	VRF Multi-split System 32° F entering water	2.8 COP	

Note: For efficiency values tested in accordance with AHRI-1230, contact your local Mitsubishi Electric sales representative



MAKE COMFORT Personal

Mitsubishi Electric Cooling & Heating 1340 Satellite Boulevard, Suwanee, GA 30024 Phone: 800-433-4822 Fax: 800-658-1458

Mitsubishi Electric Air Conditioning & Refrigeration Systems Works acquired environmental management system standard ISO 14001 certification.

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Use of the AHRI Certified™ mark indicates a manufacturer's participation in the certification program. For verification of certification for individual products, go to www.ahridirectory.org.

See complete warranty for terms, conditions, and limitations. A copy is available from Mitsubishi Electric.

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