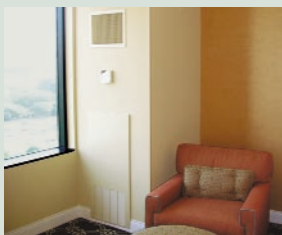




Commercial, Industrial and Institutional HVAC

All Products Catalog 2008



Engineered for flexibility and performance™

McQuay®
Air Conditioning

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Welcome to McQuay International's 2008 All Products Catalog

Use this document as your quick reference to locate and understand the specifications, features and benefits of all McQuay heating, ventilation and air conditioning (HVAC) products, systems and services.

For the most current and detailed product information, or to locate your local McQuay representative, visit www.mcquay.com or call 1-800-432-1342. You can also subscribe at www.mcquay.com to receive e-mail notification of new product announcements, design tools, application information and engineering newsletters.



A World Leader In HVAC

As part of Daikin Industries, a Fortune 1000 company, McQuay International is the second largest air conditioning, heating, ventilating and refrigeration company in the world. Combining advanced technologies and R&D capabilities, we are creating innovative products, systems and services that benefit the industry and the lives of our customers.

And with more than six million square feet of manufacturing space and 5,000 dedicated employees in 75 countries on six continents, McQuay is uniquely positioned to make sure our products and services are always within our customers' reach.

For more information on Daikin products and services, visit www.daikinac.com.



*Daikin Industries World Headquarters,
Osaka, Japan*

McQuay Facilities

North America



World Headquarters—Minneapolis, MN



Owatonna, MN



Staunton, VA



Faribault, MN



Auburn, NY

Asia



Wuhan, China



Shenzhen, China

Europe



Cecchina, Italy



Suzhou, China



Kuala Lumpur, Malaysia



Cramlington, UK

Engineered for Flexibility and Performance

McQuay International delivers engineered, flexible solutions for commercial, industrial and institutional HVAC requirements with reliable products, knowledgeable applications expertise and responsive support.

We have earned a worldwide reputation for providing a full line of quality products and expertise to meet the demands of our customers. Our representatives work with you to design HVAC systems that can save you money while providing optimal overall system performance and occupant comfort. The engineered flexibility of our products allows you to fine tune your HVAC system to meet the specific requirements of your application. You benefit from lower installed and operating costs, high energy efficiency, quiet operation, superior indoor air quality (IAQ) and low cost maintenance and service.



Dubai International Financial Centre, Dubai, United Arab Emirates

Since 1872, as a pioneer in the manufacture of the steam engine, McQuay International has been providing quality equipment. We continue to be at the forefront of changes in the HVAC industry, while leading the industry in environmental issues. We have been associated with quality brands the commercial market knows and trusts. Remington®, Singer®, HermanNelson® Company, American Air Filter® and Perfex® have all come from McQuay. In this catalog you will find McQuay Air Conditioning® and AAF®-HermanNelson® brands.



Virginia Beach Convention Center, Virginia Beach, VA



Herakles Data, Sacramento, California



Whitmore Lake High School, Whitmore Lake, Michigan

McQuay GreenWay™ HVAC System Solutions

Designing Green is Gold

Designing Green, or high performance buildings, is about creating properties that are desirable to own and occupy.

- Higher premium rentals and lower operating costs add to an owner's bottom line
- Tenants benefit from a comfortable environment that encourages higher productivity.



© Brad Feinknopf

Johnson County Office Building, Olathe, Kansas
LEED Gold Certified. McQuay Frictionless Magnetic Bearing Centrifugal Compressor Chillers.

A Whole System Approach

Each building element - such as lights, building envelope, landscaping, and HVAC - must be considered as part of the whole that makes up a sustainable building. The same is true for HVAC systems. Individual units must be designed to work together as a whole to achieve optimum operating efficiency and IAQ. This whole system approach lowers the cost to build and operate a sustainable building.

McQuay Can Help

McQuay is your source for HVAC products, systems expertise and tools required for high performance buildings and Leadership in Energy and Environmental Design (LEED®) certified projects.

Systems Expertise—Our representatives are knowledgeable, experienced engineers. They help you explore all HVAC system alternatives—from large central chilled water plants to geothermal heat pump systems—to optimize operating efficiency and IAQ within your budget.

System Design Tools—McQuay offers a variety of tools to help you in the design of high performance HVAC systems:

- Software Analysis Tools including Energy Analyzer™ and Acoustic Analyzer™
- Application Guides provide detailed design and application information for a variety of HVAC systems, refrigerants, piping and acoustics
- Engineering System Solutions Newsletters provide a focused look at specific design and industry issues

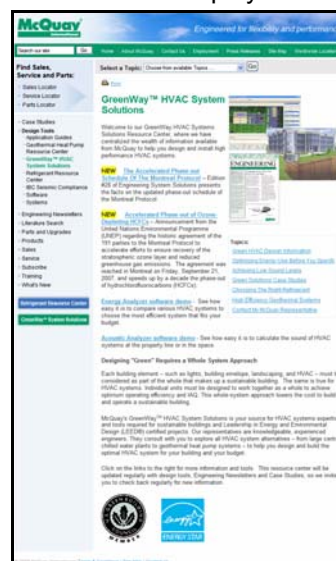
Products Engineered for Flexibility and Performance

—McQuay products give you the flexibility to match your application requirements and achieve optimal energy efficiency and superior IAQ. Our products offer:

- The widest variety of factory engineered and installed options that help you achieve performance requirements at lower installed costs
- Non-ozone depleting HFC refrigerants
- Easy integration with the building automation system of your choice using our MicroTech II® controllers with the Open Choices™ feature for open, standard protocol communication
- Serviceable designs that encourage regular maintenance for peak performance over the life of your equipment

For More Information

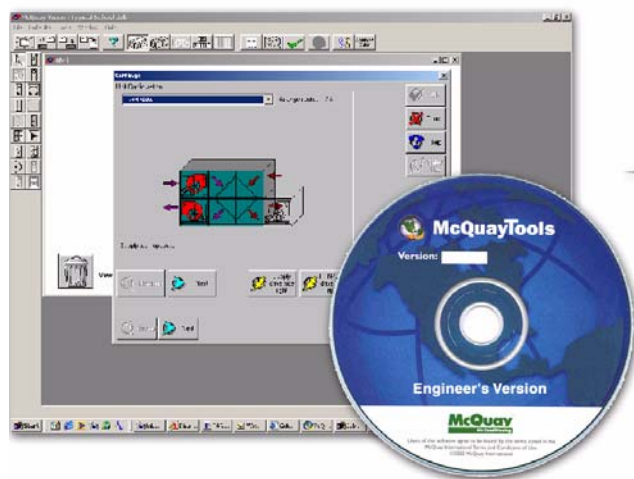
Contact your local McQuay representative for help in optimizing the operating efficiency and IAQ of your HVAC system within your budget. To access our design tools and information on high performance HVAC design, visit our GreenWay HVAC System Solutions Resource Center at www.mcquay.com.



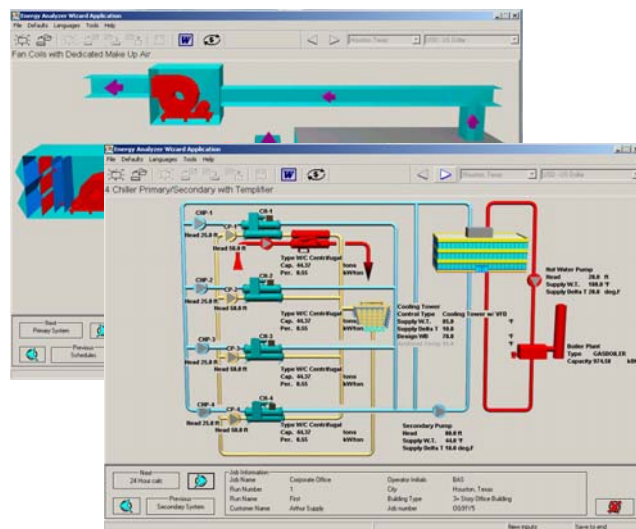
Software Tools That Make Your Job Easier

Designing and specifying the ideal HVAC system can be a time- and cost-intensive process. That's why we developed these user-friendly Windows® - based software programs; McQuayTools™, Energy Analyzer™ and Acoustic Analyzer™. For more information about McQuay software for engineers, contact your local McQuay sales representative.

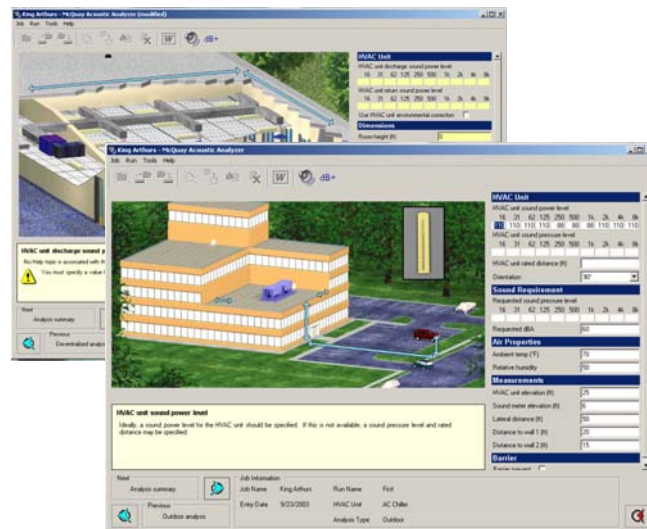
McQuayTools™ for Engineers - This web-enabled selection software program makes it easy to choose from a variety of sizes and product options to design the HVAC system that fits your requirements.



Energy Analyzer™ - Helps you select the best HVAC system to meet your building project's efficiency and budget requirements. The software helps you create a single building model and compare the life cycle costs for different HVAC systems against that same model. View a demonstration of this software at www.mcquay.com.



Acoustic Analyzer™ - Lets you estimate the sound of HVAC equipment in a space or at the property line using your design conditions. This software can help you determine if your equipment selection will meet specifications. View a demonstration of this software at www.mcquay.com.



Aftermarket and Parts Solutions

Whether you are installing, maintaining, or servicing an HVAC or refrigeration system, McQuay offers a complete line of quality parts and supplies to help you get the job done right. McQuay aftermarket and parts equipment are available through an extensive network of distributors throughout North America. To locate a McQuay parts distributor near you, visit www.mcquay.com.

Because they are designed and/or specified by the original equipment manufacturer (OEM), McQuay Parts can enhance the sustainability of your HVAC systems and increase the operating life of your equipment. Your overall maintenance costs are reduced, improving your bottom line.

Look to McQuay for these OEM Parts

- McQuay HVAC products
- AAF® HVAC products
- ClimateControl® HVAC products
- AAF®-HermanNelson® classroom unit ventilators
- Remington® air conditioning products
- Singer® packaged terminal air conditioners
- Westinghouse® commercial air conditioning products



Equipment Upgrades and Modernization

Optimize your older equipment by field installing McQuay options to improve performance and energy efficiency.

- Variable frequency drives
- Digital and analog controls
- High efficiency motors
- Remote user interface panels
- Enhanced surge protection
- Ultraviolet light pack kit
- Condenser enhancement kit
- Centrifugal chiller refrigerant oil separator
- Oil-free, magnetic bearing centrifugal chiller compressors

Service Training

Once you have made the investment in efficient, flexible HVAC equipment, taking care of your investment should be a top priority. McQuay International offers customer training classes to learn first hand, from the manufacturer, what it takes to get the most out of your new mechanical systems. Training courses provide both classroom and hands-on learning experiences. Class topics include operation, repair and maintenance of the following unit types:

- Air-cooled chillers
- Controls
- Rooftop systems
- Self-contained systems
- Terminal units
- Water-cooled chillers

For large groups, McQuay Service Training will come to your site and customize a training session specifically for the application.

To see the complete schedule of classes and to enroll online, visit the Training page on www.mcquay.com.



Service Solutions to Protect Your Building Assets

McQuay Factory Service offers solutions for all makes and models of HVAC equipment to help you get the most out of your HVAC investment and operating budget. By maintaining your HVAC system, McQuay can keep it performing efficiently and reliably, while controlling your maintenance costs.

Planned Maintenance

Protect your valuable assets with result-orientated maintenance strategies designed to meet your specific business requirements and objectives.

Emergency Repairs

We offer emergency repair services 24 hours, 7 days a week, 365 days a year.

Equipment Upgrades

Today, a variety of upgrades are available from McQuay to enhance your equipment's energy efficiency, operation and reliability.

Equipment Replacements

If you're looking to replace equipment, we can provide fully engineered, turnkey solutions. Newer, more energy efficient equipment can typically pay for itself in a short time based on energy savings alone.

Refrigerant Conversions

We provide refrigerant conversions to HFC refrigerants, which have no phase-out schedule and no ozone depletion potential.

Training for Maintenance Staff

Reduce your maintenance costs by learning how to perform routine maintenance and troubleshooting tasks. McQuay offers both classroom service training and on-site training.



Complete Building HVAC Service

Our account representatives and factory trained technicians can provide quick response and proactive solutions for any building requirement. We offer complete building services for all brands and types of HVAC systems.

- Centrifugal chillers
- Screw chillers
- Absorption chillers
- Cooling towers
- Boilers
- Packaged rooftop units
- Air handling equipment
- Exhaust/make-up air systems
- Pumping systems
- Water treatment
- And more

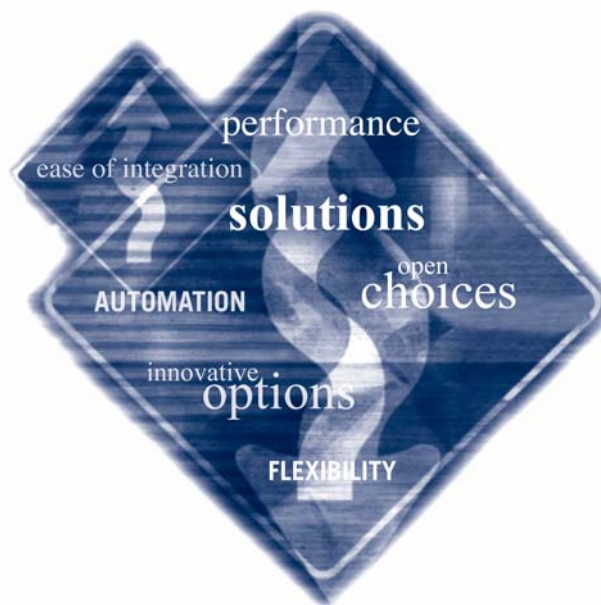


Open Choices™ for the Life of Your HVAC Equipment

To maximize the return on your building investment, you want the flexibility to choose products, systems and services that best meet your requirements. Your building's assets and expenses need to be managed efficiently to give you flexibility for the life of your building. Open, standard protocols give you choices and supplier independence.

Open Choices for communication protocols provide the owner long-term choices for:

- Building automation system integration
- Equipment adds or replacements
- Service support



Easy Integration into Your Building Automation System

McQuay provides superior value in HVAC equipment, automation protocol expertise, proven technical support capabilities from our Controls Customer Support Center (1-866-4MCQUAY), and easy integration with your building automation system (BAS).

- Testing and validation of network communications with BAS suppliers
- Integration support for job site needs during the life of McQuay HVAC equipment
- Comprehensive documentation available on www.mcquay.com
- Network communication designed for strict compliance with BACnet and LonTalk protocols

SIEMENS

t.a.c.

ALERTON®

Delta™
CONTROLS

novar.

Honeywell

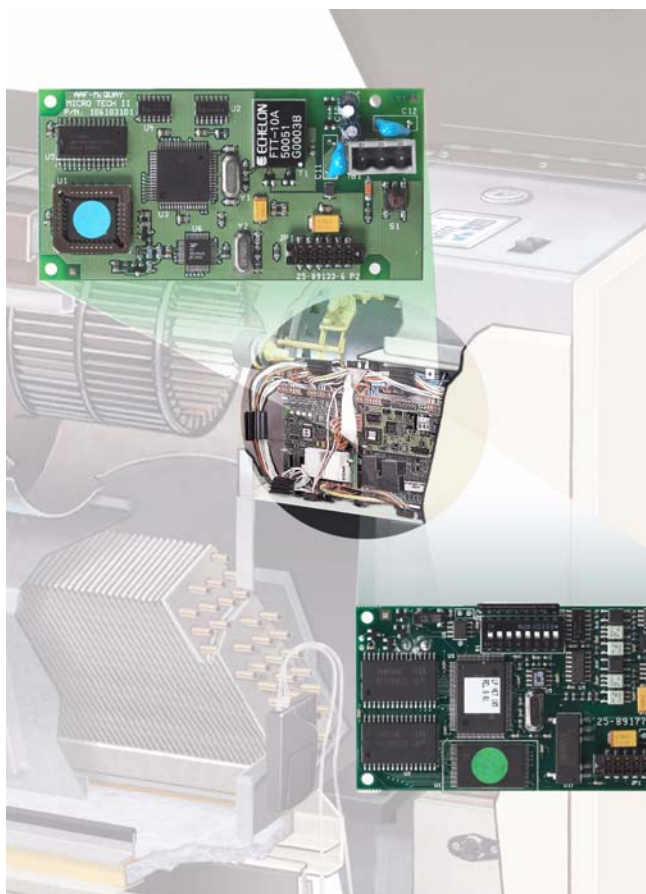
KIMC
CONTROLS

TRiD!UM™

AUTOMATEDLOGIC®
CORPORATION



BACnet™
International



Open Choices™ Feature

MicroTech II® unit controllers with our Open Choices feature offer easy integration of McQuay HVAC equipment with your building automation system.

- Optional communication modules plug into our various unit controllers to allow network communications. Depending upon unit type, McQuay communication protocol options include:
 - BACnet MS/TP
 - BACnet IP
 - BACnet Ethernet
 - LonTalk (All are minimum LONMARK 3.3 certified.)
 - Modbus® RTU
- Communication modules can be changed or upgraded to migrate with your BAS technology.

Open Choices Options for Integrating McQuay Unit Controllers into a BAS

Current Offerings	Unit	Controller	LONMARK Certified	BACnet MS/TP	BACnet IP	BACnet Ethernet	Modbus
	Chiller	MicroTech II	3.3	Yes	Yes	Yes	Yes
	Rooftop	MicroTech II	3.3	Yes	Yes	No	No
	MPS Rooftop	MicroTech II	3.4*	Yes	Yes	Yes	No
	Self-Contained	MicroTech II	3.3	Yes	Yes	No	No
	UV	MicroTech II	3.3	Yes	No	No	No

* Maverick II™ rooftop units only

Self-Contained Air Conditioning Systems—Type SWP and SWT

- Pre-engineered flexibility to design systems without compromise
- Low installation and operating costs
- Quiet operation, verified in independent laboratory tests
- Durable construction and easy service access for long life and reliable operation
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice

For more detail, refer to Catalogs 860 and 865. For the most current information, refer to www.mcquay.com.



Model SWP—20 to 125 tons

Modular capability (SWT)

- For economical retrofit and renovation
- Three separate sections can each negotiate 3' framed doorways - refrigeration system remains intact
- Integral waterside economizer
- Lower installation costs

Performance complies with ASHRAE Standard 90.1-2004

- Many selections surpass a 14 EER
- Water and airside economizer capability
- Fan flexibility to comply with bhp/cfm
- Variable Frequency Drive (VFD) fan control to satisfy VAV requirements



Model SWT—20 to 45 tons



Available LONMARK certified



Features



Serviceable design

- Reduces maintenance and service expense
- Easily accessed MicroTech II and VFD controls with user-friendly interfaces
- Cleanable condensers and economizer coils
- Stainless steel primary drain pan



Up to six row copper tube, aluminum fin evaporator coils

- Provide excellent full- and part-load temperature and humidity control
- Effectively handle lower discharge air temperature designs that can reduce first cost and operating costs
- Optional stainless steel coil casing



MicroTech II control system

- Open Choices feature provides easy integration into the BAS of your choice
- LonTalk or BACnet communication option
- Industry leading user interface
- Factory installed and tested for faster lower cost field commissioning



Water-cooled condenser

- Mechanically cleanable, all copper and brass construction
- Improves compressor reliability by reducing refrigerant charge
- Simple to clean

Waterside economizer

- Effectively uses cool cooling tower water temperatures to off load compressor operation
- Where installation parameters permit, airside economizer is also available

Self-Contained Air Conditioning System Model SWP—20 to 125 tons

Designed for:

- Variable air volume
- Constant air volume
- Water economy cycle
- Air economy cycle
- Make-up air
- Dehumidification
- Optimal air temperature (low cfm/ton)

Engineered flexibility

- 130 pre-engineered compressor and coil combinations
- Flexibility for energy and cost saving low cfm/ton systems
- Right-hand and left-hand piping arrangements
- Clockwise and counter-clockwise fan arrangements

Multiple filter options

- Longer lasting 4" filters (30%, 65% and 85% efficiency)
- Side access doors or face loading
- Improve indoor air quality
- Optional microbial resistant filters
- Pre-filter option

Distributor tubes sheathed in plastic

- Attention to quality improves longevity

Optional UVGI lights

- Improves IAQ by destroying microorganisms on coil and drain pan surfaces
- Includes door interlocks to prevent eye contact with the UV-C ultraviolet light
- Satisfies GSA requirements for UVGI lights downstream of all cooling coils

Double-sloped stainless steel drain pan

- Eliminates standing water
- Reduces bacterial growth
- Serviceable

Water Connections

- Left or right hand

Variable frequency drive (VFD)

- Manages fan speed for VAV control
- Dramatically reduces energy costs
- Reduces fan noise



Features and Options



Custom designed acoustical discharge plenum

- Multiple plenum heights
- Acoustic design with 3", 3 lb density glass fiber insulation, perforated steel liner and interior baffles to reduce turbulence and noise
- Multiple duct opening location and size options

Fan offerings

- Forward curved
- DWDI airfoil for improved efficiency and sound performance

Cost saving electrical design

- Branch short circuit protection for added reliability
- Single point power with optional factory disconnect switch
- All control devices and safeties factory installed

Scroll compressors

- Up to six, for quiet, efficient operation
- Custom selections tailored to specific customer needs
- High EERs/low operating costs
- Standby redundancy

4" structural steel base with lifting lugs and 1/4" tubular steel supports

- Unsurpassed strength and durability
- Less vibration
- Reduces rigging costs

Internal drain trap with brass clean-out plug

- Easy to maintain
- No need to elevate unit
- Eliminates the expense of a field drain trap

SWP—Capacity and Physical Data

Data	SWP model size											
	018	023	028	035	040	045	055	065	070	080	095	105
Compressor												
Quantity	4	4	4	4	4	4	4	4	4	4	4, 6	6
Evaporator coil												
Face area (ft ²)	11.8	15.3	17.7	23.3	27.7	30.7	36.1	41.5	46.3	51.1	55.9	63.2
Fpi	12	12	12	12	12	12	12	12	12	12	12	12
Waterside economizer coil												
Face area (ft ²)	11.8	15.3	17.7	23.3	27.7	30.7	36.1	41.5	46.3	51.1	55.9	63.2
Rows	4	4	4	4	4	4	4	4	4	4	4	4
FPI	12	12	12	12	12	12	12	12	12	12	12	12
Max. working press. (psig)	400	400	400	400	400	400	400	400	400	400	400	200
Hot water heating coil												
Face area (ft ²)	9.3	12.8	15.2	20.2	24.5	26.8	30.4	35.8	39.9	44.4	48.3	51.9
Rows	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1	1	1
Fpi	12	12	12	12	12	12	12	12	12	12	12	12
Electric heat												
kW	34	34	34	34	34	68	68	68	68	68	68	68
Filters												
(Quantity) size 4" depth filters	(6) 20×20 (2) 25×20	(6) 20×20 (2) 25×20	(6) 20×20 (2) 25×20	(10) 25×20	(10) 25×20	(12) 25×20	(12) 25×20	(18) 20×20	(6) 16×20 (12) 25×20	(3) 20×20 (15) 25×20	(6) 16×20 (1) 25×20	(4) 16×20 (17) 20×25 (1) 16×25
Evaporator fan¹												
Fan type	FC	FC	AF, FC	AF, FC	AF, FC	AF, FC	AF, FC	AF, FC	AF, FC	AF, FC	AF, FC	AF
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
Size	15	18	18	20	20	22	25	25	25	27	27	33
Min. horsepower	5	7.5	10	10	15	15	20	20	20	25	30	30
Max. horsepower	10	15	20	20	25	30	40	40	40	50	60	60
Min. design cfm, CV	2950	3825	4425	5825	6925	7675	9025	10,375	11,575	12,775	13,975	15,800
Min. design cfm, VAV	4720	6120	7080	9320	11,080	12,280	14,440	16,600	18,520	20,440	22,360	25,280
Max. design cfm	7080	9180	10,620	13,980	16,620	18,420	21,660	24,900	27,780	30,660	33,540	37,920
Condensers												
Waterside working pressure (psig)	400	400	400	400	400	400	400	400	400	400	400	400
Min. entering temp. (°F) mech. cooling	55	55	55	55	55	55	55	55	55	55	55	55
Minimum GPM	25	41	53	66	69	94	105	105	121	134	138	180
Maximum GPM	88	108	125	159	166	215	237	237	251	349	358	493

1. Standard fan TSP limit is 5.5 inches of water. Consult your local McQuay Sales Representative for applications beyond this range.

SWP Dimensional Data

Basic unit	018	023	028	035	040	045	055	065	070	080	095	105
Depth ^{1, 2}	72.00	72.00	72.00	72.00	72.00	81.00	81.00	81.00	81.00	84.00	84.00	96.00
Length ^{1, 2}	84.00	84.00	84.00	100.00	100.00	120.00	120.00	120.00	132.00	144.00	156.00	156.00
Height ^{1, 2}	82.00	82.00	82.00	82.00	82.00	82.00	82.00	88.00	88.00	88.00	88.00	96.00

1. Dimensions do not include lifting lugs, handle, latch, or fastener extensions.

2. For shipping dimensions, add 4" (102 mm) to depth, 8" (204 mm) to length, and 4" (102 mm) to height.

SWT—Capacity and Physical Data

Data	SWT model size				
	018C	023C	028C	035C	040C
Compressor					
Quantity	4	4	4	4	4
Evaporator coil					
Face area (ft ²)	11.8	15.3	18.9	23.3	26.3
Rows	4, 6	4, 6	4, 6	4, 6	4, 6
Fpi	12	12	12	12	12
Waterside economizer coil					
Face area (ft ²)	11.8	15.3	18.9	23.3	26.3
Rows	4	4	4	4	4
Fpi	12	12	12	12	12
Maximum working pressure (psig)	400	400	400	400	400
Hot water heating coil					
Face area (ft ²)	9.3	12.8	16.3	20.2	23.8
Rows	1, 2	1, 2	1, 2	1, 2	1, 2
Fpi	12	12	12	12	12
Electric heat					
kW	34	34	34	34	34
Filters					
(Quantity) size 4" depth filter	(4) 20 × 20 (4) 25 × 20	(4) 20 × 20 (4) 25 × 20	(4) 20 × 20 (4) 25 × 20	(5) 20 × 20 (5) 25 × 20	(5) 20 × 20 (5) 25 × 20
Evaporator fan¹					
Quantity	1	1	1	2	2
Size	15	18	18	15	15
Minimum horsepower	5	7.5	10	10	15
Maximum horsepower	10	15	20	20	25
Minimum design cfm, CV	2950	3825	4725	5825	6575
Minimum design cfm, VAV	4720	6120	7560	9320	10,520
Maximum design cfm	7080	9180	11,340	13,980	15,780
Condensers					
Waterside working pressure (psig)	400	400	400	400	400
Minimum entering temperature (°F) mechanical cooling	55	55	55	55	55
Minimum gpm	25	41	53	66	69
Maximum gpm	88	108	125	159	166

1. Standard fan TSP limit is 5.5 inches of water. Consult your local McQuay Sales Representative for applications beyond this range.

SWT Dimensional Data

Basic unit	018C	023C	028C	035C	040C
Depth ^{1, 2}	52.00	52.00	52.00	52.00	52.00
Length ^{1, 2}	84.00	84.00	84.00	100.00	100.00
Height ^{1, 2}	112.75	112.75	112.75	112.75	112.75

1. Dimensions do not include lifting lugs, handle, latch, or fastener extensions.

2. For shipping dimensions add 4" (102mm) to depth, 8" (204mm) to length, and 4" (102mm) to height.

Maverick I™ Packaged Singlezone Cooling Units—3 to 20 tons

- Ideal for new, retrofit, or replacement applications on low rise buildings
- Lower installation costs and interior space savings
- Standard low-leak dampers for superior resistance to air leakage and reduced energy costs
- Scroll compressors for efficient cooling operation and dependability
- Two-circuit refrigerant design for high reliability
- Easy access to mechanical components which promotes routine maintenance and can reduce service costs
- Non-corrosive, double-sloped drain pans per ASHRAE Standard 62.1-2004 for good indoor air quality
- Totally enclosed condenser fan motors for reliable operation

For more detail, refer to Catalogs 251 and 252.
For the most current information, refer to www.mcquay.com.

Maverick I Arrangements



Model MPS 003 through 005—3 to 5 tons



Model MPS 007 through 012—7 to 12 tons



Model MPS 015 through 020—15 to 20 tons

Features and Options



Fan and fan motor access

- Slide out fan motor and fan assembly for easy service access
- Sheaves with bushings for easy maintenance and serviceability



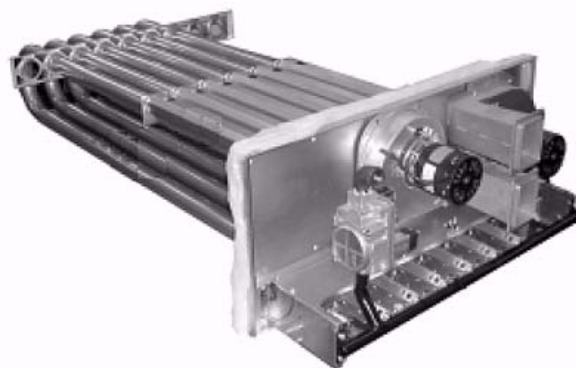
Condenser Fans

- Multiple scroll compressors used for reliability, efficiency and quiet operation
- TEAO condenser fans prevent electrical damage from rain and condensation



Refrigerant System

- Independent circuits provide increased reliability
- External gauge ports for easy serviceability



Tubular Heat Exchanger

- Made of corrosion resistant stainless steel
- Staged combustion fan provides maximum efficiency at low end
- 2-stage heating operation enables precise thermostat control for reduced design, installation, and life cycle costs

Maverick I™ Packaged Singlezone Cooling Units—3 to 20 tons**Durable construction**

- Powder paint exterior cabinet panels pass 1000-hour ASTM B 117 Salt Spray Test for durability
- 18-gauge sheet metal for durability and low leakage rates
- 3/4-inch, foil face insulation with mechanical fasteners helps prevent insulation damage and fibers in the airstream

**Hinged access doors
(7.5 to 20 ton only)**

- Provides easy access to system components for maintenance and serviceability

Optional power exhaust

- Easily field installed

**Optional disconnect and
convenience outlet**

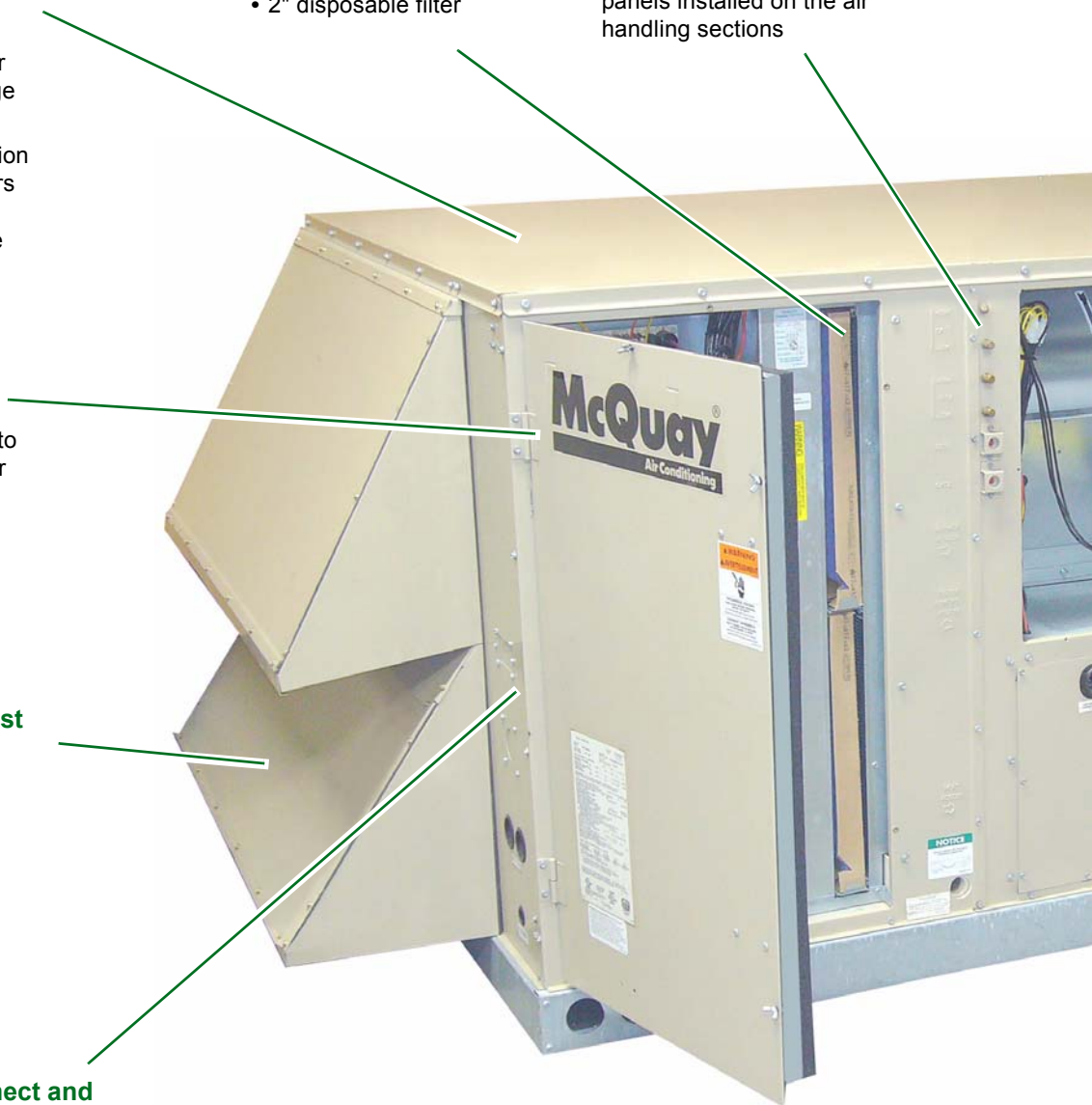
- Factory installed (gas heat)
- Field installed available for under 100 amp service (7.5 ton and up)

Filter system

- 2" filter rack
- 2" disposable filter

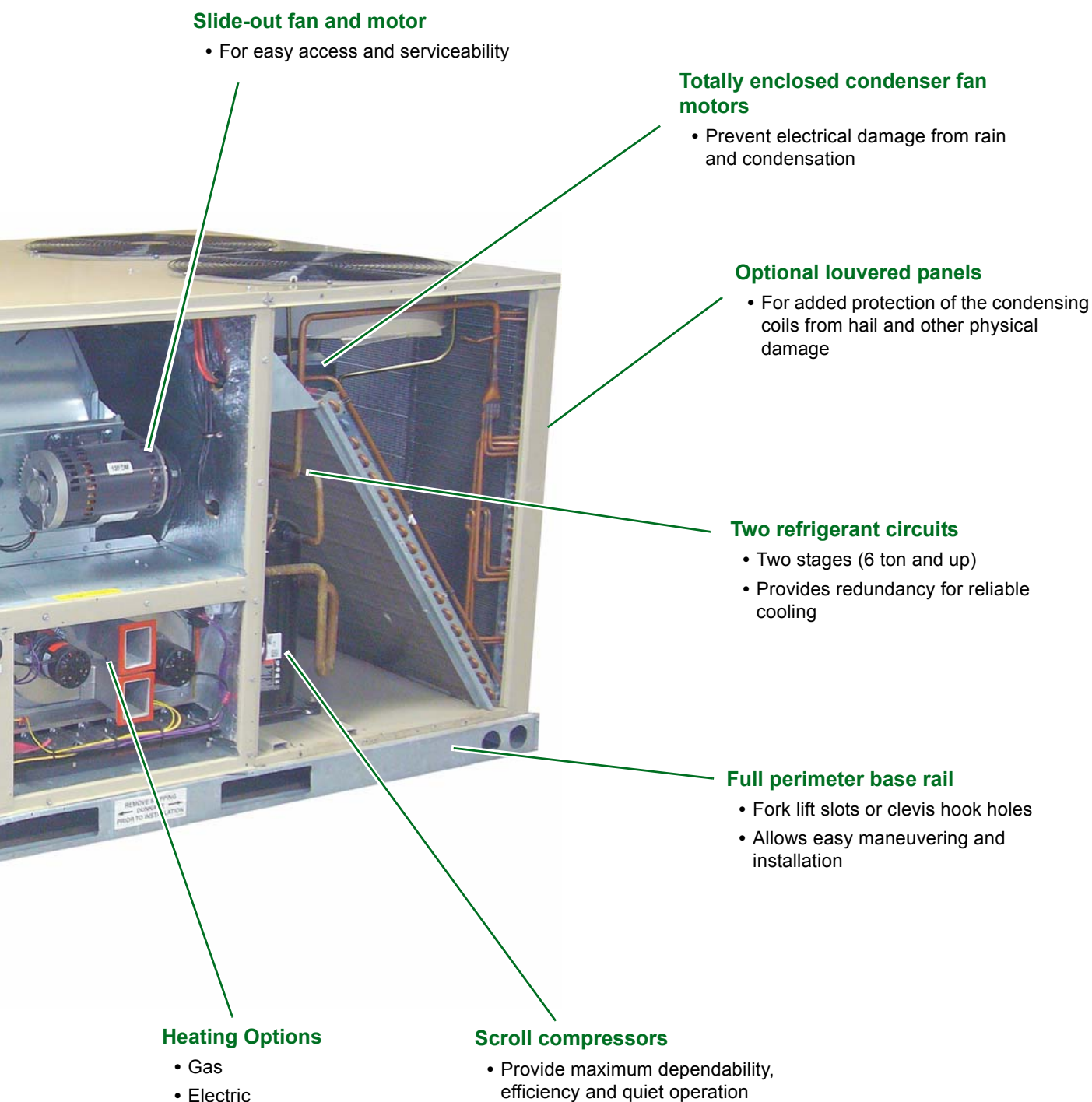
**External refrigerant gauge
ports**

- Easy access for service
- Allows inspection of refrigerant system performance with all panels installed on the air handling sections

**Polymer, double-sloped drain pan**

- Prevents corrosion
- Avoids standing water for high IAQ
- Sloped per ASHRAE Standard 62.1-2004

Features and Options



Maverick II™ Packaged Singlezone Cooling Units—30 to 50 tons

- VAV or constant volume operation
- Available with R-410A (an HFC refrigerant with no phase-out schedule)
- EER of 10.0 or higher
- Double wall construction
- Low leak damper
- AF fans for efficient operation
- Non-corrosive drain pan
- Building pressure control option
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice

For more detail, refer to Catalog 250.

For the most current information, refer to www.mcquay.com.

Maverick II Arrangements



Model MPS 030 through 050—30 to 50 tons



Available LONMARK certified



Features and Options



Outside air dampers

- Low leakage - 4 cfm/ft² for ASHRAE 90.1-2004
- Double-wall blade
- Blade edge and jamb seals



Evaporator coil

- Latent cooling 4-row DX evaporator coil
- Removable polymer drain pan for easy serviceability
- Drain pan meets fire and smoke rating and has 1/8" slope per ASHRAE 62.1-2004



Fan

- AF, SWSI
- Fixed pitch sheave
- Class II construction
- Concentric locking bearing
- Standard 1" seismic spring isolation



Exhaust air

- Direct drive prop exhaust
- 80 - 100% supply airflow
- Staged on OA position control
- Building pressure control via VFD application

Maverick II™ Packaged Singlezone Cooling Units—30 to 50 tons

2"/4" combination filter rack

- Provides more flexibility to meet building filtration requirements
- 2" MERV 6 filters shipped with unit, owner preference at building occupancy

Airfoil plenum fan

- Energy efficient and quiet
- 1" seismic spring isolators for superior vibration control
- Premium efficiency motor is standard

Low leak outside air dampers

- 4 cfm/ft² leakage rate to meet ASHRAE Standard 90.1-2004
- Double-wall blades
- Blade edge and jamb seals

Exhaust fans with building pressure control

- Provide better building operations, higher customer satisfaction

Hinged access doors

- On both sides of unit for easy access to all components
- Easy open, quarter-turn latches
- Double-wall construction protects insulation during maintenance

Polymer, double-sloped drain pan

- Eliminates corrosion
- Avoids standing water for high IAQ
- Sloped per ASHRAE Standard 62.1-2004
- Slides out for easy cleaning



Features

Durable construction

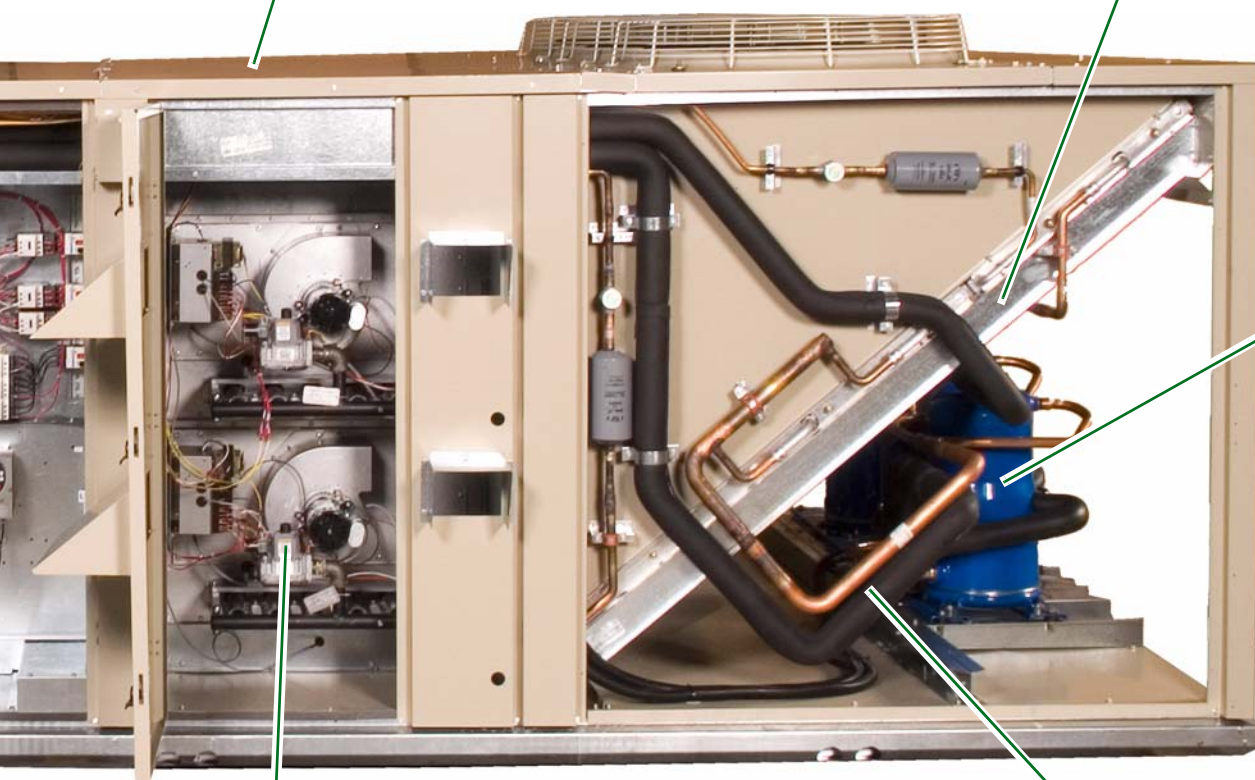
- Pre-painted exterior cabinet panels pass 750-hour ASTM B 117 Salt Spray Test for durability
- Double-wall construction protects insulation and provides wipe-clean surface

Microchannel condenser coils

- Proven technology from the automotive industry
- Suited for R-410A
- All aluminum design
- No corrosion between fins, tubes and header

Scroll compressors

- Provide maximum dependability, efficiency and quiet operation

**Natural gas heat**

- Tubular heat exchanger
- Aluminized steel or optional stainless steel tubes
- Two-stage gas valve with direct spark ignition provides greater efficiency
- Induced combustion blower

Optional electric heat

- DDC with 4-stage control
- Operational safeties
- High-limit temperature switch
- Single point power

R-410A refrigerant

- No ozone depletion potential or phase-out date
- 10.0 EER, meets ASHRAE 90.1 for the year 2010 energy requirements
- Dual refrigerant circuits provide redundancy for high unit reliability

Capacity and Physical Data—MPS 003A to 020A

Data	Unit size									
	003A	004A	005A	006A	007A	008A	010A	012A	015A	020A
Nominal capacity (tons) ¹	3.0	4.0	5.0	6.0	7.5	8.5	10.0	12.5	15.0	20.0
Nominal airflow (cfm)	1200	1600	2000	2400	3000	3300	4000	4900	6000	7700
EER/SEER	13	13.1	13	10.3	10.3	10.3	10.3	9.7	10.2	9.7
IPLV	-	-	-	11.5	11.0	11.0	10.6	10.0	10.4	9.9
Compressor										
Type	Scroll									
Qty	1	1	1	2	2	2	2	2	4	4
Stages	1	1	1	2	2	2	2	2	2	2
Refrigerant	R22	R22	R22	R22	R22	R22	R22	R22	R22	R22
Condenser fans										
Type	Totally enclosed air over									
Qty	1	1	1	1	2	2	2	2	4	4
Supply fans										
Type	DWDI - FC									
Qty	1	1	1	1	1	1	1	1	2	2
Drive	Direct		Belt							
Application	CAV	CAV	CAV	CAV	CAV	CAV	CAV	CAV	CAV	CAV
Evaporator coils										
Rows	3	3	3	4	4	4	4	4	4	4
FPI	15	15	15	12	15	15	15	15	13	13
Face area (sq ft)	5.17	5.17	5.17	6.5	13.5	13.5	13.5	13.5	15.75	15.75
Refrigerant control	TXV			Capillary tube						
Gas heat ²										
Low heat input (MBh)	80	100	100	100	150	150	150	150	250	300
High heat input (MBh)	120	135	135	135	225	225	225	252	350	400
No. of stages	1	1	1	1	2	2	2	2	2	2
Steady state efficiency (%)	81	81	81	81	81	81	81	81	81	81
Filters										
Type	2" disposable									
Area (sq ft)	5.17	5.17	5.17	6.5	13.5	13.5	13.5	13.5	15.75	15.75
Unit weight										
Weight (lbs)	543	585	597	615	1092	1092	1187	1168	1871	2042

1. Rated in accordance with ARI Standard 360.

2. Gas furnace size availability is limited by minimum airflow.

Table 1: Capacity and Physical Data—MPS 030A to 050A

Model	MPS								
	030A		035A		040A		050A		
Cooling Performance									
Gross cooling capacity (tons)	30.0		34.0		40.0		50.0		
Nominal airflow (cfm)	12,000		14,000		16,000		20,000		
EER/SEER	11.5		11.1		11.2		10.6		
Gas Heating Performance									
Heating input MBh (low heat)	300		300		400		400		
Heating output MBh (low heat)*	3700		3700		4900		4900		
Number of stages (low heat)	2		2		2		2		
Gas connection pipe size/qty (low heat)	3/4"/1		3/4"/1		3/4"/1		3/4"/1		
Heating input MBh (high heat)	600		600		800		800		
Heating output MBh (high heat)*	7400		7400		9800		9800		
Number of stages (high heat)	4		4		4		4		
Gas connection pipe size/qty (high heat)	3/4"/2		3/4"/2		3/4"/2		3/4"/2		
Steady state efficiency	81%		81%		81%		81%		
Electric Heating Performance									
Number of stages	4		4		4		4		
kW (low heat)	54		54		72		72		
MBh (low heat)	2900		2900		3800		3800		
kW (medium heat)	72		72		90		90		
MBh (medium heat)	3800		3800		4800		4800		
kW (high heat)	90		90		108		108		
MBh (high heat)	4800		4800		5700		5700		
Compressors									
Type/number	Scroll/3		Scroll/3		Scroll/3		Scroll/4		
Number of stages	5		5		4		5		
Refrigerant	R410A		R410A		R410A		R410A		
Charge (lbs)	Ckt1 - 19 Ckt2 - 11		Ckt1 - 19 Ckt2 - 11		Ckt1 - 21.5 Ckt2 - 12.5		Ckt1 - 21.5 Ckt2 - 22		
Evaporator Coils									
Rows	4		4		4		4		
FPI	20		20		20		20		
Face area (sq ft)	25.4		25.4		29.4		35.7		
Capacity control	TXV		TXV		TXV		TXV		
Condenser Coils									
Fin type	Enhanced		Enhanced		Enhanced		Enhanced		
FPI	18		18		18		18		
Face area (sq ft)	13.4 27.5		13.4 27.5		13.4 27.5		27.5 (x 2)		
Outdoor Fans									
Type	Propeller		Propeller		Propeller		Propeller		
Number - diameter	3 - 26"		3 - 26"		4 - 26"		4 - 26"		
Drive type/number of speeds	Direct/1		Direct/1		Direct/1		Direct/1		
Indoor Fans									
Type	AF - SWSI		AF - SWSI		AF - SWSI		AF - SWSI		
Number - diameter	1 - 24"		1 - 24"		1 - 30"		1 - 30"		
Drive type	Fixed sheave		Fixed sheave		Fixed sheave		Fixed sheave		
Isolation	1" spring		1" spring		1" spring		1" spring		
Number of motors	1		1		1		1		
Motor hp range	5 - 20		5 - 20		7-1/2 - 30		7-1/2 - 30		
Motor nominal rpm	1800		1800		1800		1800		
Motor efficiency	Premium		Premium		Premium		Premium		
Filters									
Type	2", MERV 6								
Area (sq ft)	32		32		36		44		
Qty. - size	8 - 24" x 24"		8 - 24" x 24"		12 - 18" x 24"		8 - 24" x 24" 4 - 18" x 24"		
Total Unit Weight									
Weight (lbs)	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
	3525	3625	3680	3780	4160	4410	4560	4870	
Curb									
Size	14"	24"	14"	24"	14"	24"	14"	24"	
Weight (lbs)	341	501	341	501	481	708	481	708	

Note: *Heating output is for standard conditions at sea level.

RoofPak™ Packaged Singlezone Heating and Cooling Units—15 to 150 tons

- Flexible, modular construction with walk-in access
- 100% make-up air, dehumidification, VAV, or constant volume operation
- Multiple factory-integrated options for customized flexibility
- Blow-through or draw-through cooling coil and filter configurations
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- Available with R-410A or R-407C (HFC refrigerants with no phase-out schedule)
- Heavy duty construction and independent certification (optional) confirm the McQuay RoofPak complies with the newest IBC seismic requirements

For more detail, refer to Catalogs 214, 219 and 220.

For the most current information, refer to www.mcquay.com.

Air-Cooled Condenser Arrangements

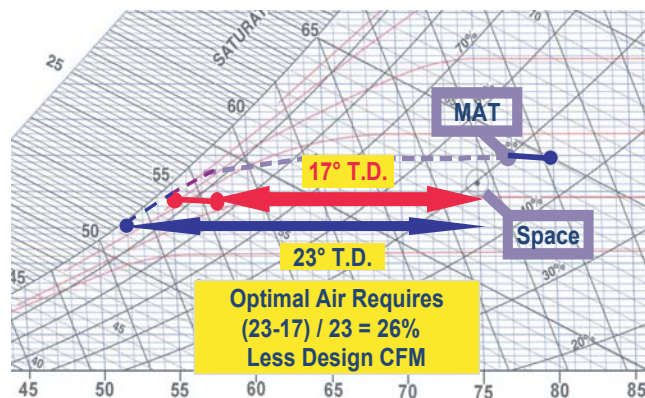


Model RPS/RFS/RCS—15 to 135 tons,
air-cooled blow-through and
draw-through configurations

Model RDT—45 to 135 tons,
air-cooled draw-through configuration

**R-410A
Available
Early 2008**

Blow-Through Optimal Air vs. Standard Draw-Through



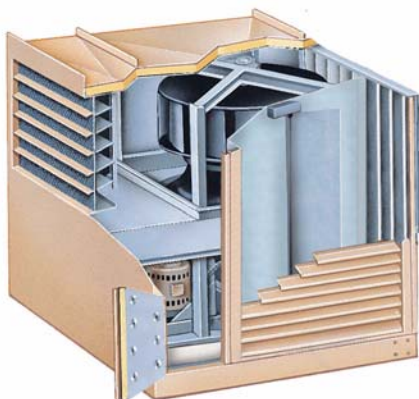
McQuay blow-through coils and fan flexibility reliably allow cost saving “optimal air” design.



Available LONMARK certified

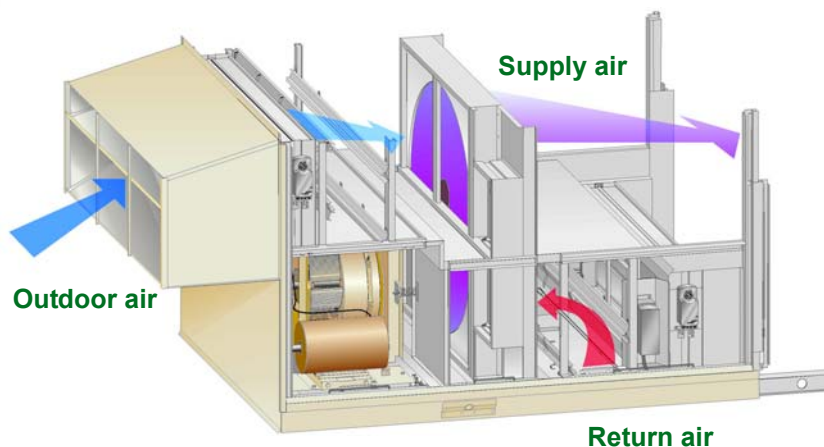


Features and Options



DesignFlow™ precision ventilation air control system

- Accurately measures and maintains minimum ventilation air intake to satisfy IAQ standards



Energy recovery wheel

- Recovers approximately 75% of the energy from exhaust air stream
- Reduces mechanical refrigeration, heating, and humidifying capacities, offsetting the initial cost of the energy recovery wheel
- Cuts winter humidification energy costs up to 60%
- Provides 100% more summer energy recovery than sensible-only energy recovery devices
- Helps provide a comfortable and affordable indoor environment
- Satisfies ASHRAE Standard 90.1 requirements for energy recovery on applications involving more than 70% minimum outdoor air and 5000 total cfm



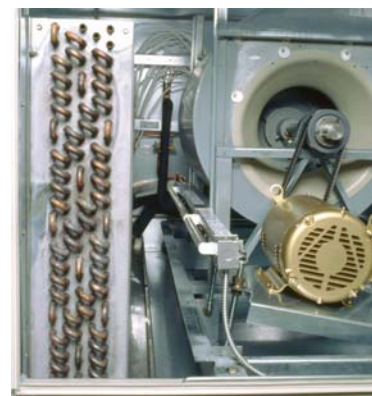
Return or exhaust fans

- Customize the unit to fit the application and return duct pressure drop
- Return fans provide better building pressure and ventilation control as return duct pressure drop increases
- Exhaust fans can save energy as return duct pressure drop requirements decrease



SuperMod™ high turndown gas burners

- Full 20:1 turndown and multiple sizes enable precise temperature control for reduced design, installation, and life cycle costs
- Maintains comfortable tenant environment in VAV, 100% makeup air, and dehumidification applications



Optional UVGI lights

- Improve IAQ by destroying microorganisms on coil and drain pan surfaces
- Includes door interlocks to prevent eye contact with the UV-C ultraviolet light
- Satisfy GSA requirement for UVGI lights downstream of all cooling coils

RoofPak™ Models RPS and RDT Singlezone Heating and Cooling Units—15 to 135 tons

Durable construction

- Pre-painted exterior cabinet panels pass ASTM B 117 Salt Spray Test for durability
- Capped seams prevent water leaks into the cabinet
- Cross-broken top panels eliminate standing water
- Double-wall construction protects R-6.5 insulation and provides wipe clean surface
- Stainless steel, sloped drain pans eliminate standing water



Airfoil fans

- More energy efficient and quieter than forward curved fans
- Double width, double inlet (DWDI) or single width, single inlet (SWSI) plenum fans

**R-410A
Available
Early 2008**

Economizer

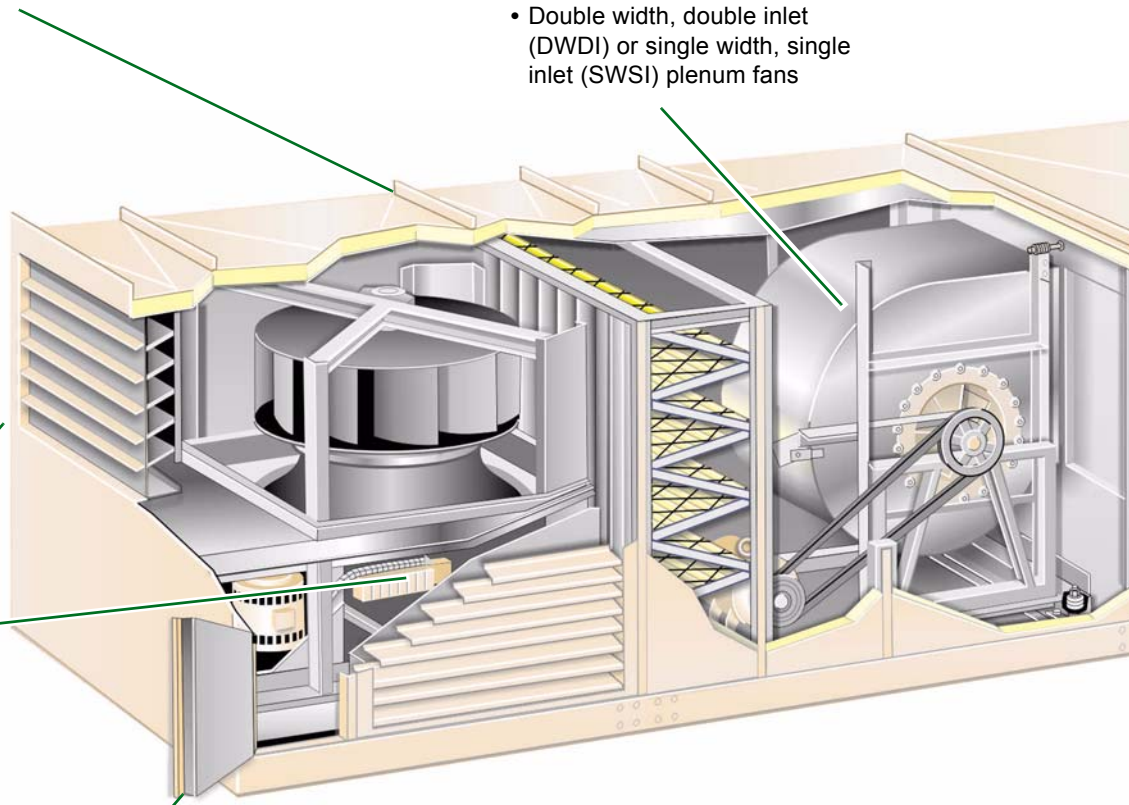
- Outside air enters from both sides, improving mixing for better temperature control
- Patented DesignFlow™ Precision Outdoor Air Control System accurately measures and maintains minimum outdoor air intake
- Patented UltraSeal™ low leak dampers minimize air leakage, reducing energy costs

Hinged access doors

- On both sides of every section for easy access to all components
- Single lever latch and door holders provide easy entry and support routine maintenance
- Double-wall construction protects insulation during maintenance

Blank sections

- Available throughout unit to factory-mount air blenders, carbon or charcoal filters, sound attenuators (shown), humidifiers, or other specialty equipment
- Allow customization for maximum system performance and efficiency
- Reduce design and installation costs



Features and Options

MicroTech II control system

- Factory-installed and tested to minimize costly field commissioning
- Open Choices feature for easy integration with the BAS of your choice using open, standard protocols such as BACnet® or LonTalk®
- Easily accessed for system diagnostics and adjustments via a keypad/display on unit
- Minimum outdoor air and humidity control logic for fresh air intake and optimum humidity levels
- Optionally add a remote keypad and display that is identical to the unit mounted user interface

**High efficiency condensing section**

- Open air design for unrestricted airflow and access to compressors and refrigerant piping
- Up to 8 steps of compressor capacity control, with hot gas bypass on each circuit, provides a stable discharge temperature and humidity control

Quiet condenser fan option on air-cooled condensers

- Highly efficient, low rpm airfoil fan with aerodynamic discharge shroud
- Reduces radiated noise by an average of 11 dB

Blow-through or draw-through cooling coils

- Customize your unit to fit the application and building load
- Blow-through arrangements provides greater sensible heat ratios and a colder unit leaving air temperature per ton
- Draw-through arrangement provides more dehumidification per ton

**Factory-mounted variable frequency drives**

- Control fan motor speed for lower fan operating costs and sound levels in VAV systems
- Four brands offered including the McQuay MD2 which is specially designed for HVAC and McQuay applications

RoofPak™ Models RPE and RDE Singlezone Heating and Cooling Units—75 to 150 tons



Evaporative Condenser Arrangements

Features

- Seven sizes from 75 to 150 tons
- Blow-through (model RPE) or draw-through (model RDE) cooling
- Walk-in service vestibule contains water connections, controls, water treatment and refrigerant service components

Benefits

- Up to 40% savings in condensing unit energy consumption versus air-cooled alternatives
- Reduced peak electrical demand at design conditions allows unit electrical service to be downsized for lower installation costs and electrical demand charges

Typical savings vs. air-cooled rooftop systems*

To illustrate the savings generated by evaporative condensing, consider a two-story shopping mall using several 125-ton VAV rooftop units, occupied 365 days a year. The table below shows the McQuay RPE condensing unit savings if the mall is located in Los Angeles, New York and Las Vegas.

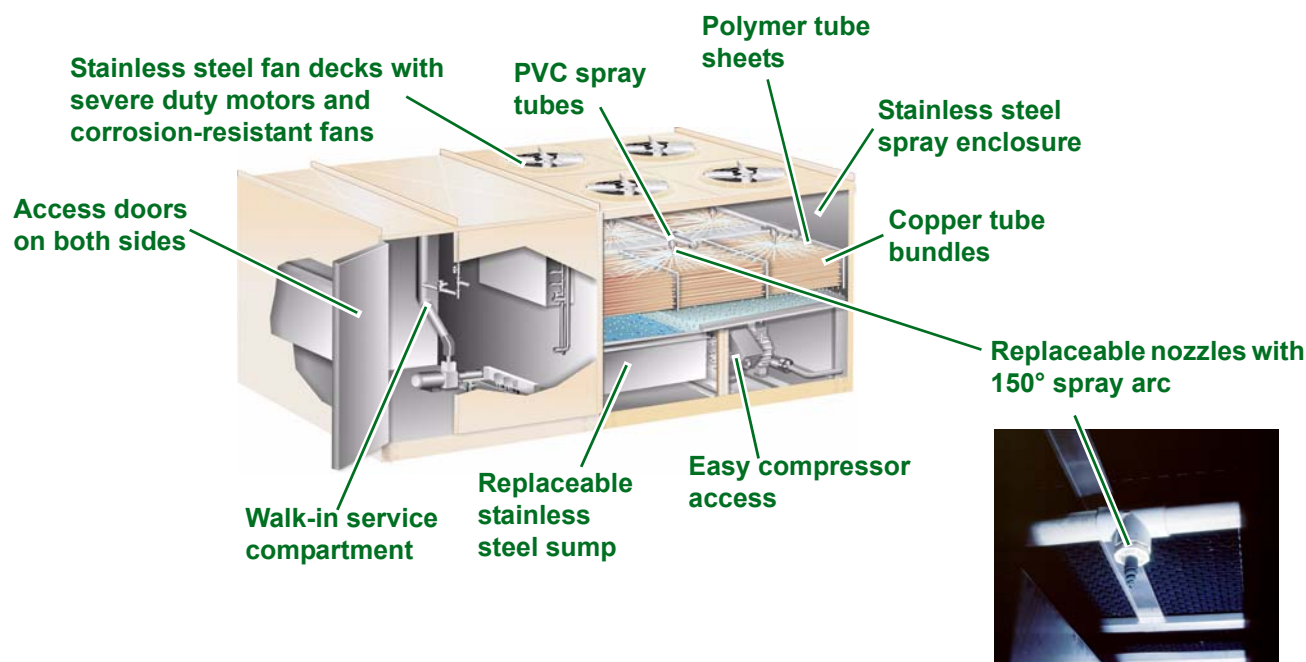
Conditions		Los Angeles		New York		Las Vegas	
		Air-cooled	McQuay RPE	Air-cooled	McQuay RPE	Air-cooled	McQuay RPE
Design ambient dry bulb/wet bulb		95°F/72°F	95°F / 72°F	95°F / 75°F	95°F / 75°F	110°F / 72°F	110°F / 72°F
Electrical consumption rate (per kW hour)		\$0.15	\$0.15	\$0.11	\$0.11	\$0.07	\$0.07
Electrical demand rate (per kW hour)		\$24.00	\$24.00	\$18.00	\$18.00	\$8.00	\$8.00
Condensing unit	Efficiency (kW/ton)	1.15	0.85	1.15	0.88	1.40	0.85
	Electrical cost	\$30,200	\$22,100	\$17,860	\$12,375	\$19,042	\$11,351
	Percent savings	27%		31%		40%	

* All energy analysis comparison charts are estimates and have been generated using McQuay Energy Analyzer™ software. Actual customer results may vary. For more information on Energy Analyzer software, see page 7.

Capacity and Physical Data—RDE and RPE 076C to 150C

Data		Unit size						
		076C	089C	100C	110C	130C	140C	150C
Nominal capacity (tons) ¹		70.5	89.9	99.5	115.2	131.1	143.2	154.4
Nominal airflow (cfm)		28,100	33,930	37,000	40,700	48,100	49,400	49,400
Compressor	Type	Reciprocating						
	Quantity – hp	2 – 30	2 – 35	2 – 40	4 – 25	4 – 30	2 – 30, 2 – 35	4 – 35
	Std. capacity control	100-83-67-33-0			100-75-50-25-0		100-72-44-22-0	100-75-50-25-0
	Opt. capacity control	100-83-67-50-33-16-0			100-88-75-63-50-38-25-12-0		100-89-79-61-44-32-22-11-0	100-92-83-67-50-42-33-16-0
Condenser fans	Qty – diameter (in)	4 – 26	4 – 26	4 – 26	6 – 26	6 – 26	6 – 26	6 – 26
Condenser fan motors	Qty – hp	4 – 1.5	4 – 1.5	4 – 1.5	6 – 1.5	6 – 1.5	6 – 1.5	6 – 1.5
Refer to RPS and RDT tables for additional physical data.								

1. Rated in accordance with ARI Standard 360.



Optional non-chemical water treatment

- Eliminates the costs and hazards associated with chemical water treatment
- Reduces water consumption and possibly eliminates sanitary sewer costs of blowdown water
- Evaporative condenser maintenance need not exceed maintenance for air-cooled units

Capacity and Physical Data—RPS 015C to 040C

Data		Unit size						
		015C	018C	020C	025C	030C	036C	040C
Nominal capacity (tons) ¹		16.3	19.8	24.2	29.4	32.1	38.4	44.8
Nominal airflow (cfm)		6000	7000	8000	10,000	12,000	14,000	16,000
Compressor	Type	Scroll						
	Quantity – hp	1 – 4.5, 1 – 9	1 – 6.7, 1 – 10	1 – 6.7, 1 – 15	2 – 6.7, 1 – 13	2 – 6.7, 1 – 15	2 – 6.7, 2 – 10	4 – 10
	Std. capacity ctrl.	100-67-33-0	100-60-40-0	100-69-31-0	100-75-50-25-0	100-75-50-25-0	100-70-50-20-0	100-75-50-25-0
Cond. coil (alum. fins)	Rows/FPI	2/16	2/16	2/16	3/16	3/16	2/16	2/16
	Face area (sq ft)	36.8	36.8	36.8	36.8	36.8	76.2	76.2
Condenser fans	Qty – dia. (in)	2 – 26	2 – 26	2 – 26	3 – 26	3 – 26	4 – 26	4 – 26
	Std. airflow (cfm)	14,552	14,552	14,552	16,047	16,047	29,376	29,376
Cond. fan motors.	Qty – hp	2 – 1.0	2 – 1.0	2 – 1.0	3 – 1.0	3 – 1.0	4 – 1.0	4 – 1.0
Supply fans	Type	Forward curved LP					Forward curved LP/MP	
	Qty – dia. (in)	2 – 15 × 6	2 – 15 × 6	2 – 15 × 6	2 – 15 × 6	2 – 15 × 6	1 – 24	1 – 24
	Qty – dia. (in)	2 – 15 × 15	2 – 15 × 15	2 – 15 × 15	2 – 15 × 15	2 – 15 × 15	–	–
	Airflow (cfm)	4000–12,000	4000–12,000	4000–12,000	5400–16,000	5400–16,000	5400–17,550	5400–17,550
	Motor hp range	1–20	1–20	1–20	1–20	1–20	1–25	1–25
	Type	DWDI airfoil, with or without variable inlet vanes						
	Qty – dia. (in)	1 – 20	1 – 20	1 – 20	1 – 20	1 – 20	1 – 24	1 – 24
	Airflow (cfm)	4000–10,000	4000–12,000	4000–12,000	5400–16,000	5400–16,000	5400–17,550	5400–17,550
Return fans	Motor hp range	1–20	1–20	1–20	1–20	1–20	1–25	1–25
	Type	Forward curved						
	Diameter (in)	2 – 15 × 15	2 – 15 × 15	2 – 15 × 15	2 – 15 × 15	2 – 15 × 15	–	–
	Airflow (cfm)	4000–10,000	4000–12,000	4000–12,000	5400–16,000	5400–16,000	–	–
	Motor hp range	1–10	1–10	1–10	1–10	1–10	–	–
	Type	SWSI airfoil, with or without variable inlet vanes						
	Qty – dia. (in)	1 – 30	1 – 30	1 – 30	1 – 30	1 – 30	1 – 30, 1 – 40	1 – 30, 1 – 40
	Airflow (cfm)	4000–10,000	4000–12,000	4000–12,000	5400–16,000	5400–16,000	5400–17,550	5400–17,550
Evaporator coils	Motor hp range	1–10	1–10	1–10	1–10	1–10	1–10	1–10
	Rows	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5
	FPI	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12
Hot water coils	FA, small (sq ft)	18.5	18.5	18.5	27.0	27.0	27.0	27.0
	Type – rows	5WH – 1	5WH – 1	5WH – 1	5WH – 1	5WH – 1	5WH – 1	5WH – 1
	Type – rows	5WS – 2	5WS – 2	5WS – 2	5WS – 2	5WS – 2	5WS – 2	5WS – 2
	FPI	9	9	9	9	9	9	9
Steam coils	Face area (sq ft)	20.3	20.3	20.3	20.3	20.3	20.3	20.3
	Type – rows	5JA – 1	5JA – 1	5JA – 1	5JA – 1	5JA – 1	5JA – 1	5JA – 1
	FPI	6, 12	6, 12	6, 12	6, 12	6, 12	6, 12	6, 12
Gas furnace ²	Face area (sq ft)	20.3	20.3	20.3	20.3	20.3	20.3	20.3
	Input (MBh)	250, 312, 400, 500, 625, 800, 812, 988, 1000, 1250						
Electric heat ³	Nom. output (MBh)	200, 250, 320, 400, 500, 640, 650, 790, 800, 1000						
	Nom. output (kW)	20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240						
Panel filters	type	30% pleated						
	Area (sq ft)	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	Qty – size (in)	10–16×20×2 10–16×25×2	10–16×20×2 10–16×25×2	10–16×20×2 10–16×25×2	10–16×20×2 10–16×25×2	10–16×20×2 10–16×25×2	10–16×20×2 10–16×25×2	10–16×20×2 10–16×25×2
Prefilters (for cartridge filters)	Type	30% prefilter, standard flow						
	Area (sq ft)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	Qty – size (in)	4–24×24×2 4–12×24×2	4–24×24×2 4–12×24×2	4–24×24×2 4–12×24×2	4–24×24×2 4–12×24×2	4–24×24×2 4–12×24×2	4–24×24×2 4–12×24×2	4–24×24×2 4–12×24×2
Cartridge filters	Type	65% or 95%, standard flow						
	Area (sq ft)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
	Qty – size (in)	4–24×24×12 4–12×24×12	4–24×24×12 4–12×24×12	4–24×24×12 4–12×24×12	4–24×24×12 4–12×24×12	4–24×24×12 4–12×24×12	4–24×24×12 4–12×24×12	4–24×24×12 4–12×24×12

1. Rated in accordance with ARI Standard 360.

2. Gas furnace size availability is limited by minimum airflow.

3. Electric heat availability is limited by minimum airflow.

Capacity and Physical Data—RPS 045C to 075C

Data		Unit size				
		045C	050C	060C	070C	075C
Nominal capacity (tons) ¹		46.1	55.1	65.9	73.0	82.0
Nominal airflow (cfm)		16,000	20,000	24,000	28,000	30,000
Compressor	Type	scroll				
	Quantity—hp	4–10	4–13	4–15	6–10	6–13
	Std. capacity control	100-75-50-25-0			100-83-67-50-33-16-0	
	Opt. capacity control	—	—	—		
Condenser coil (aluminum fins)	Rows/FPI	2/16	2/16	2/16	2/16	2/16
	Face area (sq ft)	78.0	78.0	78.0	117.0	117.0
Condenser fans	Qty—dia. (in)	4–26	4–26	6–26	6–26	8–26
	Std. airflow (cfm)	29558	29558	38624	48000	59100
Condenser fan motors	Qty—hp	4–1.0	4–1.0	6–1.0	6–1.0	8–1.0
Supply fans	type	Forward curve, LP/MP				
	Qty—dia. (in)	1–27				
	Airflow range (cfm)	8000–24,000	8000–30,000			
	Motor hp range	3–50				
	Type	DWDI airfoil				
	Qty—dia. (in)	1–27, 30	1–27, 30	1–30, 33	1–30, 33	1–30, 33
	Airflow range (cfm)	8000–24,000	8000–30,000	8000–30,000	8000–30,000	8000–30,000
	Motor hp range	3–50	3–50	3–50	3–50	3–50
Return fans	Type	SWSI airfoil				
	Qty—dia. (in)	1–40	1–40	1–40	1–40	1–40
	Airflow range (cfm)	8000–24,000	8000–30,000	8000–30,000	8000–30,000	8000–30,000
	Motor hp range	2–30	2–30	2–30	2–30	2–30
Exhaust fans	Type	Propeller				
	Diameter (In)	36	36	36	36	36
	Quantity	1 or 2 per unit	1 or 2 per unit	1 or 2 per unit	1 or 2 per unit	1–2 per unit
	Motor hp	5 each	5 each	5 each	5 each	5 each
	Airflow range (cfm)	11000–20000 each (within cabinet limitations)				
Evaporator coils	Rows	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5
	FPI	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12
	F.A., small (sq ft)	39.5	39.5	39.5	39.5	39.5
	F.A., large (sq ft)	—	47.1	47.1	47.1	47.1
Hot water coils	Type—rows	5WH–1	5WH–1	5WH–1	5WH–1	5WH–1
	Type—rows	5WS–2	5WS–2	5WS–2	5WS–2	5WS–2
	FPI	9	9	9	9	9
	Face area (sq ft)	29.7	29.7	29.7	29.7	29.7
Steam coils	Type—rows	5JA–1, 2	5JA–1, 2	5JA–1, 2	5JA–1, 2	5JA–1, 2
	FPI	6, 12	6, 12	6, 12	6, 12	6, 12
	Face area (sq ft)	29.7	29.7	29.7	29.7	29.7
Gas furnace ²	Input (MBh)	250, 312, 400, 500, 625, 800, 812, 988, 1000, 1250				
	Nom. output (MBh)	200, 250, 320, 400, 500, 640, 650, 790, 800, 1000				
Electric heat ³	Nom. output (kW)	40, 60, 80, 100, 120, 160, 200, 240				
Panel filters	Type	30% pleated				
	Area (sq ft)	73.9	73.9	73.9	73.9	73.9
	Qty—size (in)	7–16 × 20 × 2 21–16 × 25 × 2	7–16 × 20 × 2 21–16 × 25 × 2	7–16 × 20 × 2 21–16 × 25 × 2	7–16 × 20 × 2 21–16 × 25 × 2	7–16 × 20 × 2 21–16 × 25 × 2
Prefilters (for cartridge filters)	Type	30% prefilter, standard flow				
	Area (sq ft)	40.0	40.0	40.0	40.0	
	Qty—size (in)	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 8–24 × 24 × 2
	Type	30% prefilter, medium flow				
	Area (sq ft)	48.0	48.0	48.0	48.0	
	Qty—size (in)	8–12 × 24 × 2 8–24 × 24 × 2	8–12 × 24 × 2 8–24 × 24 × 2	8–12 × 24 × 2 8–24 × 24 × 2	8–12 × 24 × 2 8–24 × 24 × 2	8–12 × 24 × 2 8–24 × 24 × 2
Cartridge filters	Type	65% or 95%, standard flow				
	Area (sq ft)	40.0	40.0	40.0	40.0	
	Qty—size (in)	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12
	Type	65% or 95%, medium flow				
	Area (sq ft)	48.0	48.0	48.0	40.0	40.0
	Qty—size (in)	8–12 × 24 × 12 8–24 × 24 × 12	8–12 × 24 × 12 8–24 × 24 × 12	8–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12

1. Rated in accordance with ARI Standard 360.

2. Gas furnace size availability is limited by minimum airflow.

3. Electric heat availability is limited by minimum airflow.

Capacity and Physical Data—RPS 080C to 135C

Data		Unit size					
		080C	090C	105C	115C	125C	135C
Nominal capacity (tons) ¹		86.3	93.8	106.0	120.7	132.8	143.6
Nominal airflow (cfm)		32,000	36,000	40,000	46,000	48,000	50,000
Compressor	Type	Scroll			Reciprocating		
	Quantity—hp	6–13	3–13 + 3–15	6–15	4–30	2–30, 2–35	4–35
	Std. cap control	100-83-67-50-34-17-0	100-82-67-49-34-15-0	100-83-67-50-34-17-0	100-83-67-50-34-17-0	100-72-44-22-0	100-75-50-25-0
	Opt. cap control	—	—	—	100-88-75-63-50-38-25-12-0	100-89-79-61-44-32-22-11-0	100-92-83-67-50-42-33-16-0
Cond. coil (alum. fins)	Rows/FPI	2/16	2/16	2/16	2/16	2/16	2/16
	Face area (sq ft)	117.0	135.0	135.0	181.3	181.3	181.3
Condenser fans	Qty—dia. (in)	8–26	8–26	9–26	10–26	12–26	12–26
	St. airflow (cfm)	59,100	62,000	66,900	79,100	90,000	90,000
Cond. fan mtrs.	Qty—hp	8–1.0	8–1.0	9–1.0	10–1.0	12–1.0	12–1.0
Supply fans	Type	DWDI airfoil					
	Qty—dia. (in)	1–33, 36	1–33, 36	1–36, 40	1–36, 40	1–36, 40	1–36, 40
	Airflow rg (cfm)	11000–39,520	11000–39,520	12200–49,400	12200–49,400	15200–49,400	15200–49,400
	Motor hp range	5–75	5–75	5–75	5–75	5–75	5–75
Return fans	Type	SWSI airfoil					
	Qty—dia. (in)	1–44.5	1–44.5	1–44.5	1–44.5	1–44.5	1–44.5
	Airflow range (cfm)	11000–39,520	11000–39,520	12200–49,400	12200–49,400	15200–49,400	15200–49,400
	motor hp range	5–60	5–60	5–60	5–60	5–60	5–60
Exhaust fans	Type	Propeller					
	Diameter (in)	36	36	36	36	36	36
	Quantity	1–3 per unit	1–3 per unit	1–3 per unit	1–3 per unit	1–3 per unit	1–3 per unit
	Motor hp	5 each	5 each	5 each	5 each	5 each	5 each
	Airflow range (cfm)	11,000 – 20,000 each (within cabinet limitations)					
Evaporator coils	rows	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5
	FPI	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 1253.9
	F.A., small (sq ft)	53.9	53.9	60.8	—	—	—
	F.A., large (sq ft)	60.8	60.8	76.0	76.0	76.0	76.0
Hot water coils	Type—rows	5WH–1	5WH–1	5WH–1	5WH–1	5WH–1	5WH–1
	Type—rows	5WS–2	5WS–2	5WS–2	5WS–2	5WS–2	5WS–2
	FPI	9	9	9	9	9	9
	Face area (sq ft)	42.2	42.2	42.2	42.2	42.2	42.2
Steam coils	Type—rows	5JA–1, 2	5JA–1, 2	5JA–1, 2	5JA–1, 2	5JA–1, 2	5JA–1, 2
	FPI	6, 12	6, 12	6, 12	6, 12	6, 12	6, 12
	Face area (sq ft)	42.2	42.2	42.2	42.2	42.2	42.2
Gas furnace ²	Input (MBh)	625, 800, 812, 988, 1000, 1250, 1375, 1750, 1875, 2500					
	Nom. output (MBh)	500, 640, 650, 790, 800, 1000, 1100, 1400, 1500, 2000					
Electric heat ³	Nom. output (kW)	80, 100, 120, 160, 200, 240, 280, 320					
Panel filters	Type	30% pleated					
	Area (sq ft)	116.1	116.1	116.1	116.1	116.1	116.1
	Qty—size (in)	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2
Prefilters (for cartridge filters)	Type	30% prefilter, standard flow			30% prefilter, medium flow		
	Area (sq ft)	56.0	56.0	64.0	64.0	64.0	64.0
	Qty—size (in)	4–12 × 24 × 2 12–24 × 24 × 2	4–12 × 24 × 2 12–24 × 24 × 2	16–24 × 24 × 2	16–24 × 24 × 2	16–24 × 24 × 2	16–24 × 24 × 2
	Type	30% prefilter, medium flow			30% prefilter, high flow		
	Area (sq ft)	64.0	64.0	80.0	80.0	80.0	80.0
	Qty—size (in)	16–24 × 24 × 2	16–24 × 24 × 2	8–12 × 24 × 2 16–24 × 24 × 2	8–12 × 24 × 2 16–24 × 24 × 2	8–12 × 24 × 2 16–24 × 24 × 2	8–12 × 24 × 2 16–24 × 24 × 2
Cartridge filters	Type	65% or 95% standard flow			65% or 95% medium flow		
	Area (sq ft)	56.0	56.0	64.0	64.0	64.0	64.0
	Qty—size (in)	4–12 × 24 × 12 12–24 × 24 × 12	4–12 × 24 × 12 12–24 × 24 × 12	16–24 × 24 × 12	16–24 × 24 × 12	16–24 × 24 × 12	16–24 × 24 × 12
	Type	65% or 95% medium flow			65% or 95% high flow		
	Area (sq ft)	64.0	64.0	80.0	80.0	80.0	80.0
	Qty—size (in)	16–24 × 24 × 12	16–24 × 24 × 12	8–12 × 24 × 12 16–24 × 24 × 12	8–12 × 24 × 12 16–24 × 24 × 12	8–12 × 24 × 12 16–24 × 24 × 12	8–12 × 24 × 12 16–24 × 24 × 12

1. Rated in accordance with ARI Standard 360.

2. Gas furnace size availability is limited by minimum airflow.

3. Electric heat availability is limited by minimum airflow.

Capacity and Physical Data—RDT 045C to 075C

Data		Unit size				
		045C	050C	060C	070C	075C
Nominal capacity (tons) ¹		46.1	55.1	65.9	73.0	82.0
Nominal airflow (cfm)		16,000	20,000	24,000	28,000	30,000
Compressor	Type	scroll				scroll
	Quantity–hp	4–10	4–13	4–15	6–10	6–13
	Std. capacity control	100-75-50-25-0			100-83-67-50-33-16-0	100-83-67-50-33-16-0
	Opt. capacity control	–	–	–	–	–
Supply fans	Type	SWSI airfoil				
	Qty–dia. (in)	1–40, 44	1–40, 44	1–40, 44	1–40, 44	1–40, 44
	Airflow range (cfm)	8000–24,000	8000–30,000	8000–30,000	8000–30,000	8000–30,000
	Motor hp range	3–50	3–50	3–50	3–50	3–50
Evaporator coils	Rows	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5
	FPI	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12
	F.A., small (sq ft)	39.5	39.5	39.5	39.5	39.5
	F.A., large (sq ft)	–	47.1	47.1	47.1	47.1

1. Rated in accordance with ARI Standard 360.
For additional physical data, refer to RPS tables.

Capacity and Physical Data—RDT 080C to 135C

Data		Unit size					
		080C	090C	105C	115C	125C	135C
Nominal capacity (tons) ¹		86.3	93.8	106.0	120.7	132.8	143.6
Nominal airflow (cfm)		32,000	36,000	40,000	46,000	48,000	50,000
Compressor	Type	scroll			reciprocating		
	Quantity—hp	6–13	3–13 + (3) 15	6–15	4–30	2–30, 2–35	4–35
	Std. cap control	100-83-67-50-34-17-0	100-82-67-49-34-15-0	100-83-67-50-34-17-0	100-75-50-25-0	100-72-44-22-0	100-75-50-25-0
	Opt. cap control	—	—	—	100-88-75-63-50-38-25-12-0	100-89-79-61-44-32-22-11-0	100-92-83-67-50-42-33-16-0
Supply fans	Type	Forward curved, LP/MP					
	Qty—dia. (in)	1–33, 36	1–33, 36	1–36, 40	1–36, 40	1–36, 40	1–36, 40
	Airflow range (cfm)	11,000–39,520	11,000–39,520	12,200–49,400	12,200–49,400	15,200–49,400	15,200–49,400
	Motor hp range	5–75	5–75	5–75	5–75	5–75	5–75
	Type	DWDI airfoil					
	Qty—dia. (in)	1–33, 36	1–33, 36	1–36, 40	1–36, 40	1–36, 40	1–36, 40
	Airflow rg. (cfm)	11000–39520	11000–39520	12200–49400	12200–49400	15200–49400	15200–49400
	Motor hp range	5–75	5–75	5–75	5–75	5–75	5–75
Evaporator coils	rows	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5
	FPI	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 12	8, 10, 1253.9
	F.A., small (sq ft)	53.9	53.9	60.8	—	—	—
	F.A., large (sq ft)	60.8	60.8	76.0	76.0	76.0	76.0

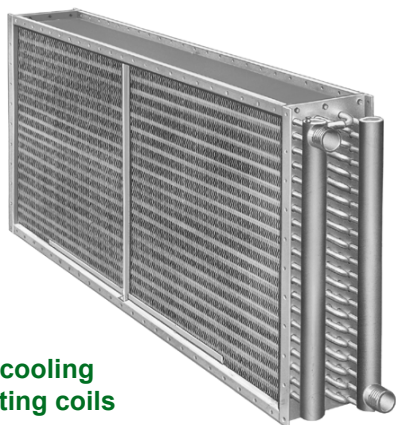
1. Rated in accordance with ARI Standard 360.
For additional physical data, refer to RPS tables.

Water Cooling or Heating, Evaporator and Steam—Fin Types HI-F5, HI-F8 and E-F5

- Easy selection of the widest variety of coil options
- Over 70 years of experience setting the industry standard for quality
- High efficiency, maximum heat transfer design
- Quick shipping programs
- Flexibility and manufacturing capabilities for special materials and configurations required for industrial and process applications
- Optional coil connection lengths and arrangements available
- Optional freeze damage protection
- Flange dimensions are variable to fit your application

For more detail, refer to Catalogs 411 (Water Cooling & Evaporator), 412 (Water Heating) and 413 (Steam). For the most current information, refer to www.mcquay.com.

Water cooling or heating coils



Steam coils



Evaporator coils



Condenser coils



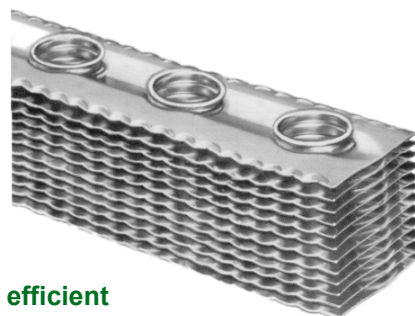
HI-F high efficiency fin type

Maximum heat transfer due to continuous air turbulence across the fin surface



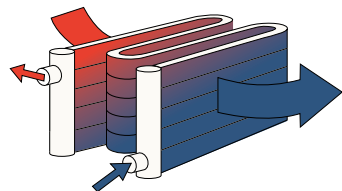
E-F energy efficient fin type

- Energy saving
- Reduces air pressure drop by as much as 33%
- Fan brake horsepower requirements are lower

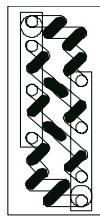


Water Cooling and Evaporator Coils—Types HI-F5 and E-F5

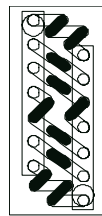
Chilled Water Circuitings



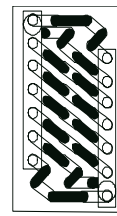
- Five standard serpentine circuitings
- Counterflow water circuits
- Unique or universal hand of connection available (all cooling coils)



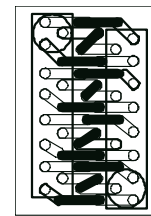
5WH
1/2 Serpentine (H)



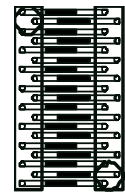
5WL
3/4 Serpentine (L)



5WS
1 Serpentine (S)

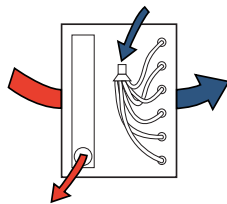


5WM
1-1/2 Serpentine (M)

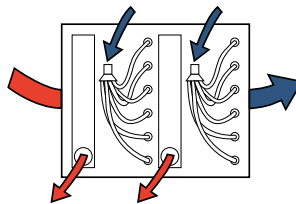


5WD
2 Serpentine (D)

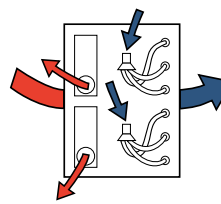
Evaporator Coil Circuitings



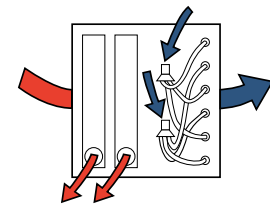
5EN Normal



5ER Row control



5EF Face control



5EJ, 5EK interlaced

Standard Availability Chart—Water Cooling and Evaporator Coils

Coil type			Chilled water							Evaporator				
Coil model			5MH	5MS	5WH	5WL	5WS	5WM	5WD	5EN	5EF	5ER	5EJ	5EK
Serpentine circuit			1/2	1	1/2	3/4	1	11/2	2	Normal	Face	Row	Interlaced	
Rows			2		3,4,5,6 8,10,12			4,5,6 8,10,12	4,6,8 10,12	2,3,4,5 6,8,10		6	3,4,6,8	4,8
Connection location			Same end except 5WS 3,5 row, 5WD 6,10 row							Same end				
Fin height 3" increment			12" to 54"							12" to 54"			15" to 54"	
Finned length			12" to 216"							12" to 216"				
Fins	Fin type	HI-F	●	●	●	●	●	●	●	●	●	●	●	●
		E-F	●	●	●	●	●	●	●	●	●	●	●	●
	Aluminum	.0075	●	●	●	●	●	●	●	●	●	●	●	●
		.0095	●	●	●	●	●	●	●	●	●	●	●	●
	Copper	.006	●	●	●	●	●	●	●	●	●	●	●	●
		.0075	●	●	●	●	●	●	●	●	●	●	●	●
		.0095	●	●	●	●	●	●	●	●	●	●	●	●
	Fins per inch		6 to 14							6 to 14				
Tubing	Diameter		5/8"							5/8"				
	Face C/C		1.5							1.5				
	Copper	.020*	●	●	●	●	●	●	●	●	●	●	●	●
		.025	●	●	●	●	●	●	●	●	●	●	●	●
		.035	●	●	●	●	●	●	●	●	●	●	●	●
		.049	●	●	●	●	●	●	●					
Headers	Standard mat'l**		Copper tubing							Copper tubing				
Maximum std. operating limits		P	250 psig							250 psig				
		T	300°F							300°F				

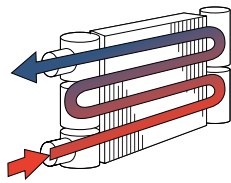
• Feature available.

* .020 is a nominal tube thickness.

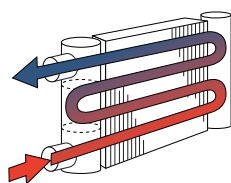
** Optional header materials are available. Consult your local McQuay Sales Representative.

Water Heating Coils—Types HI-F5 and E-F5

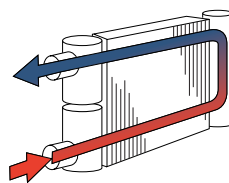
Hot Water Coil Circuitings



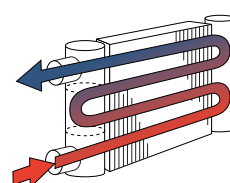
5WQ
1/4 Serpentine (1 row)



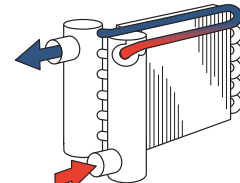
5WH
1/2 Serpentine (2 row)



5WH
1/2 Serpentine (1 row)

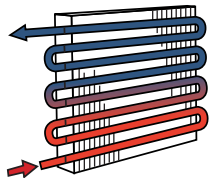


5WS
1 Serpentine (2 row)

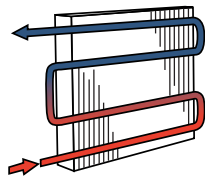


5MS
1 Serpentine (2 row)

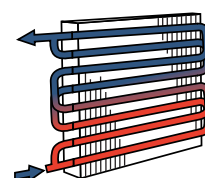
Hot Water Booster Coil Circuitings



5BS
Single feed (1, 2 row)



5BB
Single feed (1, 2 row)



5BD
Double feed (2 row)

Standard Availability Chart—Water Heating Coils

Coil type			Hot water										Cleanable hot water (removable plug)										Hot water (booster)					
Coil model			5MQ	5MH	5MS	5WB	5WQ	5WH	5WL	5WS	5WM	5WD	5KQ	5KH	5KS	5QQ	5QH	5QS	5PQ	5PH	5PS	5BB	5BS	5BD				
Serpentine circuit			1/4	1/2	1	1	1/4	1/2	3/4	1	1 1/2	2	1/4	1/2	1	1/4	1/2	1	1/4	1/2	1	1 feed	1 feed	2 feed				
Rows			1	1,2	2	1,2	1	1,2,3,4	3,4	2,3,4	4	4	1	1,2	2	1	1,2	2	1	1,2	2	1,2	1,2	2				
Connection location			Same end except 5WS 3-row										Same end										Same end					
Fin height 3" increment			12" to 54" [†]	12" to 54"		12" to 42" (1 & 2 row) & 12-54 (3 & 4 row)										12" to 42"										6" to 24"		
1 1/2" increment finned length			12" to 216"										12" to 216"										6" to 60"					
Fins	Fin type	HI-F	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
		E-F	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Aluminum	.0075	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		.0095	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Copper	.006	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		.0075	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		.0095	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	Fins per inch		6 to 14										6 to 14										6 to 14					
	Tubing	Diameter		5/8"										5/8"										5/8"				
Face C/C		1.5		3.0	1.5					1.5										3.0	1.5							
Copper		.020*	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		.025	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		.035	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		.049	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●							
Headers	Standard matl**		Copper tubing										Copper tubing										Threaded copper fittings					
Maximum std. operating limits		P	250 psig										250 psig										250 psig					
		T	300°F										300°F										300°F					

• Feature available.

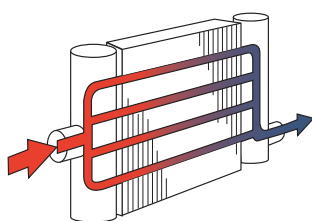
* .020 is a nominal tube thickness.

** Optional header materials are available, consult your local McQuay Sales Representative.

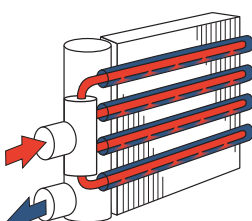
† Available in 6" increments.

Steam Coils—Types HI-F5 and E-F5

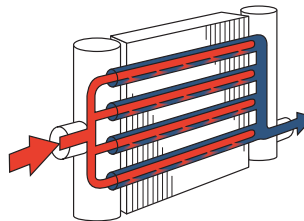
Steam Coil Circuitings



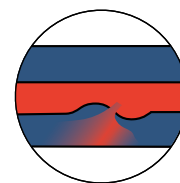
5S, 5H
Single tube



5J, 5G, 8J, 8G
Distributing tube
(same end connections)



5R, 5T, 8R, 8T
Distributing tube
(opposite end connections)



Directional Orifice
(distributing tube
steam coils)

Standard Availability Chart—Steam Coils

Coil type			Steam (single tube)		Steam (distributing tube)					
Coil model			5SA	5HA	5JA	5GA	8JA	8GA	8RA	8TA
Serpentine circuit			Does not apply		Does not apply					
Rows			1,2		1,2		1			
Connection location			Opposite end		Same end		Same end		Opposite end	
Fin height, 3" increment			12" to 42"							
Finned length, 1 1/2" increment			12" to 129"							
Fins	Fin type	HI-F	●	●	●	●	●	●	●	●
		E-F	●	●	●	●				
	aluminum	.0075	●	●	●	●				
		.0095	●	●	●	●	●*	●*	●*	●*
		.0120					●		●	
	Copper	.006	●	●	●	●				
		.0075	●	●	●	●	●*	●*	●*	●*
	Fins per inch		6 to 14				3 to 14			
Tubing	Diameter		5/8"		5/8"		1"			
	Face C/C		1.5		1.5		3.0			
	Copper	.020	●		●					
		.025	●		●		●		●	
		.035	●		●					
		.049	●		●		●		●	
	Admiralty brass		.049		●		●			
	Cupro-nickel	.020		●		●				
		.032						●		●
		.035		●		●				
.049			●		●		●		●	
Headers	Standard material		Copper	Cu Ni	Copper	Cu Ni	Copper	Cu Ni	Copper	Cu Ni
Maximum standard operating limits		P	150 psig	350 psig	150 psig	350 psig	150 psig	350 psig	150 psig	350 psig
		T	366°F	450°F	366°F	450°F	366°F	450°F	366°F	450°F

• Feature available.

* Requires 6 fins per inch or more.

Outdoor Air Handler Products Summary

Features and Highlights

Skyline™ Air Handlers	RoofPak™ Models RDS, RAH and RAR
• Flexible cabinet sizing in 2" increments (height and width) with our Variable Dimensioning™ feature • Multiple coil face areas and unit sizes to closely match your requirements, especially in smaller sizes • Multiple customized component options for fans, coils, filters, and cabinet construction • Adjustable height roof curb (16" to 30") • Published leakage rates • R-13 foam panels	• DesignFlow™ Precision Ventilation Air Control System • Multiple gas heat selections including SuperMod™ High Turndown Gas Burner with 20:1 turndown • Factory-mounted MicroTech II® DDC controls and value packages • Full factory wiring and single point power • Single piece shipment on units larger than 12' or wider than 8.5' • Optional UVGI lights • Electric heat
• Factory-mounted disconnects, starters, and VFDs • IBC seismic compliance	• Factory-mounted VFDs and starters • IBC seismic compliance



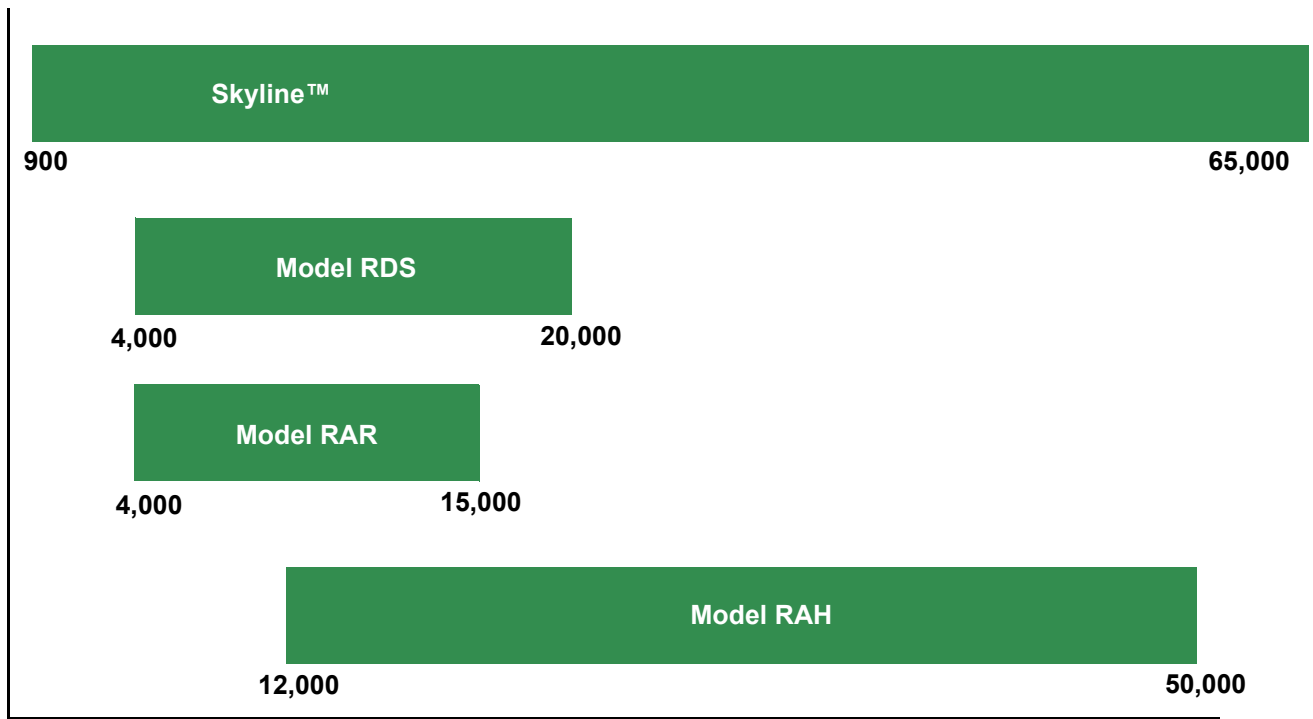
Skyline air handler



RoofPak Model RAH air handler

Selecting Outdoor Air Handler Products

Airflow range—cfm



Skyline™ Outdoor Air Handler, 3 to 92 ft²—900 to 65,000 cfm

- **Flexibility**—custom modular platform and multiple component options
- **Operating efficiency**—efficient fan selections
- **Easy, low cost installation**—ships assembled or by section with curb-ready base rail and heavy duty lifting lugs; optional roof curb kit with variable heights
- **Easy maintenance and serviceability**—easy-to-remove access panels
- **Indoor air quality**—low leakage cabinet and double-sloped drain pan

For more detail refer to Catalog 570. For the most current information, refer to www.mcquay.com.

Durable, weather tight cabinet

- Cross-broken top panels eliminate standing water
- Standing “C” cap over joint provides a watertight seal
- Drip shield on all sides and over doors
- Pre-painted frames and panels
- R-13 foam-injected insulation
- Stainless steel liners option

Custom modular design

- Allows custom selection and configuration of components to meet performance requirements

Motor control

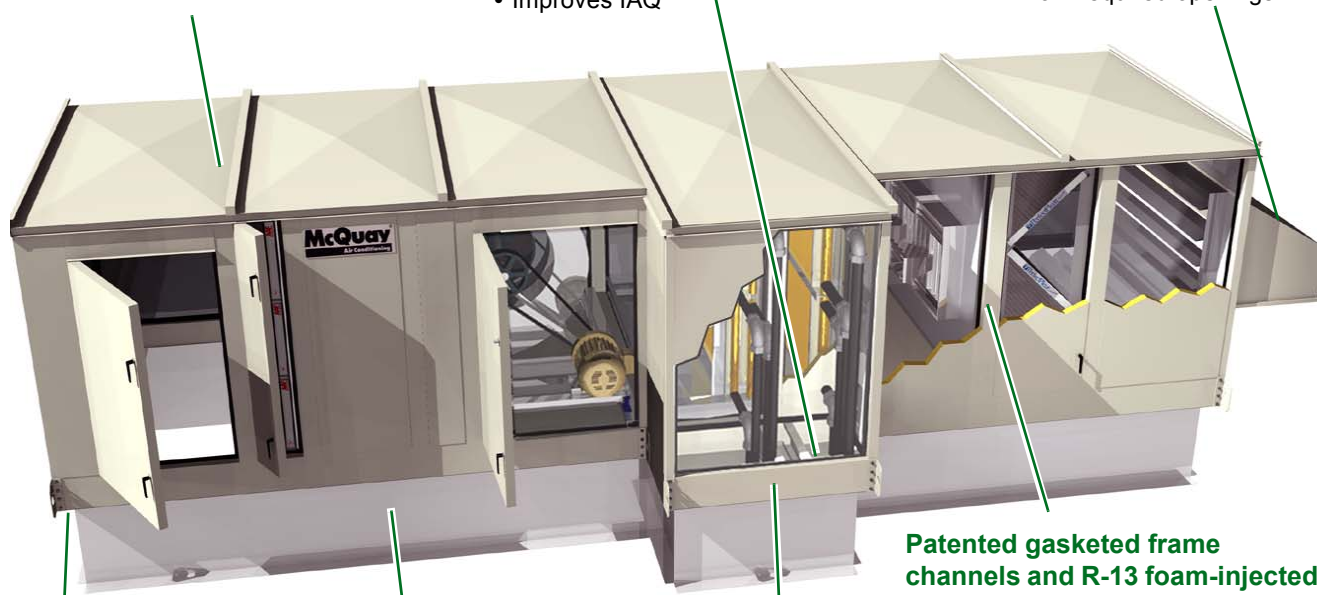
- Disconnect switches: non-fused, fused, circuit breaker
- Starters: IEC and NEMA type
- VFDs: McQuay, ABB, Danfoss

Visible double-sloped drain pan

- Microbial-resistant coated galvanized or optional stainless steel to inhibit bacteria growth
- Makes inspection and cleaning easier
- Improves IAQ

Damper hoods (optional) with screens

- Direct rain or snow away from required openings



Heavy duty base rail

- Standard base rail in varying heights (4" to 12") or curb-ready design, forms weather tight seal
- Lifting lugs on all four corners facilitates easy rigging

Factory-supplied roof curb (optional)

- Designed specifically to match custom-modular design flexibility
- Variable heights from 16" to 30" to meet installation requirements
- Includes separate pipe chase

Piping vestibule

- Encloses piping connections within unit cabinet
- Variable depths to meet your piping requirements

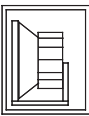
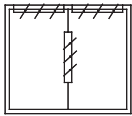
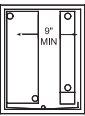
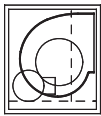
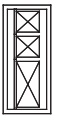
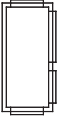
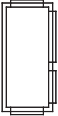
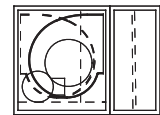
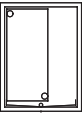
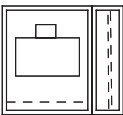
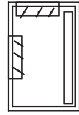
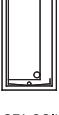
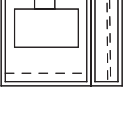
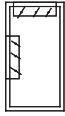
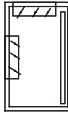
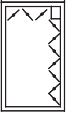
Patented gasketed frame channels and R-13 foam-injected panels

- Eliminates metal-to-metal contact between paneling and framework to minimize air leakage
- Provides superior strength
- Promotes high IAQ and long life

Customized Options

Use McQuay Skyline as a product platform on which to build the ideal outdoor air handler for your specific application. Customized options include:

- Curb-ready base and roof curb kits (16", 20", 24", 30")
- Multiple sizes of insulated, double-wall coil and piping vestibules
- Horizontal or vertical integral face and bypass dampers
- Hoods and grilles for damper openings
- Variable Dimensioning™ on 2" increments
- Multiple coil face areas per unit size
- Disconnects/starters and VFD's
- Multiple section depths
- Various casing and drain pan materials
- Mixing boxes/economizers
- Sound attenuators
- Electro-Fin epoxy coil coating
- Multiple coil section depths
- Humidifier manifold
- IBC seismic certification
- Gas-phase filtration
- Multiple fan selections: forward curve, airfoil, inline, and belt or direct drive plenum fans; twin fans (two forward curved fans on one shaft)
- Filters (flat, angular, bag and cartridge) available in side load and/or front loading configurations
- Doors, marine lights, and receptacles
- Manual selections to accommodate special components
- Hinged access doors with full grip handles

RETURN / EXHAUST	ECONOMIZER	BLENDER	FILTER	F & BP DAMPER	COIL	ACCESS	HORIZONTAL COIL	SUPPLY FAN	DIFFUSER	COIL BLOW THRU	ACCESS	FILTER	ATTENUATOR	PLENUM
PLENUM FAN 			INTERNAL 	HORIZ HEATING 	LARGE 	CLG. / HTG. COMBINATION 	FC, AF FAN, & TWIN FAN 		HORIZ 		CARTRIDGE 		ATTENUATOR 	DISCHARGE PLENUM 
FC, AF FAN & TWIN FAN 	INLET PLENUM 	2" & 4" FLAT 	INTEGRAL 	1 & 2 ROW STEAM AND 1 - 4 ROW WATER 	MEDIUM 	CLG. 10 ROW 	PLENUM FAN 		CLG. OR HTG. 		BAG 			
ESI FAN 	MIXBOX WITH 4" FILTER 	CARTRIDGE 			SMALL 	4 ROW 	ESI FAN 							
MIXING BOX 	MIXBOX WITH 2" FILTER 	BAG 	RIGHT ANGLE 			SFA COIL MFA COIL F & BP 								

Capacity and Physical Data—Quick Select Chart

Description	Unit size					
	003	004	006	008	010	012
Airflow range, cfm	900–2500	1200–3100	1700–4600	2200–6000	2900–7700	3600–9700
cfm @ 500 feet/minute through large face area coil	1550	1950	2850	3750	4800	6050
Height × width, in	32 × 38	36 × 40	36 × 52	40 × 58	42 × 64	48 × 66
Cooling coil face area, sq.ft.						
Staggered large	3.9	4.8	6.6	8.5	10.7	13.5
Large	3.1	3.9	5.7	7.5	9.6	12.1
Staggered medium	2.6	3.4	4.7	6.4	8.3	9.8
Medium	2.1	2.8	4.1	5.6	7.4	8.8
Small	NA	2.3	3.3	4.7	6.4	7.7
Fan section—depth, in						
Largest housed fan & motor avail. w/ top hor. discharge	32	32	36	40	40	46
Largest inline fan and motor available	NA	NA	NA	NA	NA	44
Largest belt drive plenum fan and motor available	NA	NA	NA	NA	34	42
Largest direct drive plenum fan and motor available	NA	NA	NA	44	46	54
Largest twin fan and motor available	NA	NA	NA	50	54	56
Mixing box—depth, in						
Mixing box only	20	20	20	20	22	24
Mixing box with flat filter	24	24	24	24	26	28
Mixing box with angular filter	42	42	42	42	44	46
Economizer—depth, in						
	40	40	42	40	44	46
Blender—depth, in						
Largest Kees	18	20	24	26	28	34
Largest Blender Products IV	18	22	26	30	34	38
Side load filter sections—depth, in						
Flat 2" and 4"	12	12	12	12	12	12
2" angular	32	30	30	30	30	30
Cartridge (12" deep w/2" pre-filter)	22	22	22	22	22	22
Bag (36" w/2" pre-filter)	42	42	42	42	42	42
Front load filter sections—depth, in						
Cartridge (12" deep w/2" pre-filter)	16	16	16	16	16	16
Bag (36" w/2" pre-filter)	40	40	40	40	40	40
Face and bypass—depth, in						
Internal	12	12	12	12	12	12
External	18	18	18	20	22	24
Coil sections—depth, in						
Heating only (2-row water)	12	12	12	12	12	12
Cooling only (4-row water)	24	24	24	24	24	24
Cooling only (6-row water)	24	24	24	24	24	24
Cooling and reheat (12-row cooling & 1-row heating)	36	36	36	36	36	36
Access sections—depth, in						
16" deep	16	16	16	16	16	16
24" deep	24	24	24	24	24	24
30" deep	30	30	30	30	30	30
36" deep	36	36	36	36	36	36
42" deep	42	42	42	42	42	42
48" deep	48	48	48	48	48	48
54" deep	54	54	54	54	54	54
Diffuser—depth, in						
With housed fan	10	10	10	12	12	16
With inline fan	NA	NA	NA	NA	NA	18
Attenuator—depth, in						
Short	40	40	40	40	40	40
Medium	52	52	52	52	52	52
Long	64	64	64	64	64	64
Supply or return plenum—depth, in						
Top, bottom or end opening	14	16	16	18	20	22

Notes: Upblast and downblast configurations not available for either housed fans or twin fans.

Front load filter sections include 24" upstream plenum section with tread plate for heavy duty floor liner.

Height dimension includes 6" curb-ready base.

Only horizontal units are available.

Capacity and Physical Data—Quick Select Chart (continued)

Description	Unit size											
	014	017	021	025	030	035	040	050	065	080	085	090
Airflow range, cfm	4200-11,200	5000-13,500	6000-16,000	7300-19,400	8500-22,500	10,000-26,500	11,500-31,000	15,000-40,000	20,000-54,000	21,500-57,500	23,100-61,600	24,600-65,600
cfm @ 500 ft/min thru large face area coil	7000	8400	10,050	12,150	14,150	16,700	19,300	24,500	33,300	35,900	38,450	41,000
Height × width, in	48 × 74	52 × 80	52 × 82	66 × 86	66 × 98	72 × 102	74 × 116	86 × 120	98 × 136	106 × 136	110 × 136	116 × 136
Cooling coil face area, sq ft												
Staggered large	15.4	18.3	21.9	27.4	31.9	37.1	42.9	58.0	76.9	82.0	87.1	92.2
Large	14.0	16.8	20.1	24.3	28.3	33.4	38.6	49.0	66.6	71.8	76.9	82.0
Staggered medium	11.2	13.7	17.2	21.3	24.8	29.7	34.3	40.1	61.5	61.5	66.6	71.8
Medium	10.2	12.6	15.8	18.2	21.2	24.1	30.0	35.7	51.2	51.2	56.4	61.5
Small	8.9	11.2	14.4	16.7	19.5	22.3	27.9	31.2	46.1	46.1	51.2	56.4
Fan section—depth, in												
Largest housed fan & motor avail. w/ top hor. discharge	46	50	52	58	58	58	70	80	92	92	92	92
Lrgst. inline fan & motor avail.	44	48	54	64	64	70	70	90	96	96	96	96
Largest belt drive plenum fan & motor avail.	42	48	52	56	58	62	62	70	82	82	82	82
Largest direct drive plenum fan & motor avail.	54	54	54	66	68	84	86	86	86	N/A	N/A	N/A
Lrgst. twin fan & motor avail.	58	58	66	66	74	82	82	82	N/A	N/A	N/A	N/A
Mixing box—depth, in												
Mixing box only	24	26	30	32	32	36	36	40	46	50	54	56
Mixing box with flat filter	28	30	34	36	36	40	40	44	50	54	58	60
Mixing box with angular filter	46	48	52	54	54	58	58	62	68	72	76	78
Economizer—depth, in												
	48	50	54	54	56	62	72	80	92	100	108	112
Blender—depth, in												
Largest Kees	36	38	42	46	48	58	58	68	76	80	84	84
Largest Blender Products IV	40	46	48	52	60	64	70	74	88	88	92	92
Side load filter sections—depth, in												
Flat 2" and 4"	12	12	12	12	12	12	12	12	12	12	12	12
2" angular	30	30	30	32	32	32	32	32	32	32	32	32
Cartr. (12" deep w/2" pre-filter)	22	22	22	22	22	22	22	22	22	22	22	22
Bag (36" w/2" pre-filter)	42	42	42	42	42	42	42	42	42	42	42	42
Front load filter sections—depth, in												
Cartr. (12" deep w/2" pre-filter)	16	16	16	16	16	16	16	16	16	16	16	16
Bag (36" w/2" pre-filter)	40	40	40	40	40	40	40	40	40	40	40	40
Face and bypass—depth, in												
Internal	12	12	12	12	12	12	12	12	12	12	12	12
External	24	26	30	32	32	34	38	44	50	54	56	58
Coil sections—depth, in												
Heating only (2-row water)	12	12	16	12	12	12	12	12	12	12	12	12
Cooling only (4-row water)	24	24	24	36	36	36	18	18	18	18	18	18
Cooling only (6-row water)	24	24	24	42	42	42	24	24	24	24	24	24
Clg (12-row) & reheat (1-row)	36	36	36	42	42	42	36	36	36	36	36	36
Access sections—depth, in												
16" deep	16	16	16	16	16	16	16	16	16	16	16	16
24" deep	24	24	24	24	24	24	24	24	24	24	24	24
30" deep	30	30	30	30	30	30	30	30	30	30	30	30
36" deep	36	36	36	36	36	36	36	36	36	36	36	36
42" deep	42	42	42	42	42	42	42	42	42	42	42	42
48" deep	48	48	48	48	48	48	48	48	48	48	48	48
54" deep	54	54	54	54	54	54	54	54	54	54	54	54
Diffuser—depth, in												
With housed fan	16	16	16	24	24	24	30	30	30	30	30	30
With inline fan	18	18	22	26	26	28	30	36	38	38	38	38
Attenuator—depth, in												
Short	40	40	40	40	40	40	40	40	40	40	40	40
Medium	52	52	52	52	52	52	52	52	52	52	52	52
Long	64	64	64	64	64	64	64	64	64	64	64	64
Supply or return plenum—depth, in												
Top, bottom or end opening	22	24	28	30	30	32	32	38	42	48	52	54

Notes: Upblast and downblast configurations not available for either housed fans or twin fans.

Front load filter sections include 24" upstream plenum section with tread plate for heavy duty floor liner.

Height dimension includes 6" curb-ready base.

Only horizontal units are available.

RoofPak™ Model RDS and RAH Air Handlers—4000 to 50,000 cfm

- Modular, walk-in, hinged construction
- 100% make up air, dehumidification, VAV, or constant volume operation
- Multiple factory-installed options for customized flexibility
- Blow-through or Draw-through cooling coil and filter configurations
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- Heavy duty construction and independent certification (optional) confirm that the McQuay RoofPak unit complies with the newest IBC seismic requirements

For more detail, refer to Catalog 218. For the most current information, refer to www.mcquay.com.



Model RAH air handler
12,000 to 50,000 cfm

Model RDS air handler
4000 to 20,000 cfm

Optional electrical

- Disconnects, starters, lights, and VFDs
- Single source power and branch short circuit protection complete with ETL label
- Factory-installed, preprogrammed, and tested static pressure and temperature controls complete with valve packages or face and bypass control

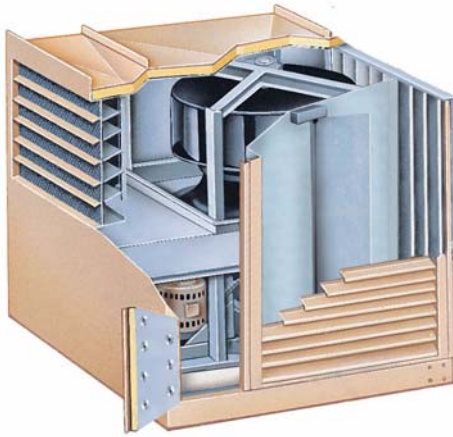
Optional heating

- Gas with SuperMod™ high turndown gas burners
- Electric
- Hot water
- Steam

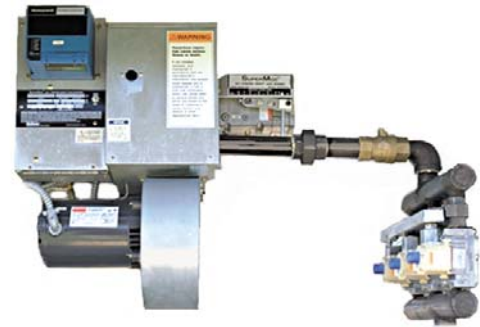


Available LONMARK certified

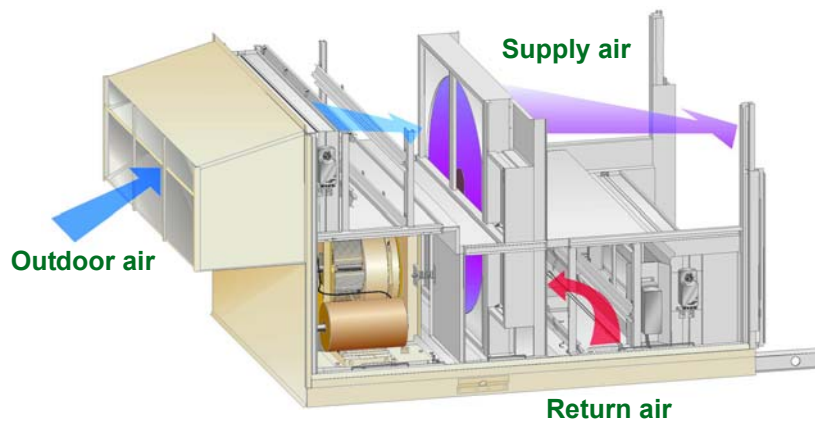
Features and Options


DesignFlow™ precision ventilation air control system

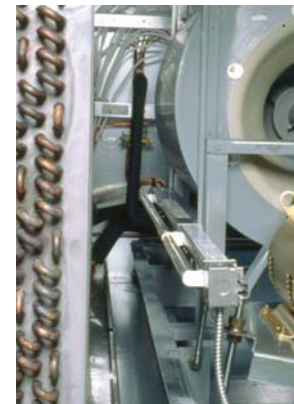
- Accurately measures and maintains minimum ventilation air intake to satisfy IAQ standards


SuperMod™ high turndown gas burners

- Full 20:1 turndown and multiple sizes enable precise temperature control at reduced design, installation, and life cycle costs
- Maintain comfortable tenant environment in VAV, 100% make-up air, and dehumidification applications


Energy recovery wheel

- Recovers approximately 75% of the energy from exhaust air stream
- Allows mechanical refrigeration, heating, and humidifying capacities to be reduced, offsetting the initial cost of the energy recovery wheel
- Cuts winter humidification energy costs by up to 60%
- Provides 100% more summer energy recovery than sensible-only energy recovery devices
- Helps provide a comfortable and affordable indoor environment
- Satisfies ASHRAE Standard 90.1 requirements for energy recovery on applications involving more than 70% minimum outdoor air and 5000 total cfm


Optional UVGI lights

- Improves IAQ by destroying microorganisms on coil and drain pan surfaces
- Includes door interlocks to prevent eye contact with the UV-C ultraviolet light
- Satisfies GSA requirement for UVGI lights downstream of all cooling coils

RoofPak™ Model RDS and RAH Air Handlers—4000 to 50,000 cfm



Return or exhaust fan

- Customize the unit to fit the application and return duct pressure drop
- Return fans provide better building pressure and ventilation control as return duct pressure drop increases
- Exhaust fans can save energy as return duct pressure drop requirements decrease



Factory-mounted variable frequency drives

- Control fan motor speed for lower fan operating costs and sound levels in VAV systems

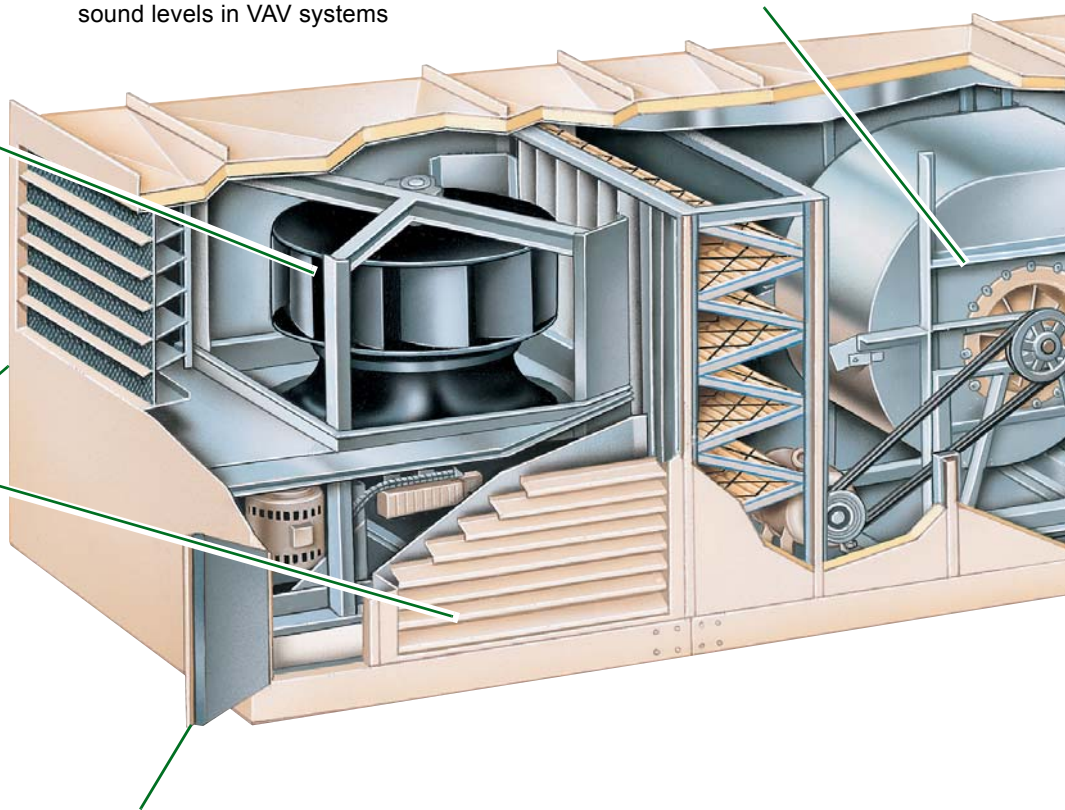


Airfoil fans

- More energy efficient and quieter than forward curved fans
- Double width, double inlet (DWDI) or single width, single inlet (SWSI) plenum fans

Economizer

- Outside air enters from both sides, improving mixing for better temperature control
- DesignFlow Precision Ventilation Air Control System accurately measures and maintains ventilation air intake
- Patented UltraSeal™ low leak dampers minimize air leakage, reducing energy costs



Hinged access doors

- On both sides of every section for easy access to all components
- Single lever latch and door holders provide easy entry and support routine maintenance
- Double-wall construction protects insulation during maintenance

Features

Blank sections

- Available throughout unit to factory-mount air blenders, carbon or charcoal filters, sound attenuators (shown), humidifiers, or other specialty equipment
- Allow customizing for maximum system performance and efficiency
- Reduced design and installation costs



MicroTech II control system

- Factory-installed and tested to minimize costly field commissioning.
- Open Choices feature for easy integration with the BAS of your choice using open, standard protocols such as BACnet® or LonTalk®
- Easily accessed for system diagnostics and adjustments via a keypad/display on unit
- Minimum outdoor air and humidity control logic for fresh air intake and optimum humidity levels
- Optionally add a remote keypad and display that is identical to the unit-mounted user interface

Durable construction

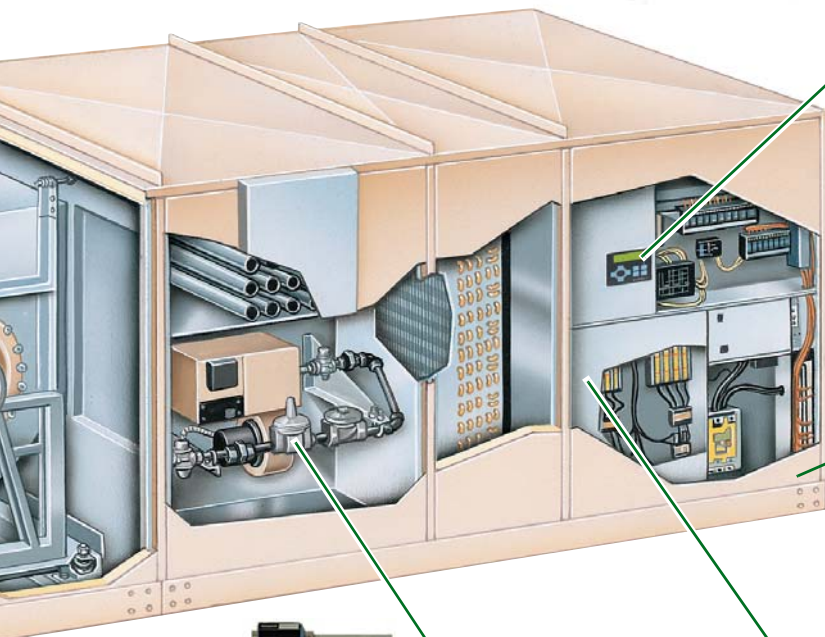
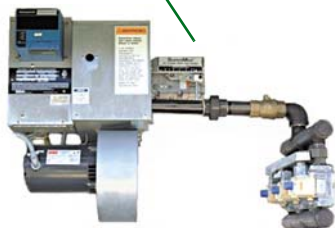
- Pre-painted exterior cabinet panels pass ASTM B 117 Salt Spray Test for durability
- Capped seams prevent water leaks into the cabinet
- Cross-broken top panels eliminate standing water
- Double-wall construction protects R-6.5 insulation and provides wipe clean surface
- Stainless steel, sloped drain pans eliminate standing water

Blow-through or draw-through cooling coils

- Customize the unit to fit the application and building load
- Blow through provides greater sensible heat ratios and colder unit leaving air temperature per ton
- Draw-through arrangement provides more dehumidification per ton
- Factory-installed valve packages are offered for many chilled water, hot water, and steam coils

SuperMod high turndown gas burner

- Full 20:1 turndown and multiple sizes enable precise temperature control at reduced design, installation, and life cycle costs
- Maintain comfortable tenant environment in VAV, 100% make-up air, and dehumidification applications



RDS 708C, 800C and 802C—Capacity and Physical Data

Data		Unit size		
		708B	800C	802C
Cabinet	Length (in)	114–279	62–538	84–566
	Height (in)	51.0	55.5	55.5
	Width (in)	67.5	94.0	94.0
Supply fans	Type	Forward curved		
	Qty–dia. (in)	1–15 × 6	2–15 × 6	1–24
	Qty–dia. (in)	1–15 × 9	2–15 × 15	–
	Qty–dia. (in)	1–15 × 15 ⁽¹⁾	–	–
	Airflow range (cfm)	4000–8000	4000–16,000	8000–20,000
	Motor hp range	1–7.5	1–20	1–25
	Type	Backward curved with or without vanes		
	Qty–dia. (in)	–	–	1–24
	Airflow range (cfm)	–	–	8000–20,000
	Motor hp range	–	–	1–25
	Type	Airfoil with or without vanes		
	Qty–dia. (in)	1–16	1–20	–
	Airflow range (cfm)	2000–8000	4000–16,000	–
	Motor hp range	1–10	1–25	–
Return fans	Type	Forward curved		
	Qty–dia. (in)	1–15 × 15 ⁽¹⁾	2–15 × 15	–
	Airflow range (cfm)	4000–7200	3000–14,400	–
	Motor hp range	1–5	1–10	–
	Type	Airfoil w. or w.o. vanes	SWSI AF with or without vanes	
	Qty–dia. (in)	1–16	1–30	1–30
	Qty–dia. (in)	–	–	1–40
	Airflow range (cfm)	4000–7200	3000–14,400	6000–18,000
	Motor hp range	1–5	1–10	1–10
Throwaway 30% pleated, cleanable filters	Area (sq ft)	13.9 ⁽²⁾	50.0	50.0
	Qty–size (in)	4–20 × 25 × 2 –	10–16 × 20 × 2 10–16 × 25 × 2	10–16 × 20 × 2 10–16 × 25 × 2
	area (sq ft)	20.8 ⁽³⁾	–	–
	Qty–size (in)	6–20 × 25 × 2 –	– –	– –
65% cartridge filters with 2" prefilters	area (sq ft)	6.0 ⁽²⁾	24.0	24.0
	Qty–size (in)	1–24 × 24 × 12 1–12 × 24 × 12	4–24 × 24 × 12 4–12 × 24 × 12	4–24 × 24 × 12 4–12 × 24 × 12
	area (sq ft)	12.0 ⁽³⁾	–	–
	Qty–size (in)	2–24 × 24 × 12 2–12 × 24 × 12	– –	– –
95% cartridge filters with 2" prefilters	area (sq ft)	8.0 ⁽²⁾	24.0	24.0
	Qty–size (in)	2–24 × 24 × 12 –	4–24 × 24 × 12 4–12 × 24 × 12	4–24 × 24 × 12 4–12 × 24 × 12
	area (sq ft)	14.0 ⁽³⁾	–	–
	Qty–size (in)	2–24 × 24 × 12 3–12 × 24 × 12	– –	– –
Gas, oil furnace ⁴	Input (MBh)	–	250, 312, 400, 500, 625, 800, 812, 988, 1000, 1250	
	Nominal output (MBh)	–	200, 250, 320, 400, 500, 640, 650, 790, 800, 1000	
Electric ⁴	Nominal output (kW)	–	20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240	

Notes: 1. On RDS 708B, the 15" × 15" supply and return fans are available with or without variable inlet vanes.

2. Filter area for RDS 708B units with a 15" × 6" supply fan.

3. Filter area for RDS 708B units with a 15" × 9", 15" × 15" or 16" supply fan.

4. Gas, oil and electric heat selection is limited by the minimum airflow requirements.

RDS 708C, 800C and 802C—Capacity and Physical Data (continued)

Data		Unit size						
		708BS		708BL		800C / 802C		
		Without F&BP	With F&BP	Without F&BP	With F&BP	Without F&BP	With F&BP	Without F&BP
								Extra large face area cooling coils
Physical	Fin height (in)	12–39	12–30	12–39	12–30	12–36	12–30	48
	Fin length (in)	36	36	48	48	79	79	78–82
	Max. coil depth (in)*	25.0	20.0	25.0	20.0	19.5	19.5	3–6 rows
	Max. face area (sq ft)	9.8	7.5	13.0	10.0	19.8	16.5	26–27.3
	Bypass area (sq ft)	–	1.9	–	2.5	–	3.3	na
	Max bypass cfm	–	4,750	–	6,250	–	8,225	na
Chilled water coils	Diameter (in)	5/8		5/8		5/8		5/8
	Type–rows	5MH–2		5MH–2		5MH–2		5WH–3,4,5,6C
	Type–rows	5WH–3, 4, 5, 6, 8, 10		5WH–3, 4, 5, 6, 8, 10		5WH–3, 4, 5, 6, 8, 10		5WL–3,4,5,6C
	Type–rows	5WL–3, 4, 5, 6, 8, 10		5WL–3, 4, 5, 6, 8, 10		5WL–3, 4, 5, 6, 8, 10		5WS–4,6C
	Type–rows	5MS–2		5MS–2		5MS–2		–
	Type–rows	5WS–4, 6, 8, 10		5WS–4, 6, 8, 10		5WS–4, 6, 8, 10		–
	Type–rows	5WM–5, 6, 8, 10		5WM–5, 6, 8, 10		5WM–5, 6, 8, 10		–
	Type–rows	5WD–8		5WD–8		5WD–8		–
Evaporator coils	Diameter (in)	5/8		5/8		5/8		5/8
	Type–rows	5EN–2, 3, 4, 5, 6, 8		5EN–2, 3, 4, 5, 6, 8		5EN–2, 3, 4, 5, 6, 8		5EN–3,4,5C
	Type–rows	SER–6		SER–6		SER–6		–
	Type–rows	5EF–2, 3, 4, 5, 6, 8		5EF–2, 3, 4, 5, 6, 8		5EF–2, 3, 4, 5, 6, 8		–
	Type–rows	5EJ–3, 4, 6, 8		5EJ–3, 4, 6, 8		5EJ–3, 4, 6, 8		–
	Type–rows	5EK–4, 8		5EK–4, 8		5EK–4, 8		–
Hot water coils	Diameter (in)	5/8		5/8		5/8		–
	Type–rows	5WB–1, 2		5WB–1		5WB–1		–
	Type–rows	5WQ–1		5WQ–1		5WQ–1		–
	Type–rows	5WH–1, 2		5WH–1		5WH–1		–
	Type–rows	5WS–2		5MH–2		5MH–2		–
	Type–rows	–		5MS–2		5MS–2		–
	Type–rows	–		–		–		–
Steam coils	Diameter (in)	5/8		5/8		5/8		–
	Type–rows	5JA–1, 2		5JA–1, 2		5JA–1, 2		–
	Type–rows	5GA–1, 2		5GA–1, 2		5GA–1, 2		–
	Diameter (in)	1		1		1		–
	Type–rows	8JA–1		8JA–1		8JA–1		–
	Type–rows	8GA–1		8GA–1		8GA–1		–

*On the RDS 708B, the maximum coil depth does not include the 6" spacer provided between the last two coils.

RDS 800/802C Unit Heating Coils¹

Tube diameter	5/8
Fin height (in) ²	39
Fin length (in)	75
Type/rows, hot water	5WH/1 and 5WS/2
Type/rows, steam	5JA/1

Notes: 1. Valve packages available.

2. If cooling coil is in the same section, the cooling coil is limited to 8 rows.

RAH 047C and 077C—Capacity and Physical Data

Data		Unit size					
		047CS	047CL	047CY	077CS	077CL	077CY
Cabinet	Length (in)	96–552	96–576	96–504	96–624	96–696	96–600
	Height (in)	73.0	73.0	73.0	97.0	97.0	97.0
	Width (in)	99.0	99.0	99.0	99.0	99.0	99.0
Throwaway filters	Type	30% pleated					
	Area (sq ft)	73.9	73.9	73.9	116.1	116.1	116.1
	No.–size (in)	7–16 × 20 × 2 21–16 × 25 × 2	7–16 × 20 × 2 21–16 × 25 × 2	7–16 × 20 × 2 21–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2	11–16 × 20 × 2 33–16 × 25 × 2
	Type	30% prefilter, standard flow					
	Area (sq ft)	40.0	40.0	40.0	56.0	56.0	56.0
	No.–size (in)	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 8–24 × 24 × 2	4–12 × 24 × 2 12–24 × 24 × 2	4–12 × 24 × 2 12–24 × 24 × 2	4–12 × 24 × 2 12–24 × 24 × 2
	Type	30% prefilter, medium flow					
	Area (sq ft)	48.0	48.0	48.0	64.0	64.0	64.0
	No.–size (in)	8–12 × 24 × 2 8–24 × 24 × 2	8–12 × 24 × 2 8–24 × 24 × 2	8–12 × 24 × 2 8–24 × 24 × 2	– 16–24 × 24 × 2	– 16–24 × 24 × 2	– 16–24 × 24 × 2
	Type	30% prefilter, high flow					
	Area (sq ft)	–	–	–	80.0	80.0	80.0
	No.–size (in)	– –	– –	– –	8–12 × 24 × 2 16–24 × 24 × 2	8–12 × 24 × 2 16–24 × 24 × 2	8–12 × 24 × 2 16–24 × 24 × 2
Cartridge filters	Type	65% or 95%, standard flow					
	Area (sq ft)	40.0	40.0	40.0	56.0	56.0	56.0
	No.–size (in)	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12	4–12 × 24 × 12 8–24 × 24 × 12
	Type	65% or 95%, medium flow					
	Area (sq ft)	48.0	48.0	48.0	64.0	64.0	64.0
	No.–size (in)	8–12 × 24 × 12 8–24 × 24 × 12	8–12 × 24 × 12 8–24 × 24 × 12	8–12 × 24 × 12 8–24 × 24 × 12	– 16–24 × 24 × 12	– 16–24 × 24 × 12	– 16–24 × 24 × 12
	Type	65% or 95%, high flow					
	Area (sq ft)	–	–	–	80.0	80.0	80.0
	No.–size (in)	– –	– –	– –	8–12 × 24 × 12 16–24 × 24 × 12	8–12 × 24 × 12 16–24 × 24 × 12	8–12 × 24 × 12 16–24 × 24 × 12
DWDI supply fans	Type	Airfoil (27" FC also offered on 047C)					
	Diameter (in)	27, 30, 33	27, 30, 33	27, 30, 33	33, 36, 40	33, 36, 40	33, 36, 40
	Max. airflow (cfm)	30,000	30,000	30,000	50,000	50,000	50,000
	Motor hp range	3–50	3–50	3–50	5–75	5–75	5–75
SWSI supply fans	Type	Airfoil					
	Diameter (in)	40, 44	40, 44	40, 44	44, 49	44, 49	44, 49
	Max. airflow (cfm)	30,000	30,000	30,000	50,000	50,000	50,000
	Motor hp range	3–50	3–50	3–50	5–75	5–75	5–75
Return fans	Type	Airfoil					
	Diameter (in)	40	40	40	44	44	44
	Max. airflow (cfm)	27,000	27,000	27,000	45,000	45,000	45,000
	Motor hp range	2–30	2–30	2–30	5–60	5–60	5–60
Exhaust fans	Type	Propeller					
	Diameter (in)	36 inch					
	Quantity	1–2 per unit			2–3 per unit		
	Motor hp	5 hp each					
	Airflow range	11,000–30,000 cfm			22,000–50,000 cfm		
Electric	Nom. output (kW)	*40, 60, 80, 100, 120, 160, 200, 240			*80, 100, 120, 160, 200, 240, 280, 320		
Gas furnace	Input (MBh)	*250, 312, 400, 500, 625, 800, 812, 988, 1000, 1250			*625, 800, 812, 988, 1000, 1250, 1375, 1750, 2500		
	Nom. output (MBh)	200, 250, 320, 400, 500, 640, 650, 790, 800, 1000			*500, 640, 650, 650, 790, 800, 1000, 1100, 1400, 1500, 2000		

Note: *Furnace and electric heat size availability is limited by the minimum airflow.

RAH 047C and 077C—Capacity and Physical Data (continued)

Data ¹		Unit size							
		047CS		047CL		077CS		077CL	
		WO/F&BP	W/F&BP ²	WO/F&BP	W/F&BP ²	WO/F&BP	W/F&BP ²	WO/F&BP	W/F&BP ²
Evaporator coils	Rows	3, 4, 5, 6							
	Fins (per in)	8, 10, 12							
	Fin material	Aluminum, copper							
	FH × FL (in)	66 × 87.5	—	(2) 39 × 87.5	—	90 × 87.5	—	(2) 63 × 87.5	—
	Face area (sq ft)	40.1	—	47.4	—	54.7	—	76.6	—
	Max. cfm	26,000	—	30,800	—	35,500	—	49,800	—
Chilled water coils	Type—rows valve package (in)	5WH—3, 4, 5, 6, 8							
		1½, 2, 2½	—	1½, 2, 2½	—	1¼, 1½, 2½, 3	—	2, 2½, 3	—
	Type—rows valve package (in)	5WL—3, 4, 5, 6, 8							
		1½, 2, 2½	—	1½, 2, 2½, 3	—	1½, 2, 2½, 3	—	2, 2½, 3	—
	Type—rows valve package (in)	5WS—4, 6, 8							
		2, 2½, 3	—	1½, 2, 2½, 3	—	1½, 2, 2½, 3	—	2, 2½, 3	—
	Type—rows valve package (in)	5WM—4, 5, 6, 8							
		2, 2½, 3	—	1½, 2, 2½, 3	—	2, 2½, 3	—	2, 2½, 3	—
	Type—rows valve package (in)	5WD—4, 8							
		2, 2½, 3	—	2, 2½, 3	—	2, 2½, 3	—	2, 2½, 3	—
	Fins (per in)	8, 10, 12							
	Fin material	Aluminum, copper							
	FH × FL (in)	66 × 83	48 × 83	(2) 39 × 83	(2) 39 × 83	90 × 83	63 × 83	(2) 63 × 83	(2) 54 × 83
	Face area (sq ft)	38.0	27.7	45.0	45.01	51.9	36.3	72.6	62.3
	Max face cfm	24,700	18,000	29,200	29,200	33,700	23,600	47,200	40,500
	Bypass area (sq ft)	—	9.2	—	10.4	—	14.4	—	18.4
	Max. bypass cfm	—	23,000	—	25,900	—	36,000	—	46,100
Hot water coils	Type—rows ³ valve package (in)	5WH—1							
		1¼, 1½, 2, 2½, 3	—	1¼, 1½, 2, 2½, 3	—	1½, 2, 2½, 3	—	1½, 2, 2½, 3	—
	Type—rows ³ valve package (in)	5WS—2							
		1¼, 1½, 2, 2½, 3	—	1¼, 1½, 2, 2½, 3	—	1½, 2, 2½, 3	—	1½, 2, 2½, 3	—
	Fins (per in)	9							
	Fin material	Aluminum, copper							
	FH × FL (in)	57 × 75	39 × 75	57 × 75	—	81 × 75	54 × 75	81 × 75	—
	Face area (sq ft)	29.7	20.3	29.7	—	42.2	28.1	42.2	—
Steam coils	Bypass area (sq ft)	—	9.2	—	—	—	14.4	—	—
	Max. bypass cfm	—	23,000	—	—	—	36,000	—	—
	Type—rows ³ Valve package (in)	5JA—1, 2							
		1¼, 1½, 2, 2½, 3	—	1¼, 1½, 2, 2½, 3	—	1½, 2, 2½, 3	—	1½, 2, 2½, 3	—
	Fins (per in)	6, 12							
	Fin material	Aluminum, copper							
	FH × FL (in)	57 × 75	39 × 75	57 × 75	—	81 × 75	54 × 75	81 × 75	—
	Face area (sq ft)	29.7	20.3	29.7	—	42.2	28.1	42.2	—
	Bypass area (sq ft)	—	9.2	—	—	—	14.4	—	—
	Max. bypass cfm	—	23,000	—	—	—	36,000	—	—

Notes: 1. Unit coils are HI-F5 fin design.

2. Consult your local McQuay representative for specific face and bypass and control valve availability.

3. The valve package for hot water and steam heat is available only in the heating section.

Indoor Air Handler Products Summary

Features and Highlights

Destiny™ Air Handlers	Vision™ Air Handlers
• Rugged, double-wall construction • Internally isolated fan and motor for quiet operation • IAQ compliant galvanized or stainless steel drain pan • ARI certified fan performance on all unit sizes • Easy access on both sides • Horizontal and vertical configurations • Electric heat • Single-point power	• Flexible cabinet sizing in 2" increments (height and width) with our Variable Dimensioning™ feature • Customized features/components including multiple fan types, energy recovery options, blenders/mixers, filter options, ultraviolet lights, sound attenuators, starters/inverters and integral face and bypass dampers • Multiple coil face areas, unit sizes and configurations to closely match application requirements • Digital Ready™ factory control options • IBC seismic compliance



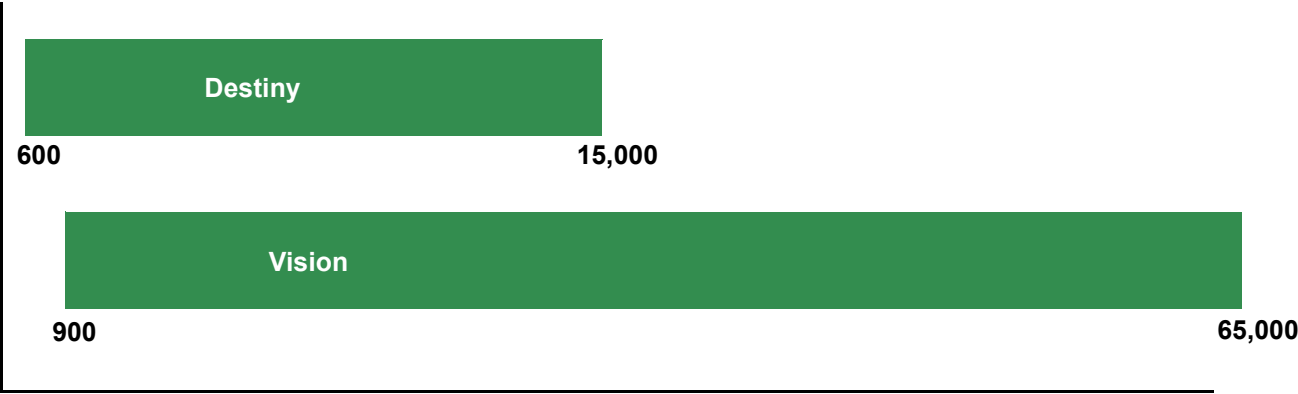
Destiny air handler



Vision air handler

Selecting Indoor Air Handler Products

Airflow range—cfm



Destiny™ Air Handler—2 to 30 ft² Face Area, 600 to 15,000 cfm

- Rugged, double-wall construction
- Internally isolated fan and motor for quiet operation
- IAQ compliant galvanized or stainless steel drain pan
- ARI certified fan performance on all unit sizes
- Easy access on both sides of unit interior

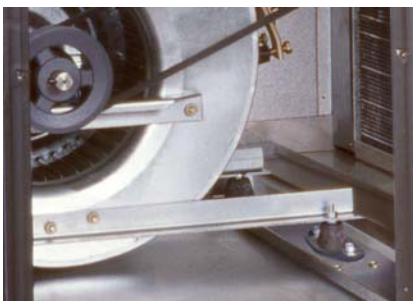
For more detail, refer to Catalog 580.

For the most current information, refer to www.mcquay.com.



The McQuay Destiny™ indoor air handler is a full-featured, light air handler that provides a single solution for blower coil and low pressure air handler applications. In sizes ranging from 600 to 15,000 cfm, Destiny air handlers eliminate the need to choose between the low cost of a blower coil and the performance of an air handler in new construction or retrofit building projects. They can be applied in any blower coil or small air handler application in offices, schools, hotels, government buildings, stores and hospitals. By offering one product design in a size range that traditionally has required two products, the Destiny air handler helps simplify your project design and specification, and it provides uniform installation procedures. Other features that simplify design, specification and installation include:

- Flexible coil and filter selections to match your application requirements
- Ceiling hung or floor mounted application flexibility in horizontal or vertical arrangements
- Higher operating static pressures than blower coils provide added flexibility in unit ducting and placement
- Field interchangeable coil allows units to be piped from either side to avoid clearance restrictions
- Blow-through electric heat with single point power connection



Internally isolated fan and motor



Flexible coil and filter selections



Flex collar at discharge

Features and Options

Standard and high-efficiency motor options

- Adjustable motor mount simplifies belt adjustments
- Drive side is field interchangeable to avoid clearance restrictions

Centrifugal blower

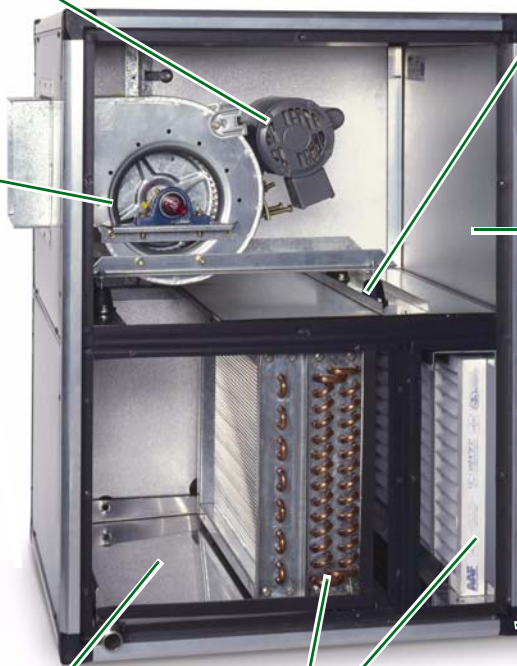
- Minimum turbulence for quiet, efficient operation
- Allows higher static pressure operation than blower coils for flexible ducting and unit placement
- Flex collar at discharge minimizes vibration transmission
- Flexible, side or top discharge arrangements (vertical units)

Mixing box selections

- Provide superior mixing of return and outside air streams in ducted return applications

Galvanized or stainless steel sloped drain pan

- Eliminates standing water to inhibit microbial growth
- Connections on both sides to avoid clearance restrictions

Vertical Configuration**Internally isolated fan and motor**

- Minimizes vibration transmission for quiet operation
- Rubber in shear (sizes 002 to 010)
- Spring isolators (sizes 015 and larger)

Double-wall construction with foam-injected insulation

- Eliminates insulation fibers from the air stream
- Helps prevent dust buildup and provides wipe-clean surface
- Galvanized steel panels provide superior corrosion resistance

Aluminum frame and polymeric corners

- Provide rigidity and superior corrosion resistance
- Unique frame structure simplifies hanger bracket attachment

Flexible coil and filter options

- Allow you to match application requirements
- Coils are field interchangeable to avoid clearance restrictions
- Preheat and reheat arrangements available

Horizontal Configuration**Access panels on both sides of each section**

- Provide complete access to the unit interior
- Pocket pull handles provide an easy method to remove and handle access panels
- Optional hinged and quarter-turn latched access doors
- Optional bottom filter access

Features and Options

Electric Heat Configuration



Electric Heat Features

- Contactors and fusing for each heating stage with up to four stages available
- Disconnect switch
- High resistance nickel-chromium alloy wire
- Single point power connection
- 1 kW to 55 kW
- ETL listed
- 24 V control transformer

Capacity and Physical Data—Destiny

Base Unit Cabinet Weights—Horizontal Unit Arrangement

Unit size	No heat	Reheat	No heat	Reheat	No heat*	Reheat	No heat*	Reheat	Preheat	
	Flat filters	Flat filters	Angular filters	Angular filters	Flat filters	Flat filters	Angular filters	Angular filters	Flat filters	Angular filters
	Cooling coil	Cooling coil	Cooling coil	Cooling coil					Cooling coil	Cooling coil
		Heating coil		Heating coil		Heating coil		Heating coil	Heating coil	Heating coil
	Fan	Fan	Fan	Fan	Fan	Fan	Fan	Fan	Fan	Fan
	Weight, lb (kg)		Weight, lb (kg)		Weight, lb (kg)		Weight, lb (kg)		Weight, lb (kg)	
002	142.34 (64.56)		187.56 (85.08)		122.36 (55.50)		149.39 (67.76)		157.12 (71.27)	184.19 (83.55)
003	170.89 (77.51)		213.02 (96.62)		148.04 (67.150)		169.18 (76.74)		186.67 (84.67)	208.34 (94.50)
004	207.68 (94.20)		257.99 (117.02)		182.04 (82.47)		205.76 (93.33)		233.73 (106.02)	257.55 (116.82)
005	245.41 (111.32)		317.41 (143.98)		213.25 (96.73)		253.09 (114.80)		267.13 (121.17)	307.89 (139.66)
007	262.71 (119.16)		340.86 (154.61)		224.74 (101.94)		271.81 (123.29)		298.53 (135.41)	346.93 (157.36)
010	302.58 (137.25)		392.63 (178.09)		260.15 (118.00)		312.73 (141.85)		341.67 (154.98)	395.58 (179.43)
015	359.18 (162.92)		463.09 (210.05)		352.58 (159.93)		411.89 (186.83)		419.72 (190.38)	480.74 (218.06)
020	445.55 (202.10)		596.73 (270.67)		440.70 (199.90)		533.01 (241.77)		511.86 (232.18)	606.56 (275.13)
025	559.02 (253.57)		736.09 (333.89)		554.95 (251.72)		658.10 (298.51)		616.52 (279.65)	773.96 (351.06)
030	603.25 (273.63)		817.52 (370.82)		599.00 (271.70)		730.10 (331.17)		633.19 (287.21)	830.10 (376.53)

*Ventilation only

Base Unit Cabinet Weights—Vertical Unit Arrangement

Unit size	No heat	Reheat	No heat*	Reheat	No heat*	Reheat
	Flat filters	Flat filters	Flat filters	Flat filters	Flat filters	Flat filters
	Cooling coil	Cooling coil				
		Heating coil		Heating coil		Heating coil
	Fan	Fan	Fan	Fan	Fan	Fan
	Weight, lb (kg)		Weight, lb (kg)		Weight, lb (kg)	
002	134.70 (61.10)		134.70 (61.10)		134.70 (61.10)	
003	183.20 (83.10)		183.20 (83.10)		183.20 (83.10)	
004	209.79 (95.16)		209.79 (95.16)		209.79 (95.16)	
005	239.00 (108.40)		239.00 (108.40)		239.00 (108.40)	
007	349.08 (158.30)		349.08 (158.30)		349.08 (158.30)	
010	399.23 (181.09)		399.23 (181.09)		399.23 (181.09)	
015	484.20 (219.63)		484.20 (219.63)		484.20 (219.63)	
020	566.96 (257.17)		566.96 (257.17)		566.96 (257.17)	
025	725.28 (328.98)		725.28 (328.98)		725.28 (328.98)	
030	750.14 (340.26)		750.14 (340.26)		750.14 (340.26)	

*Ventilation only

Capacity and Physical Data—Destiny

Unit Coil Weights

Unit size	002	003	004	005	007	010	015	020	025	030
Rows	Weight, lb (kg)									
4-row chilled water	31.64 (14.35)	40.56 (18.40)	54.30 (24.64)	59.19 (26.85)	84.80 (38.46)	111.99 (50.80)	185.93 (84.34)	255.08 (115.70)	298.34 (135.32)	341.54 (154.92)
6-row chilled water	39.94 (18.12)	54.81 (24.86)	69.01 (31.30)	86.91 (39.42)	112.30 (50.94)	154.05 (69.88)	261.55 (118.64)	353.14 (160.18)	416.35 (188.85)	477.93 (216.79)
1-row hot water	16.11 (7.31)	19.95 (9.05)	28.36 (12.86)	33.60 (15.24)	45.86 (20.80)	66.07 (29.97)	91.35 (41.44)	116.29 (52.75)	132.03 (59.89)	168.86 (76.59)
2-row hot water	24.36 (11.05)	29.96 (13.59)	38.07 (17.27)	46.13 (20.92)	64.28 (29.16)	83.91 (38.06)	121.10 (54.93)	171.48 (77.78)	197.12 (89.41)	223.03 (101.16)
4-row DX	32.73 (14.85)	42.91 (19.46)	50.11 (22.73)	64.80 (29.39)	88.18 (40.00)	115.42 (52.35)	195.54 (88.70)	248.63 (112.78)	300.8 (136.44)	344.86 (156.43)
6-row DX	43.37 (19.67)	57.01 (25.86)	71.53 (32.45)	91.69 (41.59)	105.18 (47.71)	158.52 (71.90)	268.37 (121.73)	365.31 (165.71)	429.85 (194.98)	493.24 (223.73)

Fan Weights

Unit size	Fan	Weight, lb (kg)
002	DA 7/7	19.03 (8.63)
003	DA 9/9	33.95 (15.34)
004	DA 9/9	33.95 (15.34)
005	DA 10/10	41.45 (18.80)
007	DA 12/12	60.85 (27.60)
010	DA 12/12	60.85 (27.60)
015	DA 10/10 TWIN	79.37 (36.00)
020	DA 12/12 TWIN	126.77 (57.50)
025	DA 15/15 TWIN	154.88 (70.25)
030	DA 15/15 TWIN	154.88 (70.25)

Fan Data

Type	DWDI FC	DWDI FC	DWDI FC	DWDI FC	DWDI FC	DWDI FC	Twin DWDI FC	Twin DWDI FC	Twin DWDI FC	Twin DWDI FC
Diameter	7/7	9/9	9/9	10/10	12/12	12/12	10/10	12/12	15/15	15/15
hp range	.33–2	.33–3	.33–5	.50–5	.75–5	1–7.5	2–15	3–15	5–20	5–20
cfm minimum–fan limit	206	206	529	529	765	765	1059	1529	2118	2118
Maximum rpm	2,680	2,650	2,650	2,100	1,700	1,700	2,100	1,700	1,500	1,500
Class	1	1	1	1	1	1	1	1	1	1
Motor sheave	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM	VP, VL, VM
Fan sheave	AK, BK	AK, BK	AK, BK	AK, BK	AK, BK	AK, BK	AK, BK	AK, BK	AK, BK	AK, BK
Belt	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX	A, AX, B, BX
Fan shaft diameter	3/4"	3/4"	3/4"	3/4"	1.00"	1.00"	3/4"	1.00"	1.00"	1.00"
Weight, lb (kg)	19.03 (8.63)	33.95 (15.40)	33.95 (15.40)	41.45 (18.80)	60.85 (27.60)	60.85 (27.60)	79.37 (36.00)	126.77 (57.50)	154.87 (70.25)	154.87 (70.25)

Capacity and Physical Data—Destiny

Filter Data

Unit size	002	003	004	005	007	010	015	020	025	030
Flat filter bank number	1	1	1	1	1	1	2	2	2	2
Flat filter (qty) size	(1) 16 × 25	(1) 18 × 24	(2) 16 × 20	(2) 20 × 24	(2) 24 × 24	(3) 20 × 25	(3) 12 × 24 (3) 24 × 24	(6) 24 × 24	(4) 20 × 24 (4) 24 × 24	(6) 16 × 25 (4) 20 × 25
Flat filter depth options	2", 4"	2", 4"	2", 4"	2", 4"	2", 4"	2", 4"	2", 4"	2", 4"	2", 4"	2", 4"
Angular filter bank number	1	1	1	2	2	2	2	3	3	3
Angular filter (qty) size	(1) 20 × 24	(2) 16 × 20	(2) 20 × 20	(4) 16 × 20	(4) 16 × 25	(6) 16 × 20	(6) 20 × 24	(9) 20 × 24	(6) 20 × 24 (6) 24 × 24	(6) 20 × 24 (6) 24 × 24
Angular filter depth options	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"

Coil Data—Chilled Water

Unit size	002	003	004	005	007	010	015	020	025	030
Fin height	14	16	16	22	22	26	32.5	45	45	52.5
Fin length	21	27	34	34	48	54	65	65	80	80
Rows	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6
fpi	12	12	12	12	12	12	12	12	12	12
Connection material	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Steel NPT	Steel NPT	Steel NPT	Steel NPT
Connection size 4-row	0.875 OD	1.125 OD	1.625 OD	1.625 OD	1.625 OD	1.625 OD	1.5 NPT	2.5 NPT	2.5 NPT	2.5 NPT
Connection size 6-row	0.875 OD	1.125 OD	1.625 OD	1.625 OD	1.625 OD	2.125 OD	2.0 NPT	2.5 NPT	2.5 NPT	2.5 NPT
Casing	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized

Coil Data—DX Coils

Unit size	002	003	004	005	007	010	015	020	025	030
Fin height	14	16	16	22	22	26	32.5	45	45	52.5
Fin length	21	27	34	34	48	54	65	65	80	80
Rows	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6	4, 6
fpi	12	12	12	12	12	12	12	12	12	12
Connection material	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat
Connection size, 4-row	Suction 0.875 OD	1.125 OD	1.125 OD	1.125 OD	1.625 OD	1.625 OD	1.625 OD	1.625 OD	1.625 OD	1.625 OD
	Liquid 0.625 OD	0.625 OD	0.625 OD	0.875 OD	0.875 OD	1.125 OD	0.625 OD	0.875 OD	1.125 OD	1.125 OD
Connection size, 6-row	Suction 0.875 OD	1.125 OD	1.625 OD	1.625 OD	1.625 OD	2.125 OD	1.625 OD	2.125 OD	2.125 OD	2.625 OD
	Liquid 0.625 OD	0.625 OD	0.625 OD	1.125 OD	1.125 OD	1.125 OD	0.875 OD	0.875 OD	1.125 OD	1.375 OD
Casing	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized
Circuit Number	1	1	1	1	1	1	2	2	2	2
Circuit type	Normal	Normal	Normal	Normal	Normal	Normal	Face split	Face split	Face split	Face split

Coil Data—Hot Water Coils

Unit size	002	003	004	005	007	010	015	020	025	030
Fin height	14	16	16	22	22	26	32.5	45	45	52.5
Fin length	21	27	34	34	48	54	65	65	80	80
Rows	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2
fpi	12	12	12	12	12	12	12	12	12	12
Connection material	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Copper sweat	Steel NPT	Steel NPT	Steel NPT	Steel NPT
Connection size 1-row	0.625 OD	0.625 OD	0.875 OD	0.875 OD	1.125 OD	1.375 OD	1.0 NPT	1.5 NPT	1.5 NPT	2.0 NPT
Connection size 2-row	0.875 OD	0.875 OD	1.125 OD	1.125 OD	1.625 OD	1.625 OD	1.5 NPT	2.0 NPT	2.0 NPT	2.0 NPT
Casing	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized

Capacity and Physical Data—Destiny

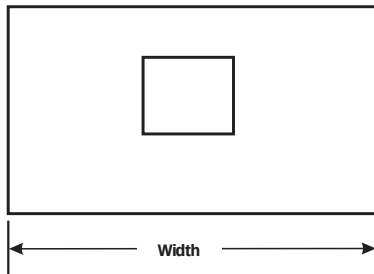
Drain Connection Data—Main and Secondary

Unit size	002	003	004	005	007	010	015	020	025	030
Drain connection	ID MPT dimensions, in (mm)									
Main	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)	1 1/4 (31.75)	1 1/4 (31.75)	1 1/4 (31.75)	1 1/4 (31.75)
Secondary	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)

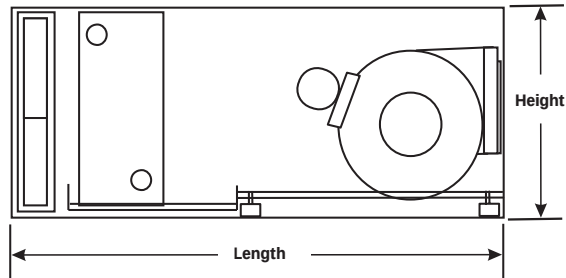
Cabinet Dimensions—Horizontal Unit

Dimension/Configuration		Unit size									
		002	003	004	005	007	010	015	020	025	030
Dimension		Unit height and width dimensions, in (mm)									
Height		20.47 (520)	22.44 (570)	22.44 (570)	28.35 (720)	28.35 (720)	32.48 (825)	39.37 (1000)	51.57 (1310)	51.57 (1310)	59.06 (1500)
Width		28.54 (725)	34.84 (885)	42.52 (1080)	42.52 (1080)	56.50 (1435)	63.00 (1600)	74.41 (1890)	75.00 (1905)	89.96 (2285)	89.96 (2285)
Configuration		Unit length dimensions, in (mm)									
Cooling only or cooling with reheat coils	Flat filter	47.84 (1215)	47.84 (1215)	53.35 (1355)	54.72 (1390)	58.86 (1495)	58.86 (1495)	53.74 (1365)	56.30 (1430)	62.00 (1575)	62.00 (1575)
	Angular filter	58.27 (1480)	55.12 (1400)	60.63 (1540)	65.95 (1675)	70.08 (1780)	70.08 (1780)	64.37 (1635)	71.26 (1810)	76.97 (1955)	80.12 (2035)
Cooling with preheat coils	Flat filter	51.97 (1320)	51.97 (1320)	59.25 (1505)	59.45 (1510)	65.55 (1665)	65.55 (1665)	62.80 (1595)	65.35 (1660)	69.09 (1755)	69.09 (1755)
	Angular filter	62.40 (1585)	59.25 (1505)	66.53 (1690)	70.67 (1795)	76.77 (1950)	76.77 (1950)	73.42 (1865)	80.32 (2040)	84.06 (2135)	87.20 (2215)
Heating only	Flat filter	39.96 (1015)	39.96 (1015)	45.47 (1155)	45.67 (1160)	49.80 (1265)	49.80 (1265)	52.56 (1335)	55.51 (1410)	61.42 (1560)	61.42 (1560)
	Angular filter	50.39 (1280)	47.24 (1200)	52.76 (1340)	56.89 (1445)	61.02 (1550)	61.02 (1550)	63.19 (1605)	70.47 (1790)	76.38 (1940)	79.53 (2020)
Ventilation only	Flat filter	39.96 (1015)	39.96 (1015)	45.47 (1155)	45.67 (1160)	49.80 (1265)	49.80 (1265)	52.56 (1335)	55.51 (1410)	61.42 (1560)	61.42 (1560)
	Angular filter	50.39 (1280)	47.24 (1200)	52.76 (1340)	56.89 (1445)	61.02 (1550)	61.02 (1550)	63.19 (1605)	70.47 (1790)	76.38 (1940)	79.53 (2020)

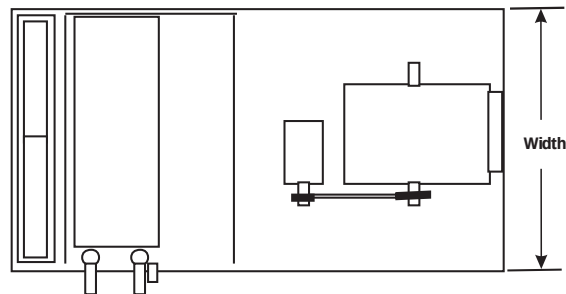
Front View



Side View



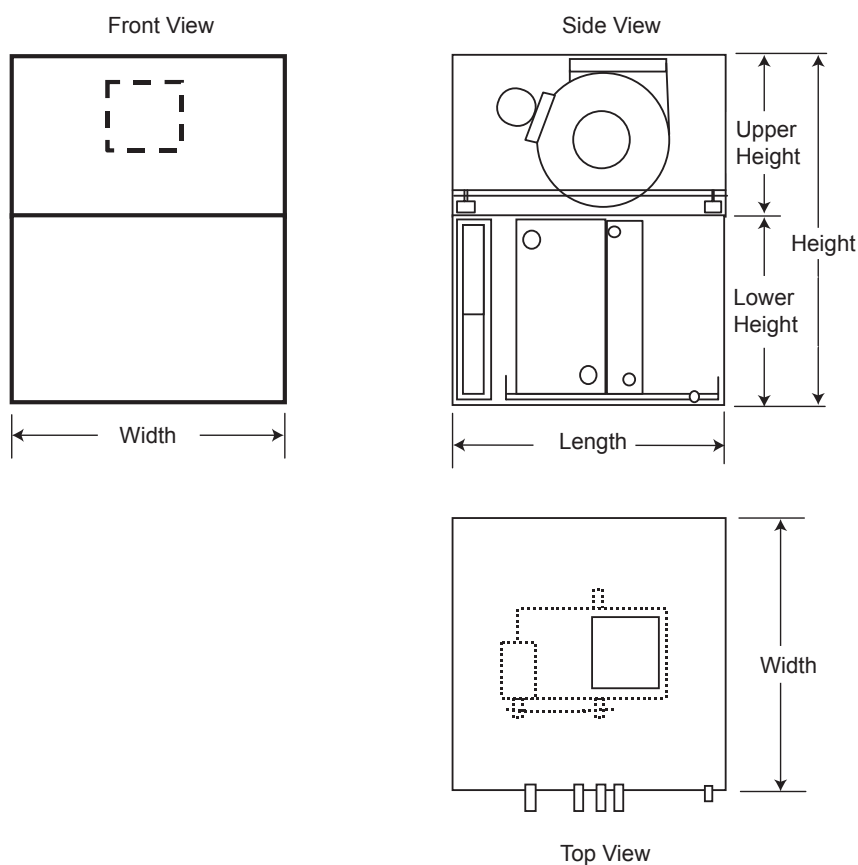
Top View



Capacity and Physical Data—Destiny

Cabinet Dimensions—Vertical Unit

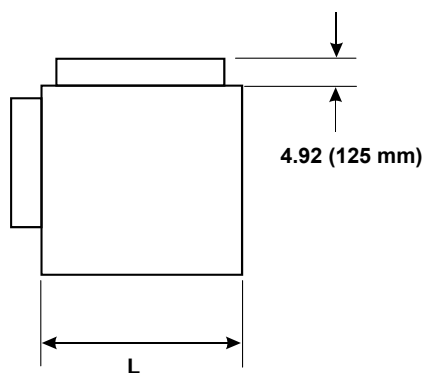
Dimensions	Unit size									
	002	003	004	005	007	010	015	020	025	030
Height—in (mm)	37.60 (955)	42.32 (1075)	42.32 (1075)	50.39 (1280)	52.95 (1345)	57.09 (1450)	63.19 (1605)	78.54 (1905)	82.87 (2285)	90.35 (2295)
Width—in (mm)	28.54 (725)	34.84 (885)	42.52 (1080)	42.52 (1080)	56.50 (1435)	62.99 (1600)	74.41 (1890)	75.00 (1905)	89.96 (2285)	89.96 (2285)
Length—in (mm)	29.92 (760)	33.07 (840)	33.07 (840)	36.42 (925)	39.96 (1015)	39.96 (1015)	42.72 (1085)	47.83 (1215)	51.18 (1300)	51.18 (1300)
Upper section height—in (mm)	17.13 (435)	19.88 (505)	19.88 (505)	22.05 (560)	24.61 (625)	24.61 (625)	23.82 (605)	26.97 (685)	31.30 (795)	31.30 (795)
Lower section height—in (mm)	20.47 (520)	22.44 (570)	22.44 (570)	28.35 (720)	28.35 (720)	32.48 (825)	39.37 (1000)	51.57 (1310)	51.57 (1310)	59.06 (1500)



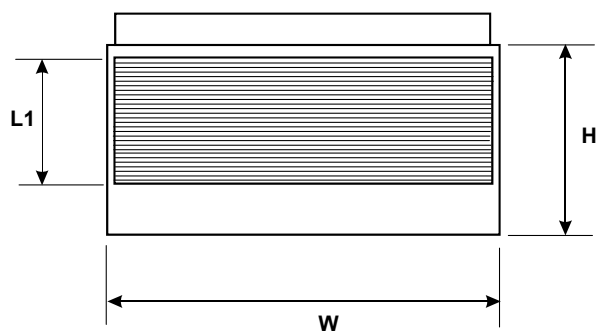
Capacity and Physical Data—Destiny

Dimensions—Mixing Box, Horizontal and Vertical Units

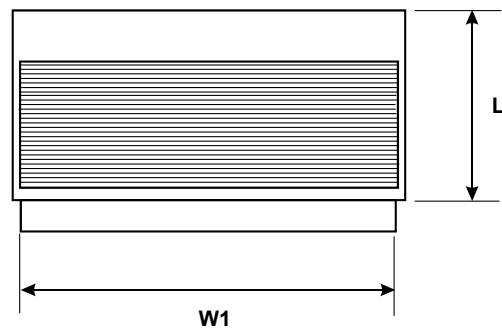
Unit size	Cabinet, in (mm)			Damper, in (mm)		
	W	H	L	W1	L1	Area (ft ²)
002	28.54 (725)	20.47 (520)	10.24 (260)	26.18 (665)	7.87 (200)	1.43
003	34.84 (885)	22.44 (570)	10.24 (260)	32.48 (825)	7.87 (200)	1.78
004	42.52 (1080)	22.44 (570)	10.24 (260)	40.16 (1020)	7.87 (200)	2.20
005	42.52 (1080)	28.35 (720)	14.17 (360)	40.16 (1020)	11.81 (300)	3.29
007	56.50 (1435)	28.35 (720)	14.17 (360)	54.13 (1375)	11.81 (300)	4.44
010	62.99 (1600)	32.48 (825)	14.17 (360)	60.63 (1540)	11.81 (300)	4.97
015	74.41 (1890)	39.37 (1000)	18.11 (460)	72.05 (1830)	15.75 (400)	7.88
020	75.00 (1905)	51.57 (1310)	25.98 (660)	72.64 (1845)	23.62 (600)	11.92
025	89.96 (2285)	51.57 (1310)	25.98 (660)	87.60 (2225)	23.62 (600)	14.37
030	89.96 (2285)	59.06 (1500)	29.92 (760)	87.60 (2225)	27.56 (700)	16.76



Side View



Top View



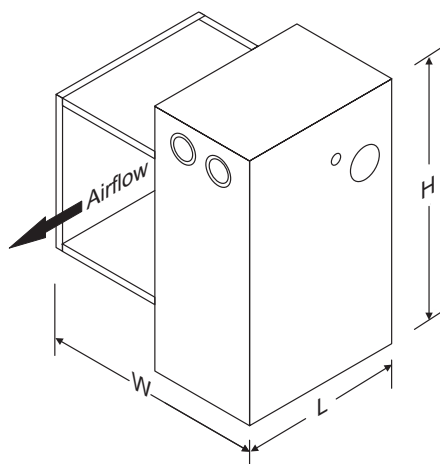
Capacity and Physical Data—Destiny Electric Heat Configuration

Dimensions—Electrical Heat Box, Left and Right Hand Units (LAH 002A through LAH005A)

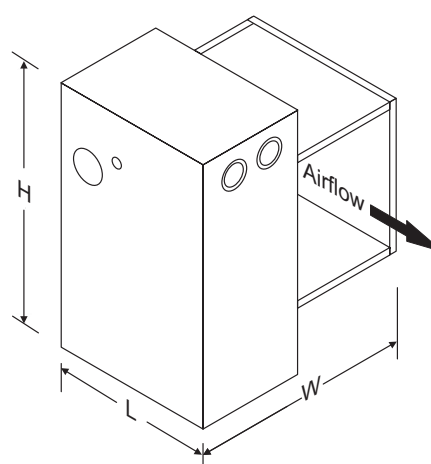
Dimensions inches (mm)	Unit part number									
	LAH002A		LAH004A				LAH005A			
	1 step	2 step	1 step	2 steps	3 steps	4 steps	1 step	2 steps	3 steps	4 steps
L	11 1/2 (292.1)	16 (406.4)	11 1/2 (292.1)	16 (406.4)	20 (508)	24 (609.6)	11 1/2 (292.1)	16 (406.4)	20 (508)	24 (609.6)
W	19 1/2 (495.3)	19 1/2 (495.3)	22 1/4 (565.1)	22 1/4 (565.1)	22 1/4 (565.1)	22 1/4 (565.1)	23 1/2 (596.9)	23 1/2 (596.9)	23 1/2 (596.9)	23 1/2 (596.9)
H	20 (508)	20 (508)	22 1/4 (565.1)	22 1/4 (565.1)	22 1/4 (565.1)	22 1/4 (565.1)	23 1/2 (596.9)	23 1/2 (596.9)	23 1/2 (596.9)	23 1/2 (596.9)

Dimensions—Electrical Heat Box, Left and Right Hand Units (LAH 007A through LAH010A)

Dimensions inches (mm)	Unit part number							
	LAH007A				LAH010A			
	1 step	2 steps	3 steps	4 steps	1 step	2 steps	3 steps	4 steps
L	11 1/2 (292.1)	16 (406.4)	20 (508)	24 (609.6)	11 1/2 (292.1)	16 (406.4)	20 (508)	24 (609.6)
W	26 (660.4)	26 (660.4)	26 (660.4)	26 (660.4)	26 (660.4)	26 (660.4)	26 (660.4)	26 (660.4)
H	25 (635)	25 (635)	25 (635)	25 (635)	25 (635)	25 (635)	25 (635)	25 (635)



Left hand electrical heat box

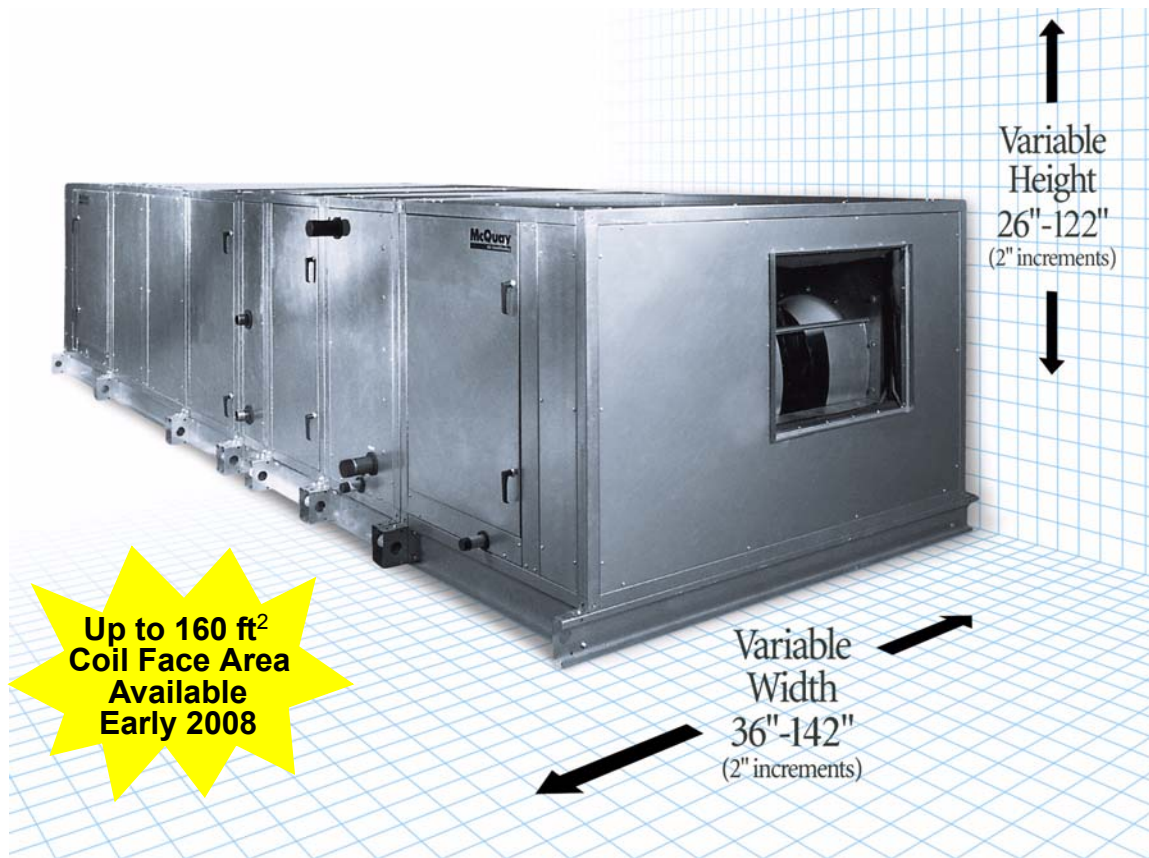


Right hand electrical heat box

Vision™ Air Handler—3 to 92 ft² Face Area, 900 to 65,000 cfm

- **Flexibility**—custom modular platform and our Variable Dimensioning™ feature
- **Operating efficiency**—efficient fan selections and energy recovery
- **Easy, low cost installation**—ships assembled or by section
- **Easy maintenance and serviceability**—easy to remove access panels
- **Indoor air quality**—low leakage cabinet

For more detail,
refer to Catalog 550.
For the most current
information, refer to
www.mcquay.com.

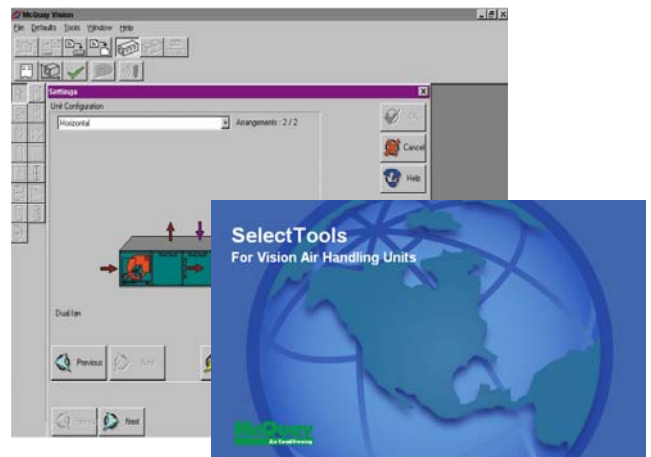


Flexibility

Our unique Variable Dimensioning feature of the Vision air handler offers tremendous flexibility that allows sizing of units in two-inch increments. Numerous section and component options, and the ability to arrange components however required, allow Vision air handlers to be customized for each job without modifications in the field. Units can ship completely assembled, in modules, or by component sections for new or retrofit applications requiring smaller sections for passage through the building.

Vision SelectTools™ Software Selection Program

Because of the Vision air handler's flexibility and various component types, there are an infinite number of unit arrangements. To help easily define product requirements, McQuay provides the user-friendly Vision SelectTools Software Selection Program to configure and size both standard and custom units. This Windows® based program leads you through the selection process by prompting for pertinent input data for all components. The program gives immediate feedback regarding fan and coil selection, offering a choice of several options based on performance inputs. Once final components are selected, the program provides all output needed for specification and submittal purposes, including required fan curves, coil performance psychometric charts, weights, dimensional drawings, and a unit specification.



This is available in McQuayTools™ for Engineers software. Ask your McQuay representative for details.

Quality Construction

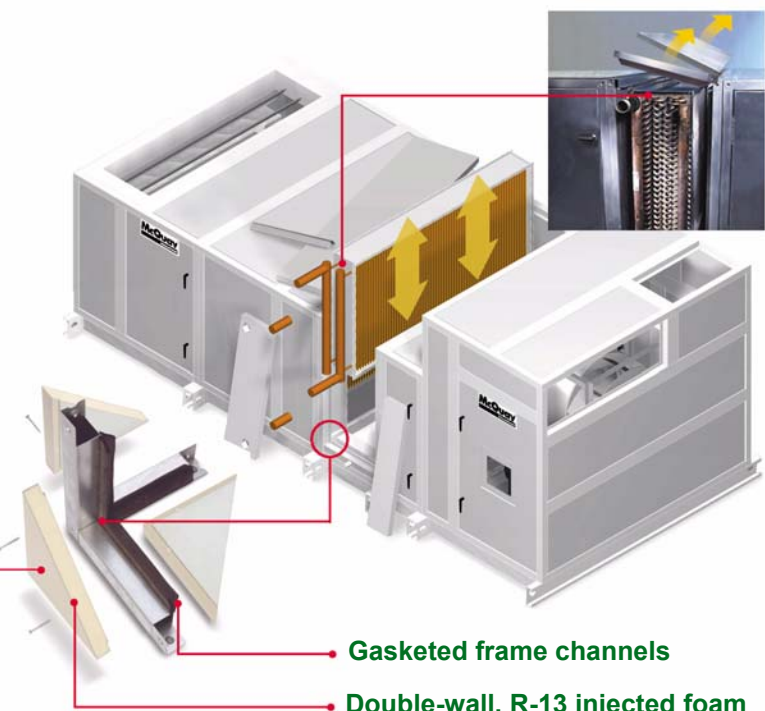
Quality construction makes Vision units capable of leakage rates of less than 1%. This is equal to or less than that of costly custom units, and is far superior to leakage rates of up to 10% for standard commercial units. Our patented, insulated internal splice collar, factory-installed gasketing, and double-wall, injected

foam insulated panels help to preserve the airtight environment. They also eliminate fibers and stop dirt and moisture from penetrating the casing. The results for your client can be quieter units than standard commercial air handlers, with lower operating costs and optimal indoor air quality.

Panels and frame channels easily removed for access to large components



Rigid, injected foam panels provide superior strength, improve operating efficiency, and reduce unit weight.



Vision™ Air Handler—3 to 92 ft² Face Area, 900 to 65,000 cfm



Patented UltraSeal™ low-leak dampers

- Maximize operating efficiency
- Reduce operating cost



Extended coil connections

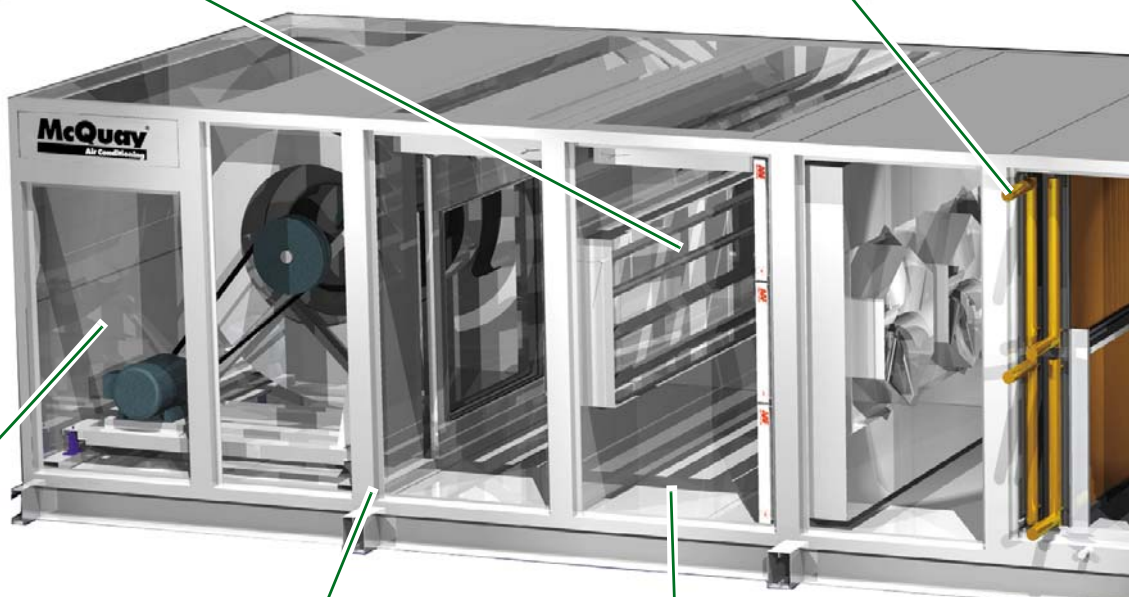
- Saves installation costs
- Reduces maintenance time
- Aids proper drainage

Custom modular design with variable dimensioning feature

- Allows custom selection and configuration of components
- Allows design of system to meet space and performance requirements

Rugged cabinet enclosure

- Rigid thermally efficient (R-13) injected foam panels are strong and light weight
- G-90 galvanized or painted finish
- Promotes longer unit life



Smooth interior surface

- Reduces dirt accumulation
- Facilitates cleaning
- Improves IAQ



Gasketed frame channel

- Eliminates metal-to-metal contact between paneling and framework
- Minimizes cabinet condensate and corrosion
- Facilitates top and side component removal
- Promotes long life



Features



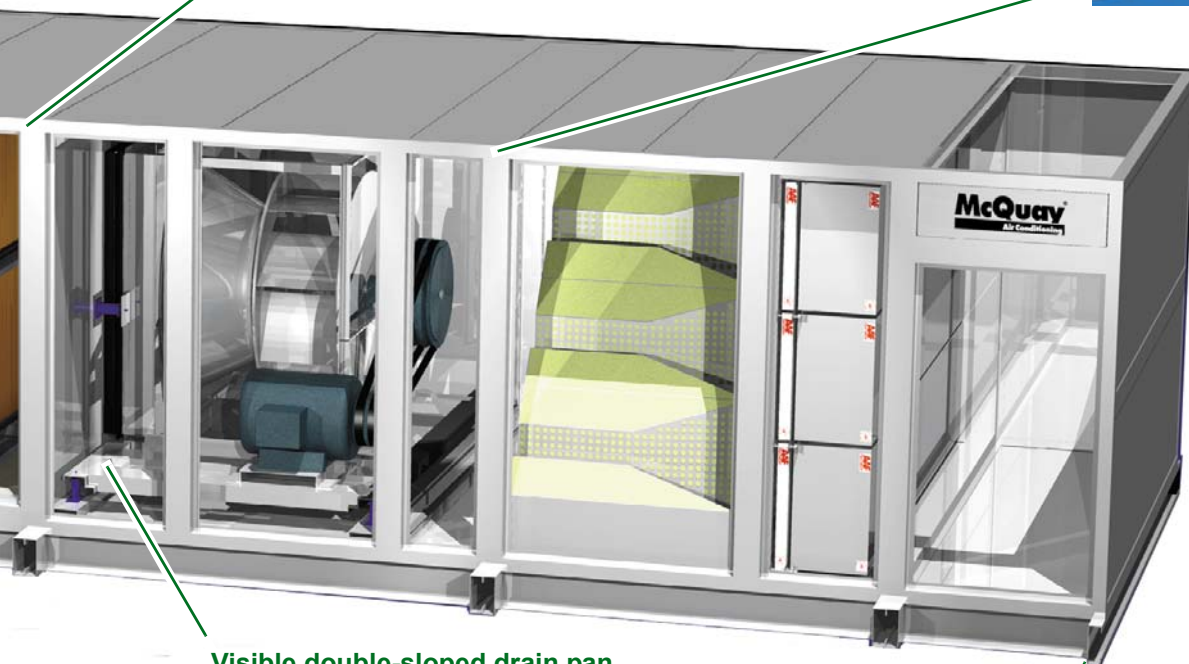
Patented splice collar

- Reduces installation cost
- Creates an air tight environment



Frame channel disassembly

- Allows two-sided access
- Easier, faster service and maintenance



Visible double-sloped drain pan

- Makes inspection and cleaning easier
- Improves IAQ



Variable height base rails (4"-12")

- Eliminates costly housekeeping pad
- Allows for adequate condensate trapping



Vision™ Air Handler—3 to 92 ft² Face Area, 900 to 65,000 cfm

Use McQuay Vision as a product platform on which to build the ideal air handler for your specific application. Customized options include:

- Variable Dimensioning feature for flexible cabinet sizing on 2" increments
- Painted cabinet
- Multiple access section depths
- Variable base rail heights (4"–12")
- Various casing and drain pan materials
- Mixing boxes/economizers
- Sound attenuators
- Horizontal and vertical integral face and bypass dampers
- Blenders and air mixers
- Multiple coil section depths
- Electro-Fin epoxy coil coating
- Energy recovery sections (heat wheels, fixed plate heat exchangers, and runaround coil loops)
- Multiple fan selections: forward curve, airfoil, inline, and belt or direct drive plenum fans
- Twin fans (two forward curved fans on one shaft)
- Filters (flat, angular, bag and cartridge) available in side-load and/or front-load configuration
- Humidifier manifold
- IBC seismic certification
- Multiple liner options
- Flush-mounted filter gauges
- Starters, VFDs, and disconnects
- Digital Ready™ factory control options
- Electric heaters
- Ultraviolet lights
- Inward opening doors
- Windows, doors, marine lights and receptacles
- Manual selections to accommodate special components
- Flexibility in shipping arrangements
- Dual path dehumidification
- Gas-phase filtration



Fan options



Disconnect, starter and vfd

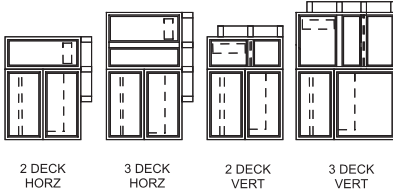


Integral face and bypass dampers



Digital Ready™ factory control options

Customized Options

RETURN/ EXHAUST	ECONOMIZER	BLENDER	FILTER	ENERGY RECOVERY	F & BP DAMPER	COIL	ACCESS	HORIZONTAL COIL	SUPPLY FAN	DIFFUSER	COIL BLOW THRU	ACCESS	FILTER	ATTENUATOR	PLENUM
PLENUM FAN			2" & 4" ANGULAR	WHEEL	INTERNAL	HORIZ HEATING	LARGE	CLG. / HTG. COMBINATION	FC, AF FAN, & TWIN FAN		HORIZ		CARTRIDGE		DISCHARGE PLENUM
FC, AF FAN & TWIN FAN	INLET PLENUM		2" & 4" FLAT	FLAT PLATE CUBE	INTEGRAL	1 & 2 ROW STEAM AND 1-4 ROW WATER	MEDIUM	CLG. 10 ROW	PLENUM FAN		CLG. OR HTG.		BAG		
ESI FAN	MIXBOX WITH 4" FILTER		CARTRIDGE				SMALL	4 ROW	ESI FAN	MULTI-ZONE COIL SECTIONS 					
MIXING BOX	MIXBOX WITH 2" FILTER	MIXBOX WITH ANG FILTER	BAG		RIGHT ANGLE			SFA COIL MFA COIL F & BP	FAN AND VERTICAL COIL						



Multiple filter options



Sound attenuator options



Static mixer options



Energy recovery options

Capacity and Physical Data

Quick Select Table*—Vision

Description	Unit size								
	003	004	006	008	010	012	014	017	021
Airflow range, cfm	900–2500	1200–3100	1700–4600	2200–6000	2900–7700	3600–9700	4200–11,200	5000–13,500	6000–16,000
cfm @ 500 ft/min through large face area coil	1550	1950	2850	3750	4800	6050	7000	8400	10,050
Height × width, inches	26 × 38	30 × 40	30 × 52	34 × 58	36 × 64	42 × 66	42 × 74	46 × 80	58 × 82
Cooling coil face area, sq ft									
Extended/staggered large	3.9	4.8	6.6	8.5	10.7	13.5	15.4	18.3	21.9
Large	3.1	3.9	5.7	7.5	9.6	12.1	14.0	16.8	20.1
Extended/staggered medium	2.6	3.4	4.7	6.4	8.3	9.8	11.2	13.7	17.2
Medium	2.1	2.8	4.1	5.6	7.4	8.8	10.2	12.6	15.8
Small	N/A	2.3	3.3	4.7	6.4	7.7	8.9	11.2	14.4
Fan section—depth, inches									
Largest housed fan & motor avail. w/ top hor. dischg.	32	32	36	40	40	46	46	50	52
Largest inline fan and motor available	N/A	N/A	N/A	N/A	N/A	44	44	50	54
Largest belt drive plenum fan & motor available	N/A	N/A	N/A	N/A	34	42	42	48	52
Largest direct drive plenum fan & motor available	N/A	N/A	N/A	20	20	54	54	54	54
Largest twin fan and motor available	N/A	N/A	N/A	50	56	56	58	58	66
Mixing box—depth, inches									
Mixing box only	20	20	20	20	22	24	24	26	30
Mixing box with flat filter	24	24	24	24	26	28	28	30	34
Mixing box with angular filter	42	42	42	42	44	46	46	48	52
Economizer—depth, inches									
	40	40	40	40	44	48	48	52	60
Blender—depth, inches									
Largest Kees	18	20	24	26	28	34	36	38	42
Largest Blender Products IV	18	22	26	30	34	38	40	46	48
Side load filter sections—depth, inches									
Flat 2" and 4"	12	12	12	12	12	12	12	12	12
2" angular	32	30	30	30	30	30	30	30	30
Cartridge (12" deep w/2" pre-filter)	22	22	22	22	22	22	22	22	22
Bag (36" w/2" pre-filter)	42	42	42	42	42	42	42	42	42
Front load filter sections—depth, inches									
Cartridge (12" deep w/2" pre-filter)	16	16	16	16	16	16	16	16	16
Bag (36" w/2" pre-filter)	40	40	4	40	40	40	40	40	40
Face and bypass—depth, inches									
Internal	12	12	12	12	12	12	12	12	12
External	18	18	18	20	22	24	24	26	30
Coil sections—depth, inches									
Heating only (2-row water)	12	12	12	12	12	12	12	12	12
Cooling only (4-row water)	18	18	18	18	18	18	18	18	18
Cooling only (6-row water)	24	24	24	24	24	24	24	24	24
Cooling & reheat (12-row cooling & 1-row heating)	36	36	36	36	36	36	36	36	36
Vertical cooling only (6-row water)	30	30	30	30	36	36	36	36	42
Multizone coil section—depth, inches									
3-deck horizontal with dampers	N/A	N/A	40	42	42	52	52	54	56
Access sections—depth, inches									
16" deep	16	16	16	16	16	16	16	16	16
24" deep	24	24	24	24	24	24	24	24	24
30" deep	30	30	30	30	30	30	30	30	30
36" deep	36	36	36	36	36	36	36	36	36
42" deep	42	42	42	42	42	42	42	42	42
48" deep	48	48	48	48	48	48	48	48	48
54" deep	54	54	54	54	54	54	54	54	54
Diffuser—depth, inches									
With housed fan	10	10	10	12	12	16	16	16	16
With inline fan	N/A	N/A	N/A	N/A	N/A	18	18	18	22
Attenuator—depth, inches									
Short	40	40	40	40	40	40	40	40	40
Medium	52	52	52	52	52	52	52	52	52
Long	64	64	64	64	64	64	64	64	64
Supply or return plenum—depth, inches									
Top, bottom or end opening	14	16	16	18	20	22	22	24	28

* Based on typical industry sizes. Vision air handling units are available in 2 inch increments of height and width to fit the exact space requirements.
Front load filter sections include 24" upstream plenum section with tread plate for heavy duty floor liner.

Quick Select Table*—Vision (continued)

Description	Unit size								
	025	030	035	040	050	065	080	085	090
Airflow range, cfm	7300–19,400	8500–22,500	10,000–26,500	11,500–31,000	15,000–40,000	20,000–54,000	21,500–57,500	23,100–61,600	24,600–65,600
cfm @ 500 ft/min through large face area coil	12,150	14,150	16,700	19,300	24,500	33,300	35,900	38,450	41,000
Height × width, inches	60 × 86	60 × 98	66 × 102	68 × 116	80 × 120	92 × 136	98 × 136	104 × 136	110 × 136
Cooling coil face area, sq ft									
Extended/staggered large	27.4	31.9	37.1	42.9	58.0	76.9	82.0	87.1	92.2
Large	24.3	28.3	33.4	38.6	49.0	66.6	71.8	76.9	82.0
Extended/staggered medium	21.3	24.8	29.7	34.3	40.1	61.5	61.5	66.6	71.8
Medium	18.2	21.2	24.1	30.0	35.7	51.2	51.2	56.4	61.5
Small	16.7	19.5	22.3	27.9	31.2	46.1	46.1	51.2	56.4
Fan section—depth, inches									
Largest housed fan & motor avail. w/ top hor. discharge	58	58	58	70	80	92	92	92	92
Largest inline fan and motor available	64	64	70	70	90	96	96	96	96
Largest belt drive plenum fan and motor available	56	58	62	62	70	82	82	82	82
Largest direct drive plenum fan and motor available	66	78	84	86	86	86	N/A	N/A	N/A
Largest twin fan and motor available	66	74	82	82	82	n/a	N/A	N/A	N/A
Mixing box—depth, inches									
Mixing box only	32	32	36	36	40	46	50	54	56
Mixing box with flat filter	36	36	40	40	44	50	54	58	60
Mixing box with angular filter	54	54	58	58	62	68	72	76	78
Economizer—depth, inches									
	64	64	72	72	80	92	100	108	112
Blender—depth, inches									
Largest kees	46	48	58	58	68	76	80	84	84
Largest blender products iv	52	60	64	70	74	88	88	92	92
Side load filter sections—depth, inches									
Flat 2" and 4"	12	12	12	12	12	12	12	12	12
2" angular	32	32	32	32	32	32	32	32	32
Cartridge (12" deep w/2" pre-filter)	22	22	22	22	22	22	22	22	22
Bag (36" w/2" pre-filter)	42	42	42	42	42	42	42	42	42
Front load filter sections—depth, inches									
Cartridge (12" deep w/2" pre-filter)	16	16	16	16	16	16	16	16	16
Bag (36" w/2" pre-filter)	40	40	40	40	40	40	40	40	40
Face and bypass—depth, inches									
Internal	12	12	12	12	12	12	12	12	12
External	32	32	34	38	44	50	54	56	58
Coil sections—depth, inches									
Heating only (2-row water)	12	12	12	12	12	12	12	12	12
Cooling only (4-row water)	18	18	18	18	18	18	18	18	18
Cooling only (6-row water)	24	24	24	24	24	24	24	24	24
Cooling and reheat (12-row cooling & 1-row heating)	36	36	36	36	36	36	36	36	36
Vertical cooling only (6-row water)	48	48	54	N/A	N/A	N/A	N/A	N/A	N/A
Multizone coil section—depth, inches									
3-deck horizontal with dampers	60	60	70	70	76	88	N/A	N/A	N/A
Access sections—depth, inches									
16" deep	16	16	16	16	16	16	16	16	16
24" deep	24	24	24	24	24	24	24	24	24
30" deep	30	30	30	30	30	30	30	30	30
36" deep	36	36	36	36	36	36	36	36	36
42" deep	42	42	42	42	42	42	42	42	42
48" deep	48	48	48	48	48	48	48	48	48
54" deep	54	54	54	54	54	54	54	54	54
Diffuser—depth, inches									
With housed fan	24	24	24	30	30	30	30	30	30
w/inline fan	26	26	28	30	36	38	38	38	38
Attenuator—depth, inches									
Short	40	40	40	40	40	40	40	40	40
Medium	52	52	52	52	52	52	52	52	52
Long	64	64	64	64	64	64	64	64	64
Supply or return plenum—depth, inches									
Top, bottom or end opening	30	30	32	32	38	42	48	52	54

* Based on typical industry sizes. Vision air handling units are available in 2-inch increments of height and width to fit the exact space requirements.

Coil weights based on aluminum fins and 8 fins per inch. Mixing box and economizer section weights include dampers.

Front load filter sections include 24" upstream plenum section with tread plate for heavy duty floor liner.

Air-Cooled Scroll Condensing Units—10 to 39 Tons

- **Efficient**—Up to 11.4 EER at full load and up to 14.6 EER at part load (IPLV)
- **Quiet**—All dBA ratings are tested in accordance with ARI Standard 370
Less acoustical treatment can lower your project cost
- **Reliable**—Scroll compressors have fewer moving parts
- **Controls flexibility**—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- **Optional low ambient operation** range down to 0°F

For more detail, refer to Catalog ACZ-AGZB.
For the most current information, refer to www.mcquay.com.



Model ACZ-B—10 to 39 tons



Available LONMARK certified



Scroll Condensing Units—Physical Data

ACZ 010BS through 020BS, R-22/R-407C

Physical data	ACZ model number			
	010B	013B	016B	020B
Basic data				
Nominal Tons ¹	10	13	16	20
Number of refrigerant circuits	1	1	1	1
Unit operating charge, R-22/R407C, lb (kg) ²	22.0 (10.0)	22.0 (10.0)	24.0 (10.9)	31.0 (14.1)
Cabinet dimensions, L × W × H, in (mm)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)
Unit operating weight, lb (kg)	1015 (461)	1015 (461)	1090 (495)	1190 (541)
Unit shipping weight, lb (kg)	1000 (454)	1000 (454)	1065 (484)	1150 (523)
Add'l weight if copper finned coils, lb (kg) R-22 and [R-407C]	176 (80.0) [176 (80.0)]	176 (80.0) [176 (80.0)]	176 (80.0) [176 (80.0)]	264 (120.0) [264 (120.0)]
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal horsepower	4.0 / 4.0	6.0 / 6.0	7.5 / 7.5	9.0 / 9.0
Oil charge per compressor of a tandem set, oz (g)	57 (1616)	60 (1701)	140 (3969)	140 (3969)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area, ft ² (m ²)	30.3 (2.8)	30.3 (2.8)	30.3 (2.8)	30.3 (2.8)
Finned height × finned length, in (mm)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)
Fins per inch × rows deep: R-22/R-407C	16 × 2	16 × 2	16 × 2	16 × 3
Pumpdown capacity, lb (kg)	35.3 (16.0)	35.3 (16.0)	35.3 (16.0)	50.3 (22.8)
Condenser fans—direct drive propeller type				
Number of fans—fan diameter, in (mm)	2–26 (660)	2–26 (660)	2–26 (660)	2–26 (660)
Number of motors—hp (kW) ³	2–1.0 (0.75)	2–1.0 (0.75)	2–1.0 (0.75)	2–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	13,950 (6584)	13,950 (6584)	13,950 (6584)	12,000 (5664)

1. Nominal capacity based on 95°F ambient air and 50°F saturated suction temperature (SST).

2. Operating charge is for the condensing unit only. Refrigerant lines and evaporator charge must be added.

3. Except for 380V/60 and 575V/60, hp = 2.0.

ACZ 025BS through 039BS, R-22/R-407C

Physical data	ACZ model number			
	025BS	028BS	033BS	039BS
Basic data				
Nominal tons ¹	25	28	33	39
Number of refrigerant circuits	1	1	1	1
Unit operating charge, R-22/R-407C, lb (kg) ²	34.0 (15.4)	36.0 (16.3)	47.0 (21.3)	50.0 (22.7)
Cabinet dimensions, L × W × H, in (mm)	106.2 × 46.3 × 50.8 (2697 × 1176 × 1289)	106.2 × 46.3 × 50.8 (2697 × 1176 × 1289)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1493)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1493)
Unit operating weight, lb (kg)	1470 (667)	1490 (676)	1760 (799)	1960 (890)
Unit shipping weight, lb (kg)	1580 (717)	1600 (726)	1890 (858)	2090 (949)
Add'l weight if copper finned coils, lb (kg) R-22 and [R-407C]	350 (159) [426 (194)]	426 (194) [426 (194)]	435 (197) [435 (197)]	435 (197) [435 (197)]
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal horsepower	12.0 / 12.0	13.0 / 13.0	15.0 / 15.0	20.0 / 20.0
Oil charge per compressor of a tandem set, oz (g)	110 (3119)	110 (3119)	110 (3119)	158 (4479)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area, ft ² (m ²)	49.0 (4.6)	49.0 (4.6)	58.3 (5.4)	58.3 (5.4)
Finned height × finned length, in (mm)	84 × 84 (2134 × 2134)	84 × 84 (2134 × 2134)	100 × 84 (2545 × 2134)	100 × 84 (2545 × 2134)
Fins per inch × rows deep: R-22/R-407C	16 × 2	16 × 2	16 × 3	16 × 3
Pumpdown capacity, lb (kg)	53.1 (24.0)	53.1 (24.0)	90.7 (41.1)	92.8 (42.0)
Condenser fans—direct drive propeller type				
Number of fans—fan diameter, in (mm)	3–26 (660)	3–26 (660)	3–26 (660)	3–26 (660)
Number of motors—hp (kW) ³	3–1.0 (0.75)	3–1.0 (0.75)	3–1.0 (0.75)	3–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	20,925 (9877)	20,925 (9877)	19,800 (9346)	19,800 (9346)

1. Nominal capacity based on 95°F ambient air and 50°F saturated suction temperature (SST).

2. Operating charge is for the condensing unit only. Refrigerant lines and evaporator charge must be added.

3. Except for 380V/60 and 575V/60, hp = 2.0.

Dual Circuit, Air-Cooled Scroll, Condensing Units—25 to 135 Tons

- **Efficient**—Up to 11.1 EER at full load
- **Reliable**—Scroll compressors have fewer moving parts; two circuits on all size units provide backup cooling
- **Quiet**—Optional quiet condenser fan reduces radiated sound by 11dB
- **Optional low ambient operation range down to 0°F**

For more detail, refer to Catalog 221.
For the most current information, refer to www.mcquay.com.



Model RCS air-cooled scroll
condensing unit—25 to 135 tons

**R-410A
Available
Early 2008**

Scroll Condensing Units—Physical Data

RCS 025C through 050C, R-22/R-407C

Physical data	RCS model number							
	025C		030C		040C		050C	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Nominal tons ¹	25		30		40		50	
Number of refrigerant circuits	2		2		2		2	
Unit operating charge, R-22/R-407C, lb (kg)	30 (11)	30 (11)	29 (11)	29 (11)	46 (17)	46 (17)	47 (18)	47 (18)
Cabinet dimensions, L × W × H, in (mm)	51.5 × 94.0 × 55.5 (1308 × 2388 × 1410)		51.5 × 94.0 × 55.5 (1308 × 2388 × 1410)		100.0 × 94.0 × 55.5 (2540 × 2388 × 1410)		83 × 99 × 73 (2108 × 2515 × 1854)	
Unit operating weight, lb (kg)	1807 (820)		1839 (834)		2760 (1252)		2933 (1330)	
Unit shipping weight, lb (kg)	1897 (860)		1931 (876)		2898 (1315)		3080 (1397)	
Add'l weight if copper finned coils, lb (kg)	80 (36)		90 (41)		423 (192)		435 (197)	
Compressors								
Type	Scroll		Scroll		Scroll		Scroll	
Nominal hp tonnage of each compressor	6.7	13	6.7	15	10	10	13	13
Number of compressors per circuit	2	1	2	1	2	2	2	2
Oil charge per compressor, oz (g)	60 (1701)	140 (3969)	60 (1701)	140 (3969)	140 (3969)	140 (3969)	140 (3969)	140 (3969)
Capacity reduction steps—2t								
Staging	0-25-50-75-100		0-25-50-75-100		0-25-50-75-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, ft ² (m ²)	36.8 (3.4)	36.8 (3.4)	36.8 (3.4)	36.8 (3.4)	76.2 (7.1)	76.2 (7.1)	78 (7.2)	78 (7.2)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 2	16 × 2	16 × 2	16 × 2
Pumpdown capacity, 90% full, lb (kg)	72 (33)	72 (33)	72 (33)	72 (33)	106 (48)	106 (48)	108 (49)	108 (49)
Maximum relief valve pressure setting, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type								
Number of fans—fan diameter, in (mm)	3—26 (660)		3—26 (660)		4—26 (660)		4—26 (660)	
Number of motors—hp (kW)	3—1.0		3—1.0		4—1.0		4—1.0 (.75)	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	7756 (39)		7756 (39)		7756 (39)		7756 (2364)	
60 Hz total unit airflow, cfm (L/s)	16,047 (7573)		16,047 (7573)		29,376 (13,864)		29,558 (13,950)	

1. Nominal capacity based on 95°F ambient air and 45°F saturated suction temperature (SST).

RCS 060C through 090C, R-22/R-407C

Physical data	RCS model number							
	060C		070C		075C		090C	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Nominal tons ¹	60		70		75		90	
Number of refrigerant circuits	2		2		2		2	
Unit operating charge, R-22, lb (kg)	48 (22)	48 (22)	55 (25)	55 (25)	55 (25)	55 (25)	65 (29)	65 (29)
Cabinet dimensions, L × W × H, in (mm)	83 × 99 × 73 (2108 × 2515 × 1854)		119 × 99 × 73 (3023 × 2515 × 1854)		119 × 99 × 73 (3023 × 2515 × 1854)		119 × 99 × 97 (3023 × 2515 × 2464)	
Unit operating weight, lb (kg)	3149 (1428)		3603 (1634)		3691 (1674)		4400 (1996)	
Unit shipping weight, lb (kg)	3306 (1500)		3783 (1716)		3876 (1758)		4620 (2096)	
Add'l weight if copper finned coils, lb (kg)	435 (197)		649 (294)		649 (294)		724 (328)	
Compressors								
Type	Scroll		Scroll		Scroll		Scroll	
Nominal hp tonnage of each compressor	15	15	10	10	13	13	13	15
Number of compressors per circuit	2	2	3	3	3	3	3	3
Oil charge per compressor, oz (g)	140 (3969)	140 (3969)	140 (3969)	140 (3969)	140 (3969)	140 (3969)	140 (3969)	140 (3969)
Capacity reduction steps—percent of compressor displacement								
Staging	0-25-50-75-100		0-17-33-50-67-83-100		0-17-33-50-67-83-100		0-17-33-50-67-83-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, ft ² (m ²)	78 (7.2)	78 (7.2)	117 (10.9)	117 (10.9)	117 (10.9)	117 (10.9)	117 (10.9)	135 (12.5)
Fins per inch × rows deep	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2
Pumpdown capacity, 90% full, lb (kg)	108 (49)	108 (49)	134 (61)	134 (61)	134 (61)	134 (61)	134 (61)	160 (73)
Maximum relief valve pressure setting, psig (kpa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type								
Number of fans—fan diameter, in (mm)	6–26 (660)		6–26 (660)		8–26 (660)		8–26 (660)	
Number of motors—hp (kW)	6–1.0 (.75)		6–1.0 (.75)		8–1.0 (.75)		8–1.0 (.75)	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	7756 (2364)		7756 (2364)		7756 (2364)		7756 (2364)	
60 Hz total unit airflow, cfm (L/s)	38,624 (18,229)		48,000 (22,653)		59,100 (27,892)		62,000 (29,261)	

1. Nominal capacity based on 95°F ambient air and 45°F saturated suction temperature (SST).

RCS 105C through 135C, R-22/R-407C

Physical data	RCS model number							
	105C		115C		125C		135C	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Nominal tons ¹	105		115		125		135	
Number of refrigerant circuits	2		2		2		2	
Unit operating charge, R-22, lb (kg)	71 (32)	71 (32)	84 (38)	84 (38)	55 (25)	55 (25)	65 (29)	65 (29)
Cabinet dimensions, L × W × H, in (mm)	119 × 99 × 97 (2108 × 2515 × 1854)		119 × 99 × 73 (3023 × 2515 × 1854)		139 × 99 × 73 (3023 × 2515 × 1854)		139 × 99 × 97 (3023 × 2515 × 2464)	
Unit operating weight, lb (kg)	4528 (2054)		5400 (2449)		5603 (2541)		5633 (5633)	
Unit shipping weight, lb (kg)	4754 (2156)		5670 (2572)		5883 (2668)		5915 (2683)	
Add'l weight if copper finned coils, lb (kg)	724 (328)		1008 (457)		1008 (457)		1008 (457)	
Compressors								
Type	Scroll		Discus		Discus		Discus	
Nominal hp tonnage of each compressor	15	15	30	30	30, 35	30, 35	35	35
Number of compressors per circuit	3	3	2	2	2	2	4	4
Oil charge per compressor, oz (g)	140 (3969)	140 (3969)	152 (4309)	152 (4309)	152 (4309) 160 (4536)	152 (4309) 160 (4536)	160 (4536)	160 (4536)
Capacity reduction steps—percent of compressor displacement								
Staging	0-17-33-50-67-83-100		0-25-50-75-100		0-22-44-72-100		0-25-50-75-100	
Optional Staging	N/A		0-12-25-38-50-63-75-88-100		0-11-22-32-44-61-79-89-100		0-16-33-42-50-67-83--92-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, ft ² (m ²)	135 (12.4)	135 (12.4)	181 (16.8)	181 (16.8)	181 (16.8)	181 (16.8)	181 (16.8)	181 (16.8)
Fins per inch × rows deep	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2	16 × 2
Pumpdown capacity, 90% full, lb (kg)	208 (94)	208 (94)	208 (94)	208 (94)	208 (94)	208 (94)	208 (94)	208 (94)
Maximum relief valve pressure setting, psig (kpa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type								
Number of fans—fan diameter, in (mm)	9–26 (660)		10–26 (660)		12–26 (660)		12–26 (660)	
Number of motors—hp (kW)	9–1.0 (.75)		10–1.0 (.75)		12–1.0 (.75)		12–1.0 (.75)	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	7756 (2364)		7756 (2364)		7756 (2364)		7756 (2364)	
60 Hz total unit airflow, cfm (L/s)	66,900 (31,573)		79,100 (37,331)		90,000 (42,475)		90,000 (42,475)	

1. Nominal capacity based on 95°F ambient air and 45°F saturated suction temperature (SST).

Air-Cooled Condensers—130 to 2225 MBh

- Model ACH offers most capacity per dollar
- Models ACL and ACX provide excellent efficiency and sound ratings at a moderate price
- Easy-to-install design reduces installation cost and time
- Fan motors and blades have been selected for the best performance at minimum sound levels
- High efficiency condenser coil designed for optimum performance
- Condenser coils are designed to operate with R-134a, R-407C, and R-410A

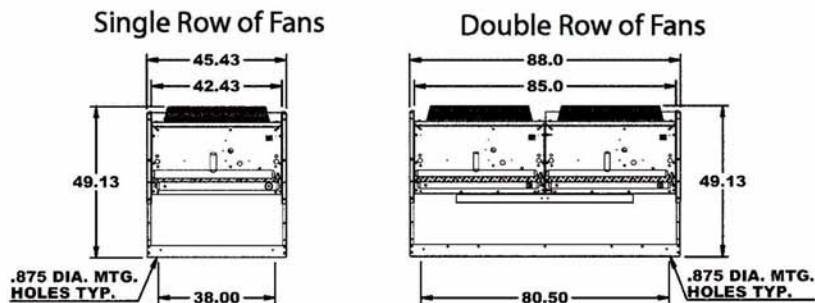
For more detail, refer to Catalog A-C Cond. For the most current information, refer www.to.mcquay.com.



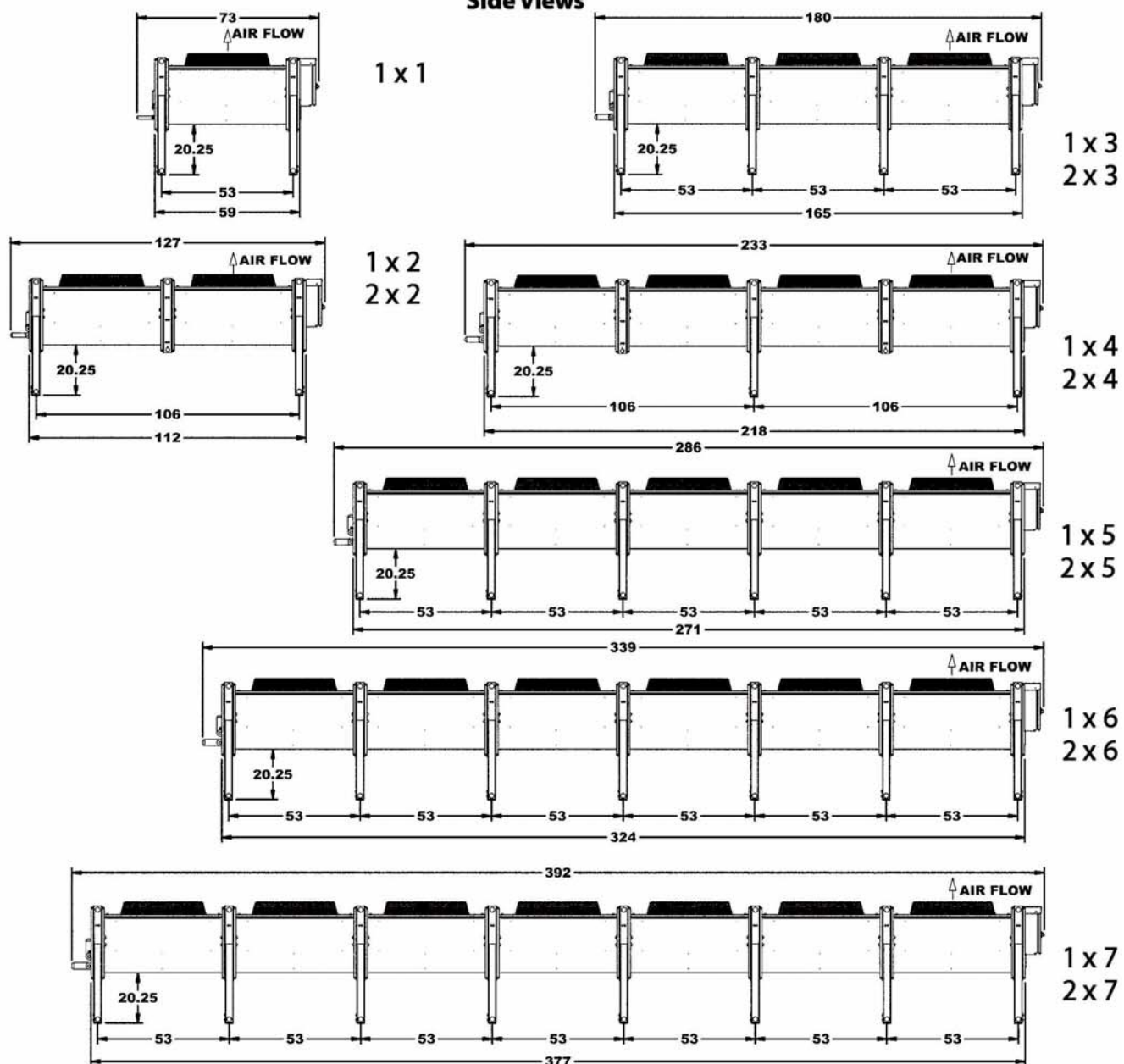
Models ACH/ACX/ACL air-cooled condenser—130 to 2225 MBh

Air-Cooled Condenser Dimensions (shown in inches)

End Views



Side Views



Models ACH, ACL, ACX Air-Cooled Condensers—Physical Data

Model 014S through 225D

Model number	Model ACH				Model ACL				Model ACX			
	Fans/ Row	CFM	Conn. (in)	Weight (lbs)	Fans/ Row	CFM	Conn. (in)	Weight (lbs)	Fans/ Row	CFM	Conn. (in)	Weight (lbs)
014 S	1	9900	1 3/8	330	1	8400	1 3/8	330	1	7600	1 3/8	330
016 S	1	9500	1 3/8	360	1	8000	1 3/8	360	1	7300	1 3/8	360
020 S	2	20,500	1 3/8	580	2	17,500	1 3/8	580	2	15,900	1 3/8	580
025 S	2	19,800	1 5/8	630	2	16,700	1 5/8	630	2	15,200	1 5/8	630
030 S	2	19,000	2 1/8	680	2	16,100	2 1/8	680	2	14,700	2 1/8	680
040 S	3	29,700	2 1/8	930	3	25,100	2 1/8	930	3	22,900	2 1/8	930
050 S	3	28,500	2 1/8	1000	3	24,100	2 1/8	1000	3	22,000	2 1/8	1000
055 S	4	38,600	2 1/8	1210	4	32,800	2 1/8	1210	4	29,800	2 1/8	1210
060 S	4	37,000	2 5/8	1310	4	31,200	2 5/8	1310	4	28,400	2 5/8	1310
070 S	5	48,300	2 5/8	1510	5	41,000	2 5/8	1510	5	37,300	2 5/8	1510
080 S	5	46,200	2 5/8	1640	5	39,100	2 5/8	1640	5	35,500	2 5/8	1640
100 S	6	55,400	2 5/8	1950	6	46,900	2 5/8	1950	6	42,600	2 5/8	1950
110 S	7	64,700	(2) 2 5/8	2240	7	54,700	(2) 2 5/8	2240	7	49,700	(2) 2 5/8	2240
040 D	2	41,000	(2) 1 3/8	1240	2	35,000	(2) 1 3/8	1240	2	31,700	(2) 1 3/8	1240
050 D	2	39,600	(2) 1 5/8	1340	2	33,500	(2) 1 5/8	1340	2	30,500	(2) 1 5/8	1340
060 D	2	38,100	(2) 2 1/8	1440	2	32,100	(2) 2 1/8	1440	2	29,300	(2) 2 1/8	1440
080 D	3	59,400	(2) 2 1/8	1990	3	50,200	(2) 2 1/8	1990	3	45,700	(2) 2 1/8	1990
100 D	3	57,100	(2) 2 1/8	2140	3	48,200	(2) 2 1/8	2140	3	44,000	(2) 2 1/8	2140
110 D	4	77,200	(2) 2 1/8	2630	4	65,600	(2) 2 1/8	2630	4	59,700	(2) 2 1/8	2630
130 D	4	73,900	(2) 2 5/8	2830	4	62,500	(2) 2 5/8	2830	4	56,800	(2) 2 5/8	2830
140 D	5	96,500	(2) 2 5/8	3290	5	82,000	(2) 2 5/8	3290	5	74,600	(2) 2 5/8	3290
160 D	5	92,400	(2) 2 5/8	3540	5	78,100	(2) 2 5/8	3540	5	71,000	(2) 2 5/8	3540
200 D	6	110,900	(2) 2 5/8	4230	6	93,700	(2) 2 5/8	4230	6	85,200	(2) 2 5/8	4230
225 D	7	129,400	(4) 2 5/8	4910	7	109,300	(4) 2 5/8	4910	7	99,400	(4) 2 5/8	4910

Direct Drive Fluid Coolers—5 to 212 Tons

- Specifically engineered for outdoor installation with heavy gauge galvanized steel construction to resist corrosion
- Factory-installed lifting brackets and single point field wiring reduce installation costs and time
- Coils are fabricated with corrugated aluminum fins and staggered copper tubes for optimum heat transfer
- Models AFS 023 through AFS 212 use the McQuay patented Floating Tube design to virtually eliminate leaks at the tube sheets
- Fan motor and blade assemblies undergo dynamic stress testing to provide low vibration levels and to improve the reliability of the air moving assembly

For more detail, refer to Catalog AFSD.
For the most current information, refer to www.mcquay.com.



Model AFS 005 through AFS 107—5 to 107 tons
Model AFD 046 through AFD 212—46 to 212 tons

Direct Drive Fluid Coolers—Physical Data

Model 005 through 021

Model	Fan data		Approximate net weight, lb	Approximate shipping weight, lb
	Fan configuration	Fan diameter		
005	1 × 1	24	180	325
008	1 × 1	26	260	380
010	1 × 2	24	450	600
012	1 × 2	26	470	620
014	1 × 2	26	510	650
016	1 × 2	26	530	680
021	1 × 3	26	550	725

Note: Net weight is unit only.

Model 023 through 212

Model	Fan data			Approximate operating charge, gal	Approximate net weight, lb ^{1, 2}	Approximate shipping weight, lb
	Fan configuration	Number of fans ³	cfm			
AFS single row of fans						
023	1 × 2	2	23,000	6.7	730	800
027	1 × 2	2	23,200	9.2	790	840
031	1 × 2	2	21,900	9.2	790	860
035	1 × 2	2	20,700	11.8	889	950
041	1 × 3	3	34,800	13.0	1190	1280
045	1 × 3	3	32,900	13.0	1210	1300
049	1 × 3	3	31,800	16.7	1240	1330
053	1 × 4	4	46,400	16.7	1580	1690
061	1 × 4	4	43,900	16.7	1620	1730
065	1 × 4	4	42,400	21.7	1650	1760
071	1 × 4	4	41,500	21.7	1760	1870
075	1 × 5	5	54,900	20.4	2000	2150
079	1 × 5	5	54,800	26.6	2020	2150
089	1 × 5	5	51,800	26.6	2200	2390
097	1 × 6	6	65,800	31.6	2390	2610
107	1 × 6	6	62,200	31.6	2630	2850
AFD double row of fans						
046	2 × 2	4	46,000	13.5	1540	1730
054	2 × 2	4	46,400	18.5	1580	1770
060	2 × 2	4	43,900	18.5	1620	1820
066	2 × 2	4	42,400	23.5	1650	1840
070	2 × 2	4	41,500	23.5	1760	1950
080	2 × 3	6	69,700	25.9	2360	2570
086	2 × 3	6	67,000	25.9	2380	2620
090	2 × 3	6	65,800	25.9	2420	2630
098	2 × 3	6	63,600	33.4	2480	2690
106	2 × 4	8	92,900	33.3	3150	3360
120	2 × 4	8	87,800	33.3	3230	3420
132	2 × 4	8	84,800	43.3	3300	3470
140	2 × 4	8	83,000	43.3	3510	3730
152	2 × 5	10	190,700	40.7	4040	4290
162	2 × 5	10	109,700	53.1	3990	4270
168	2 × 5	10	106,000	53.1	4130	4450
178	2 × 5	10	103,700	53.1	4390	4680
194	2 × 6	12	131,600	63.1	4790	5150
202	2 × 6	12	127,200	63.1	4960	5330
212	2 × 6	12	124,400	63.1	5270	5670

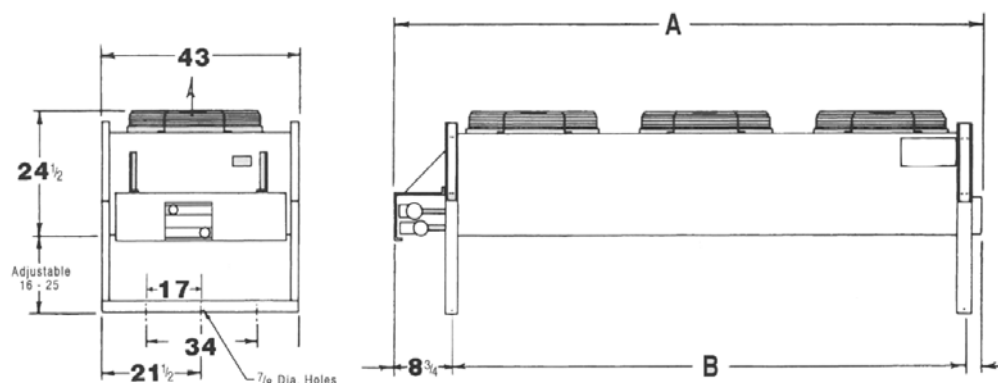
1. Net weight is unit only.

2. Operating weight based on 50% ethylene glycol at 130°F.

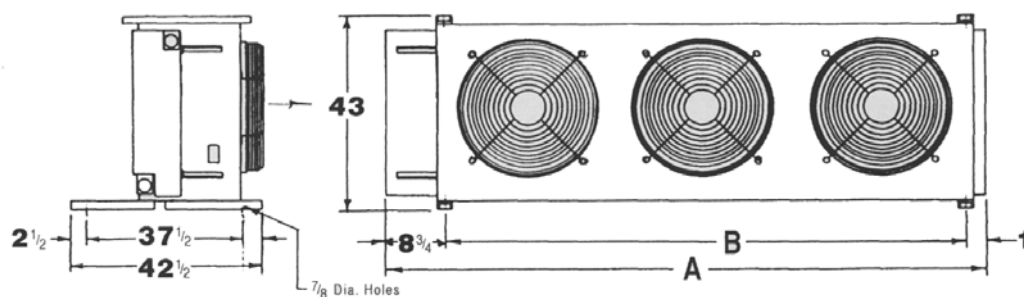
3. All fans are 30 inches in diameter.

Direct Drive Fluid Coolers—Dimensions

AFS 005 through AFS 021 with Vertical Flow



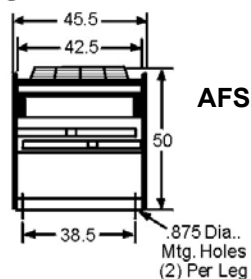
AFS 005 through AFS 021 with Horizontal Flow



Model	Dimensions (inches)	
	A	B
005	39 3/4	30
008	49 3/4	40
010	69 3/4	60
012	69 3/4	60
014	89 3/4	80
016	89 3/4	80
021	129 3/4	120

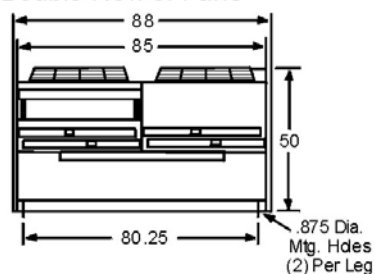
End Views

Single Row of Fans



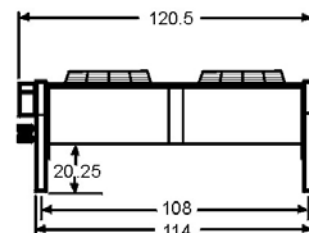
AFS 023 through AFS 107

Double Row of Fans

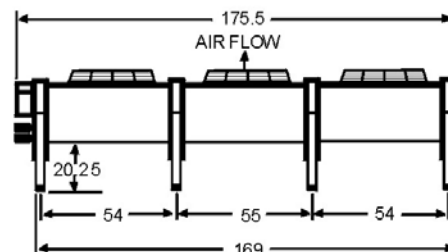


AFD 046 through AFD 212

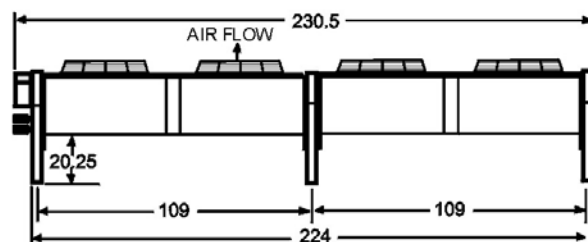
Side Views



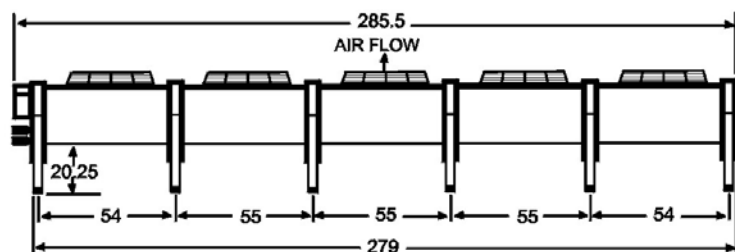
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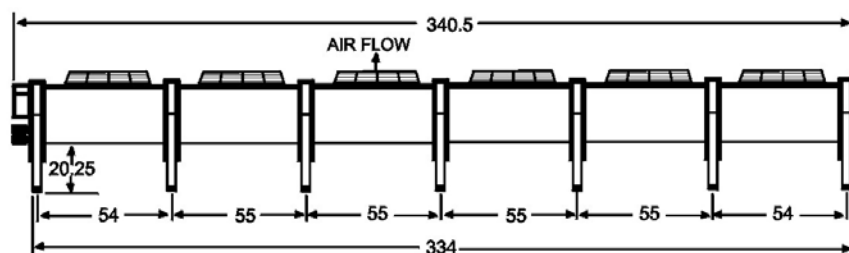
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2 x 3



1 x 4
2 x 4



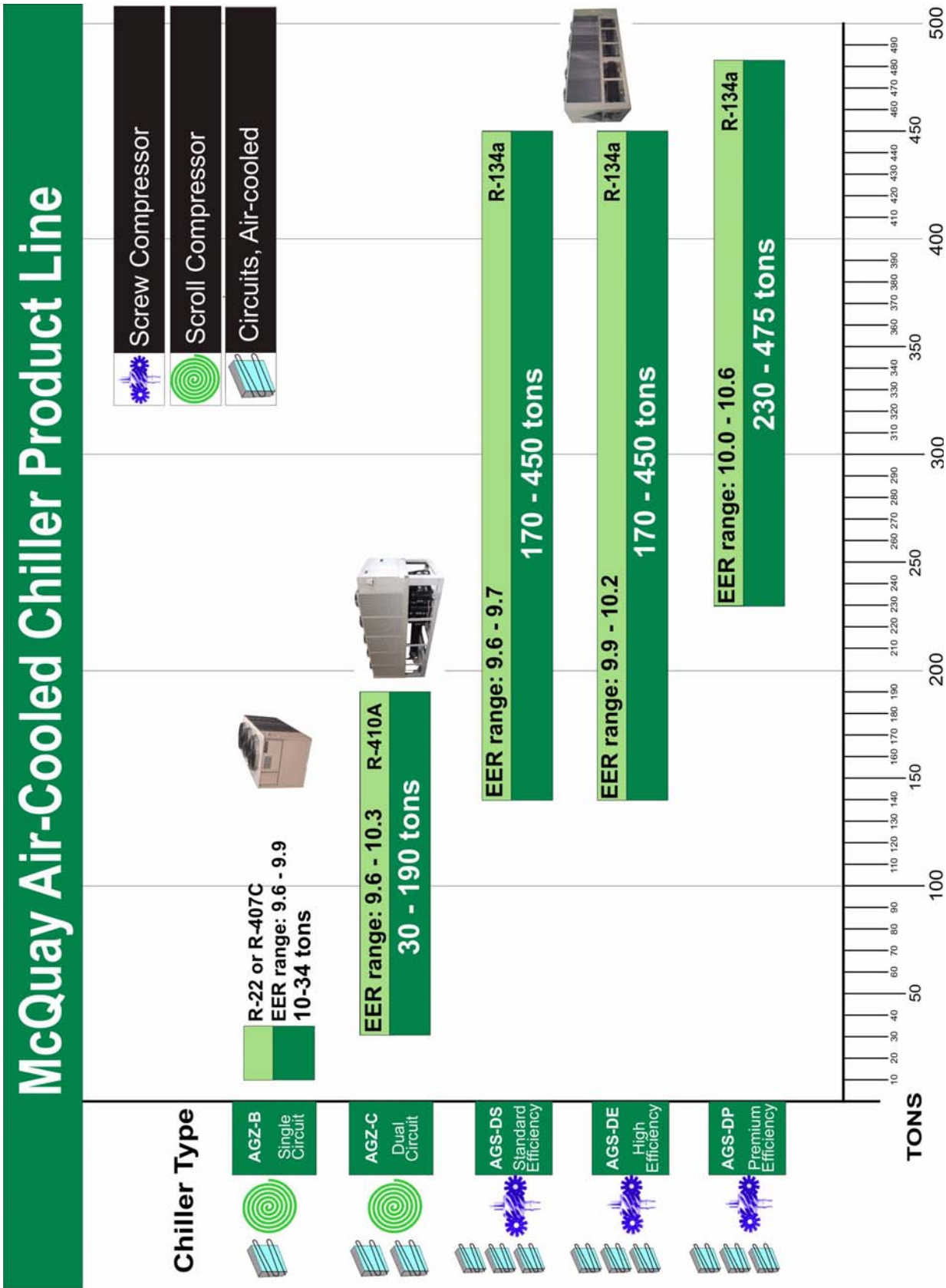
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2 x 6

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Air-Cooled Chiller Selection Chart



Air-Cooled Scroll Compressor Chillers—10 to 180 Tons

- **Efficient**—Meets or exceeds ASHRAE Standard 90.1-2004
Up to 10.0 EER at full load and up to 14.5 EER at part load (IPLV)
- **Quiet**—All dBA ratings tested in accordance with ARI Standard 370. Less acoustical treatment can lower your project's cost
- **Reliable**—Tandem or trio scroll compressor sets per circuit have fewer moving parts. Dual circuits start at 30 tons
- **Controls flexibility**—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- **Optional low ambient operation range down to -10°F**
- **Remote evaporators available**
- **Pumping package option available at all tonnages**

For more detail, refer to Catalog AGZC or ACZ-AGZB.
For the most current information, refer to www.mcquay.com.



Model AGZ-B—10 to 34 tons,
R-22 or R-407C



Model AGZ-C—30 to 180 tons,
R-410A
(unit shown with optional
louvers)

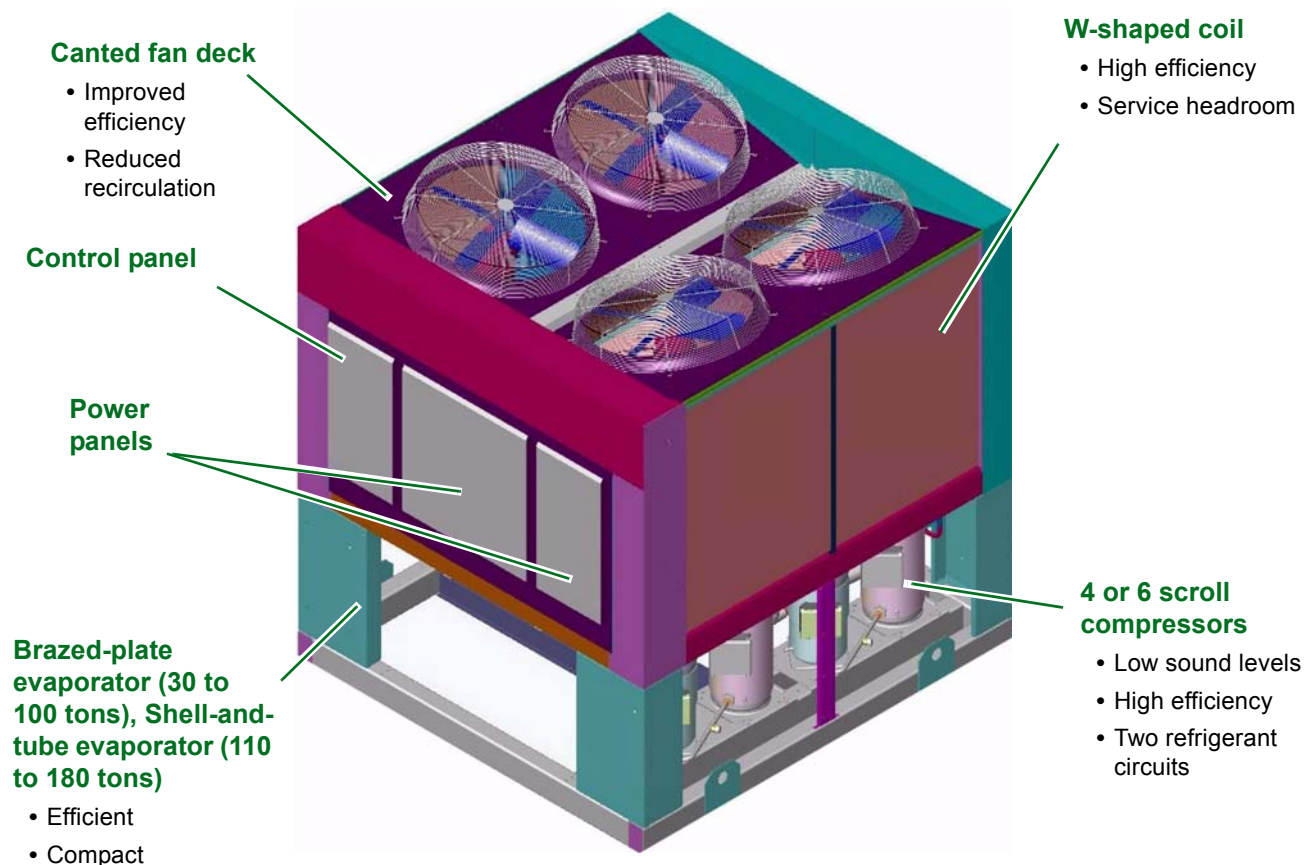


Available LONMARK certified

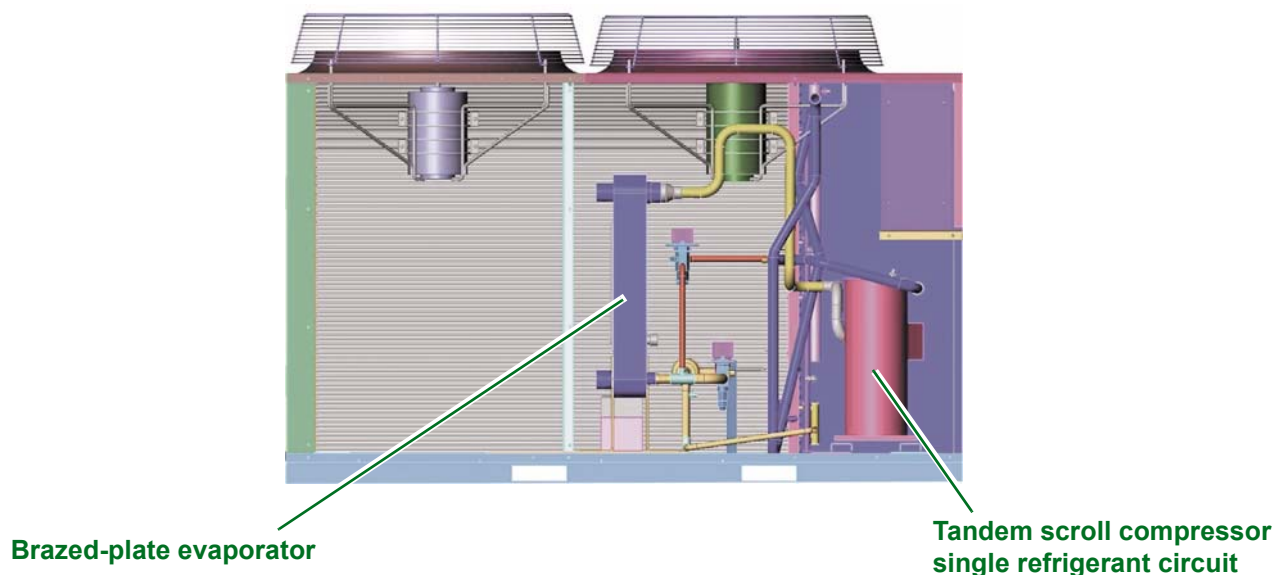


Features

Model AGZ 030C through AGZ 180C Two-Circuit Air-Cooled Scroll Chiller (four-fan model illustrated)



Model AGZ 010B through AGZ 034B Single-Circuit Chiller



AGZ Air-Cooled Scroll Compressor Packaged Chiller—Capacity and Physical Data

AGZ 010BS through 017BS, Packaged, R-22/R-407C

Physical data	AGZ model number		
	010BS	013BS	017BS
Basic data			
Unit capacity @ ARI conditions, tons (kW)*	10.0 (36.2)	13.7 (48.2)	15.8 (55.6)
No. of refrigerant circuits	1	1	1
Unit operating charge, R-22/R-407C, lb (kg)	13.8 (6.2)	14.1 (6.4)	18.0 (8.2)
Cabinet dimensions, L × W × H, in (mm)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)
Unit operating weight, lb (kg)	1095 (498)	1190 (541)	1300 (591)
Unit shipping weight, lb (kg)	1085 (493)	1170 (532)	1280 (582)
Add'l weight if copper finned coils, lb (kg) R-22 and [R-407C]	176 (80.0) [176 (80.0)]	176 (80.0) [176 (80.0)]	264 (120.0) [264 (120.0)]
Compressors			
Type	Scroll	Scroll	Scroll
Nominal tons per compressor	6.0 / 6.0	7.5 / 7.5	9.0 / 9.0
Oil charge per compressor of a tandem set, oz (g)	60 (1701)	85 (2410)	110 (3119)
Capacity reduction steps—percent of compressor displacement			
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling			
Coil face area, one of two sides, ft ² (m ²)	30.3 (2.8)	30.3 (2.8)	30.3 (2.8)
Finned height × finned length, in (mm)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)
Fins per inch × rows deep: R-22 and [R-407C]	16 × 2 [16 × 2]	16 × 2 [16 × 2]	16 × 3 [16 × 3]
Pumpdown capacity lb (kg)	35.3 (16.0)	35.3 (16.0)	52.9 (24.0)
Condenser fans—direct drive propeller type			
No. of fans/circuit—fan dia., in (mm)	2–26 (660)	2–26 (660)	2–26 (660)
No. of motors—hp (kW)**	2–1.0 (0.75)	2–1.0 (0.75)	2–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	13,950 (6584)	13,950 (6584)	12,000 (5664)
Direct expansion evaporator—brazed plate-to-plate			
Connection size victaulic, in (mm)	2 (51)	2 (51)	2 (51)
Water volume, gallons (L)	0.94 (3.6)	1.66 (6.3)	2.00 (7.6)
Maximum refrigerant working pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)
Maximum water pressure, psig (kPa)	350 (2413)	350 (2413)	350 (2413)

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

AGZ 020BS through 034BS, Packaged, R-22/R-407C

Physical data	AGZ model number			
	020BS	025BS	029BS	034BS
Basic data				
Unit capacity @ ARI conditions, tons (kW)*	20.6 (72.4)	22.7 (79.8)	27.7 (97.5)	34.0 (119.5)
No. of refrigerant circuits	1	1	1	1
Unit operating charge, R-22, lb (kg)	34.0 (15.4)	42.0 (19.1)	47.0 (21.3)	50.0 (22.7)
Cabinet dimensions, L × W × H, in (mm)	106.2 × 46.3 × 50.8 (2697 × 1176) × 1289	106.2 × 46.3 × 50.8 (2697 × 1176) × 1289	106.2 × 46.3 × 58.8 (2697 × 1176 × 1493)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1493)
Unit operating weight, lb (kg)	1590 (723)	1635 (743)	1830 (832)	2315 (1052)
Unit shipping weight, lb (kg)	1570 (714)	1610 (732)	1800 (818)	2270 (1032)
Add'l weight if copper finned coils, lb (kg)	350 (159)	350 (159)	435 (197)	435 (197)
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal tons per compressor	12.0 / 12.0	13.0 / 13.0	15.0 / 15.0	20.0 / 20.0
Oil charge per compressor of a tandem set, oz (g)	110 (3119)	110 (3119)	110 (3119)	158 (4479)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0–50–100	0–50–100	0–50–100	0–50–100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area, one of two sides, ft ² (m ²)	49.0 (4.6)	49.0 (4.6)	58.3 (5.4)	58.3 (5.4)
Finned height × finned length, in (mm)	84 × 84 (2134 × 2134)	84 × 84 (2134 × 2134)	100 × 84 (2545 × 2134)	100 × 84 (2545 × 2134)
Fins per inch × rows deep: R-22 and [R-407C]	16 × 2 [16 × 3]	16 × 3 [16 × 3]	16 × 3 [16 × 3]	16 × 3 [16 × 3]
Pumpdown capacity R-22 and [R-407C], lb (kg)	56.9 (25.9)	85.4 (38.8)	101.6 (46.2)	101.6 (46.2)
Condenser fans—direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	3–26 (660)	3–26 (660)	3–26 (660)	3–26 (660)
No. of motors—hp (kW)**	3–1.0 (0.75)	3–1.0 (0.75)	3–1.0 (0.75)	3–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	20,925 (9877)	20,925 (9877)	19,800 (9346)	19,800 (9346)
Direct expansion evaporator—brazed plate-to-plate				
Connection size victaulic, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)
Water volume, gallons (L)	2.16 (8.2)	3.05 (11.5)	4.00 (15.1)	5.55 (21.0)
Maximum refrigerant working pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Maximum water pressure, psig (kPa)	350 (2413)	350 (2413)	350 (2413)	350 (2413)

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

AGZ Air-Cooled Scroll Compressor Packaged Chiller with Remote Evaporator—Capacity and Physical Data

AGZ 010BM through 017BM, Remote Evaporator, R-22/R-407C

Physical data	AGZ model number		
	010BM	013BM	017BM
Basic data			
Unit capacity @ ARI conditions, tons (kW)*	10.0 (36.2)	13.7 (48.2)	15.8 (55.6)
No. of refrigerant circuits	1	1	1
Unit operating charge, R-22/R-407C, lb (kg)	13.0 (5.9)	14.0 (5.3)	17.0 (7.7)
Cabinet dimensions, L × W × H, in (mm)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)
Unit operating weight, lb (kg)	950 (431)	1276 (579)	1278 (580)
Unit shipping weight, lb (kg)	1025 (465)	1350 (613)	1363 (619)
Add'l weight if copper finned coils, lb (kg) R-22 and [R-407C]	176 (80.0) [176 (80.0)]	176 (80.0) [176 (80.0)]	264 (120.0) [264 (120.0)]
Compressors			
Type	Scroll	Scroll	Scroll
Nominal tons per compressor	6.0 / 6.0	7.5 / 7.5	9.0 / 9.0
Oil charge per compressor of a tandem set, oz (g)	60 (1701)	85 (2410)	110 (3119)
Capacity reduction steps—percent of compressor displacement			
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling			
Coil face area, one of two sides, ft ² (m ²)	30.3 (2.8)	30.3 (2.8)	30.3 (2.8)
Finned height × finned length, in (mm)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)
Fins per inch × rows deep: R-22 and [R-407C]	16 × 2 [16 × 2]	16 × 2 [16 × 2]	16 × 3 [16 × 3]
Pumpdown capacity lb (kg)	35.3 (16.0)	35.3 (16.0)	52.9 (24.0)
Condenser fans—direct drive propeller type			
No. of fans/circuit—fan dia., in (mm)	2–26 (660)	2–26 (660)	2–26 (660)
No. of motors—hp (kW)**	2–1.0 (0.75)	2–1.0 (0.75)	2–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	13,950 (6584)	13,950 (6584)	12,000 (5664)
Direct expansion evaporator—brazed plate-to-plate			
Connection size victaulic, in (mm)	2 (51)	2 (51)	2 (51)
Water volume, gallons (L)	0.94 (3.6)	1.66 (6.3)	2.00 (7.6)
Liquid line connection braze, in	1.125	1.125	1.125
Suction line connection braze, in	2.125	2.125	2.125
Temperature sensor connection NPT, in	0.75	0.75	0.75
Dry weight, lbs (kg)	50 (22)	75 (34)	87 (39)
Operating weight, lbs (kg)	58 (26)	88 (40)	109 (49)
Maximum refrigerant working pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)
Maximum water pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)
Vent and drain connection	Field	Field	Field

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

AGZ 020BM through 034BM, Remote Evaporator, R-22/R-407C

Physical data	AGZ model number			
	020BM	025BM	029BM	034BM
Basic data				
Unit capacity @ ARI conditions, tons (kW)*	20.0 (72.4)	22.7 (79.8)	27.7 (97.5)	34.0 (119.5)
No. of refrigerant circuits	1	1	1	1
Unit operating charge, R-22 and [R-407C], lb (kg)	34.0 (15.4) [38.0 (17.3)]	42.0 (19.1)	47.0 (21.3)	50.0 (22.7)
Cabinet dimensions, L × W × H, in (mm)	106.2 × 46.3 × 50.8 (2697 × 1176 × 1289)	106.2 × 46.3 × 50.8 (2697 × 1176 × 1289)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1494)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1494)
Unit operating weight, lb (kg)	1459 (662)	1478 (671)	1622 (737)	1817 (825)
Unit shipping weight, lb (kg)	1558 (707)	1576 (716)	1719 (780)	1914 (869)
Add'l weight if copper finned coils, lb (kg) R-22 and [R-407C]	284 (129.0) [426 (194.0)]	426 (194.0) [426 (194.0)]	508 (231.0) [508 (231.0)]	508 (231.0) [508 (231.0)]
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal tons per compressor	12.0 / 12.0	13.0 / 13.0	15.0 / 15.0	20.0 / 20.0
Oil charge per compressor of a tandem set, oz (g)	110 (3119)	110 (3119)	110 (3119)	158 (4479)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area, one of two sides, ft ² (m ²)	49.0 (4.6)	49.0 (4.6)	58.3 (5.4)	58.3 (5.4)
Finned height × finned length, in (mm)	84 × 84 (2134 × 2134)	84 × 84 (2134 × 2134)	100 × 84 (2545 × 2134)	100 × 84 (2545 × 2134)
Fins per inch × rows deep: R-22 and [R-407C]	16 × 2 [16 × 3]	16 × 3 [16 × 3]	16 × 3 [16 × 3]	16 × 3 [16 × 3]
Pumpdown capacity lb (kg)	56.9 (25.9) [85.4 (38.8)]	85.4 (38.8)	101.6 (46.2)	101.6 (46.2)
Condenser fans—direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	3–26 (660)	3–26 (660)	3–26 (660)	3–26 (660)
No. of motors—hp (kW)**	3–1.0 (0.75)	3–1.0 (0.75)	3–1.0 (0.75)	3–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	20,925 (9877)	20,925 (9877)	19,800 (9346)	19,800 (9346)
Direct expansion evaporator—brazed plate-to-plate				
Connection size victaulic, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)
Water volume, gallons (L)	2.16 (8.2)	3.05 (11.5)	4.00 (15.1)	5.55 (21.0)
Liquid line connection braze, in	1.125	1.125	1.375	1.375
Suction line connection braze, in	2.125	2.125	2.125	2.125
Temperature sensor connection NPT, in	0.75	0.75	0.75	0.75
Dry weight, lbs (kg)	92 (42)	124 (56)	156 (71)	211 (96)
Operating weight, lbs (kg)	110 (50)	148 (67)	188 (85)	255 (116)
Maximum refrigerant working pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Maximum water pressure, psig (kPa)	350 (2413)	350 (2413)	350 (2413)	350 (2413)
Vent and drain connection	Field	Field	Field	Field

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

AGZ Air-Cooled Scroll Compressor Packaged Chiller with Remote Evaporator—Capacity and Physical Data

AGZ 030CH through 040CH, Packaged, R-410A

Physical data	AGZ model number					
	030CH		035CH		040CH	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	31.5 (110.7)		34.1 (119.9)		37.1 (130.4)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	30 (13.6)	30 (13.6)	32 (14.5)	32 (14.5)	40 (18.1)	40 (18.1)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	3195 (1449)		3205 (1454)		3285 (1490)	
Unit shipping weight, lb (kg)	3180 (1442)		3185 (1445)		3265 (1481)	
Add'l weight if copper finned coils, lb (kg)	284 (129)		288 (130)		288 (130)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	8.5	8.5	8.5	10.0	10.0	10.0
No. of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-23-50-73-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-27-50-73-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	44.1 (4.1)	44.1 (4.1)
Finned height × finned length, in (mm)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 2	16 × 2
Pumpdown capacity, 90% full lb (kg)	40 (18)	40 (18)	40 (18)	47 (21)	47 (21)	47 (21)
Maximum relief valve pressure setting, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	4–30 (762)		4–30 (762)		4–30 (762)	
No. of motors—hp (kW)**	4–1.5 (1.1)		4–1.5 (1.1)		4–1.5 (1.1)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	24,316 (11,478)		39,600 (18,692)		39,600 (18,692)	
Evaporator—brazed plate-to-plate						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Water volume, gallons (L)	1.9 (7.14)		2.2 (8.3)		2.4 (9.1)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrig. working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic conn. in (mm)***	2.5 (65)		2.5 (65)		2.5 (65)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 045CH through 060CH, Packaged, R-410A

Physical data	AGZ model number							
	045CH		050CH		055CH		060CH	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	42.1 (148.0)		47.6 (167.4)		51.4 (180.7)		55.1 (193.7)	
No. of refrigerant circuits	2		2		2		2	
Unit operating charge, R-410A, lb (kg)	47 (21)	47 (21)	50 (23)	50 (23)	52 (24)	52 (24)	54 (25)	54 (25)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	3445 (1563)		3525 (1599)		3555 (1613)		3760 (1706)	
Unit shipping weight, lb (kg)	3420 (1551)		3495 (1585)		3525 (1599)		3710 (1683)	
Add'l weight if copper finned coils, lb (kg)	476 (216)		476 (216)		476 (130)		568 (258)	
Compressors								
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	11.5	11.5	13.0	13.0	13.0	13.0	15.0	15.0
No. of compressors per circuit	2	2	2	2	2	2	2	2
Oil charge per compressor, oz	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)
Capacity Reduction Steps—percent of compressor displacement								
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-25-50-75-100		0-23-50-73-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-25-50-75-100		0-27-50-77-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, ft ² (m ²)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)
Finned height × finned length, in (mm)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)
Condenser fans—direct drive propeller type								
No. of fans/circuit—fan dia., in (mm)	4–30 (762)		4–30 (762)		4–30 (762)		4–30 (762)	
No. of motors—hp (kW)**	4–1.5 (1.1)		4–1.5 (1.1)		4–1.5 (1.1)		4–2.0 (1.1)	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	39,600 (18,692)		39,600 (18,692)		37,228 (17,572)		43,452 (20,510)	
Evaporator—brazed plate-to-plate								
No. of evaporators	1		1		1		1	
No. of refrigerant circuits	2		2		2		2	
Water volume, gallons (L)	2.9 (11.0)		3.4 (12.8)		3.7 (14.0)		5.8 (22.1)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)		653 (4502)	
Max. refrig. working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)		653 (4502)	
Water inlet / outlet victaulic conn., in (mm)***	2.5 (65)		2.5 (65)		2.5 (65)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field		Field	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 065CH through 075CH, Packaged, R-410A

Physical data	AGZ model number					
	065CH		070CH		075CH	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	57.1 (200.8)		62.3 (219.1)		71.6 (251.7)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	58 (26)	58 (26)	60 (27)	60 (27)	80 (36)	80 (36)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)	
Unit operating weight, lb (kg)	3795 (1721)		4205 ((1907)		5510 (2499)	
Unit Shipping Weight, lb (kg)	3740 (1696)		4150 (1882)		5460 (2477)	
Add'l weight if copper finned Coils, lb (kg)	568 (258)		568 (258)		870 (395)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	15.0	15.0	15.0 / 20.0	15. / 20.0	20.0	20.0
No. of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	110 (3119)	110 (3119)	110 (3119) 158 (4479)	110 (3119) 158 (4479)	158 (4479)	158 (4479)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-25-50-75-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-25-50-75-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	52.6 (4.9)	52.6 (4.9)	52.6 (4.9)	52.6 (4.9)	66.2 (6.1)	66.2 (6.1)
Finned height × finned length, in (mm)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	42 × 113.4 (1069 × 2880)	42 × 113.4 (1069 × 2880)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full, lb (kg)	81 (37)	81 (37)	81 (37)	81 (37)	111 (50)	111 (50)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	4—30 (762)		4—30 (762)		6—30 (762)	
No. of motors—hp (kW)**	4—2.0 (1.5)		4—2.0 (1.5)		6—2.0 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	43,452 (20,510)		43,452 (20,510)		65,178 (30,765)	
Evaporator—brazed plate-to-plate						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Water volume, gallons (L)	6.4 (24.3)		6.4 (24.3)		6.4 (24.3)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrigerant working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic conn., in (mm)***	3 (80)		3 (80)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 080CH through 100CH, Packaged, R-410A

Physical data	AGZ model number					
	080CH		090CH		100CH	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	79.5 (279.5)		86.3 (303.4)		97.8 (343.6)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-22, lb (kg)	80 (36)	80 (36)	86 (39)	86 (39)	88 (40)	88 (40)
Cabinet dimensions, L × W × H, in (mm)	134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)	
Unit operating weight, lb (kg)	5600 (2540)		5710 (2590)		5815 (2638)	
Unit shipping weight, lb (kg)	5545 (2515)		5645 (2561)		5750 (2608)	
Add'l weight if copper finned coils, lb (kg)	870 (395)		870 (395)		870 (395)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	20.0	25.0	25.0	25.0	25.0 / 30.0	25.0 / 30.0
No. of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	158 (4479)	230 (6520)	230 (6520)	230 (6520)	230 (6520) 213 (6038)	230 (6520) 213 (6038)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-22-50-72-100		0-25-50-75-100		0-22-50-72-100	
Staging, 4 stages, circuit #2 in lead	0-28-50-78-100		0-25-50-75-100		0-22-50-72-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	66.2 (6.1)	66.2 (6.1)	78.8 (7.3)	78.8 (7.3)	78.8 (7.3)	78.8 (7.3)
Finned height × finned length, in (mm)	42 × 113.4 (1067 × 2880)	42 × 113.4 (1067 × 2880)	50 × 113.4 (1270 × 2880)	50 × 113.4 (1270 × 2880)	50 × 113.4 (1270 × 2880)	50 × 113.4 (1270 × 2880)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full, lb (kg)	111 (50)	111 (50)	130 (59)	130 (59)	130 (59)	130 (59)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	6–30 (762)		6–30 (762)		6–30 (762)	
No. of motors—hp (kW)**	6–2.0 (1.5)		6–2.0 (1.5)		6–2.0 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	65,178 (30,765)		65,178 (30,765)		65,178 (30,765)	
Evaporator—brazed plate-to-plate						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Water volume, gallons (L)	6.6 (24.9)		7.5 (28.4)		8.0 (30.2)	
Maximum water pressure, psig (kpa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrigerant working pressure, psig (kpa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic connections, in (mm)***	3 (80)		3 (80)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 110CH through 130CH, Packaged, R-410A

Physical data	AGZ model number					
	110CH		125CH		130CH	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	104.2 (366.0)		114.3 (402)		124.7 (438)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	102 (46)	102 (46)	115 (52)	115 (52)	115 (52)	115 (52)
Cabinet dimensions, L × W × H, in (mm)	173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)	
Unit operating weight, lb (kg)	7270 (3298)		7500 (3402)		7665 (3477)	
Unit shipping weight, lb (kg)	7200 (3266)		7420 (3366)		7570 (3434)	
Add'l weight if copper finned coils, lb (kg)	1155 (524)		1155 (524)		1155 (524)	
Compressors						
Type	Trio scrolls		Trio scrolls		Trio scrolls	
Nominal tonnage of each compressor	20.0	20.0	20.0	25.0	25.0	25.0
No. of compressors per circuit	3	3	3	3	3	3
Oil charge per compressor, oz (g)	158 (4479)	158 (4479)	158 (4479)	230 (6520)	230 (6520)	230 (6520)
Capacity reduction steps—percent of compressor displacement						
Staging, 6 stages, circuit #1 in lead	0-17-33-50-67-83-100		0-15-33-48-67-81-100		0-17-33-50-67-83-100	
Staging, 6 stages, circuit #2 in lead	0-17-33-50-67-83-100		0-19-33-52-67-86-100		0-17-33-50-67-83-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	88.4 (8.2)	88.4 (8.2)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)
Finned height × finned length, in (mm)	42 × 151.6 (1069 × 3851)	42 × 151.6 (1069 × 3851)	50 × 151.6 (1270 × 3851)	50 × 151.6 (1270 × 3851)	50 × 151.6 (1270 × 3851)	50 × 151.6 (1270 × 3851)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	142 (64)	142 (64)	166 (75)	166 (75)	166 (75)	166 (75)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	8–30 (762)		8–30 (762)		8–30 (762)	
No. of motors—hp (kW)**	8–2.0 (1.5)		8–2.0 (1.5)		8–2.0 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz Fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz Total unit airflow, cfm (L/s)	86,904 (41,020)		86,904 (41,020)		86,904 (41,020)	
Evaporator—shell and tube						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Water volume, gallons (L)	8.5 (32.1)		9.6 (36.3)		10.5 (39.7)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrigerant working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet viciaulic connections, in (mm)***	3 (80)		3 (80)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 140CH through 180CH, Packaged, R-410A

Physical data	AGZ model number					
	140CH		160CH		180CH	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	133.7 (470.0)		151.5 (533)		169.3 (595)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	135 (61)	135 (61)	140 (64)	140 (64)	140 (64)	140 (64)
Cabinet dimensions, L × W × H, in (mm)	218.6 × 88.0 × 100.4 (5552 × 2235 × 2545)		218.6 × 88.0 × 100.4 (5552 × 2235 × 2545)		218.6 × 88.0 × 100.4 (5552 × 2235 × 2545)	
Unit operating weight, lb (kg)	9530 (4323)		9680 (4391)		9830 (4459)	
Unit shipping weight, lb (kg)	9155 (4153)		9320 (4228)		9470 (4296)	
Add'l weight if copper finned coils, lb (kg)	1596 (724)		1596 (724)		1596 (724)	
Compressors						
Type	Trio scrolls		Trio scrolls		Trio scrolls	
Nominal tonnage of each compressor	25.0	25.0	25.0	30.0	30.0	30.0
No. of compressors per circuit	3	3	3	3	3	3
Oil charge per compressor, oz (g)	230 (6520)	230 (6520)	230 (6520)	213 (6038)	213 (6038)	213 (6038)
Capacity reduction steps—percent of compressor displacement						
Staging, 6 stages, circuit #1 in lead	0-17-33-50-67-83-100		0-15-33-48-67-81-100		0-17-33-50-67-83-100	
Staging, 6 stages, circuit #2 in lead	0-17-33-50-67-83-100		0-19-33-52-67-86-100		0-17-33-50-67-83-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)
Finned height × finned length, in (mm)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 2	16 × 2
Pumpdown capacity, 90% full lb (kg)	202 (92)	202 (92)	202 (92)	202 (92)	202 (92)	202 (92)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	10–30 (762)		10–30 (762)		10–30 (762)	
No. of motors—hp (kW)**	10–1.5 (1.0)		10–1.5 (1.0)		10–1.5 (1.0)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz Fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz Total unit airflow, cfm (L/s)	108,630 (51,268)		108,630 (51,268)		108,630 (51,268)	
Evaporator—shell and tube						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Water volume, gallons (L)	43 (164.0)		43 (164.0)		43 (164.0)	
Maximum water pressure, psig (kPa)	152 (1048)		152 (1048)		152 (1048)	
Max. refrigerant working pressure, psig (kPa)	450 (3103)		450 (3103)		450 (3103)	
Water inlet/outlet victaulic connections, in (mm)***	8 (200)		8 (200)		8 (200)	
Drain—NPT int, in	1/2-in NPTF		1/2-in NPTF		1/2-in NPTF	
Vent—NPT int, in (mm)	1/2-in NPTF		1/2-in NPTF		1/2-in NPTF	

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ Air-Cooled Scroll Compressor Packaged Chiller with Remote Evaporator—Capacity and Physical Data

AGZ 030CB through 040CB, Remote Evaporator, R-410A

Physical data	AGZ model number					
	030CB		035CB		040CB	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	31.5 (110.7)		34.1 (119.9)		37.1 (130.4)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	30 (13.6)	30 (13.6)	32 (14.5)	32 (14.5)	40 (18.1)	40 (18.1)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	3130 (1420)		3130 (1420)		3195 (1449)	
Unit shipping weight, lb (kg)	3070 (1393)		3070 (1393)		3115 (1413)	
Add'l weight if copper finned coils, lb (kg)	284 (129)		288 (130)		288 (130)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	8.5	8.5	8.5	10.0	10.0	10.0
No. of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-23-50-73-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-27-50-73-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	44.1 (4.1)	44.1 (4.1)
Finned height × finned length, in (mm)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 2	16 × 2
Pumpdown capacity, 90% full lb (kg)	40 (18)	40 (18)	40 (18)	40 (18)	47 (21)	47 (21)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	4–30 (762)		4–30 (762)		4–30 (762)	
No. of motors—hp (kW)**	4–1.5 (1.1)		4–1.5 (1.1)		4–1.5 (1.1)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	24,316 (11,478)		39,600 (18,692)		39,600 (18,692)	
Evaporator—brazed plate-to-plate						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Dry weight, lb (kg)	99 (45)		110 (50)		126 (57)	
Water volume, gallons (L)	1.9 (7.14)		2.2 (8.3)		2.4 (9.1)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrig. working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic conn. in (mm)***	2.5 (65)		2.5 (65)		2.5 (65)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 045CB through 060CB, Remote Evaporator, R-410A

Physical data	AGZ model number							
	045CB		050CB		055CB		060CB	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	42.1 (148.0)		47.6 (167.4)		51.4 (180.7)		55.1 (193.7)	
No. of refrigerant circuits	2		2		2		2	
Unit operating charge, R-410A, lb (kg)	47 (21)	47 (21)	50 (23)	50 (23)	52 (24)	52 (24)	54 (25)	54 (25)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	3360 (1524)		3380 (1533)		3410 (1547)		3430 (1556)	
Unit shipping weight, lb (kg)	3260 (1479)		3280 (1488)		3300 (1497)		3320 (1506)	
Add'l weight if copper finned coils, lb (kg)	476 (216)		476 (216)		476 (130)		568 (258)	
Compressors								
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	11.5	11.5	13.0	13.0	13.0	15.0	15.0	15.0
No. of compressors per circuit	2	2	2	2	2	2	2	2
Oil charge per compressor, oz	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)	110 (3119)
Capacity Reduction Steps—percent of compressor displacement								
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-25-50-75-100		0-23-50-73-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-25-50-75-100		0-27-50-77-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, ft ² (m ²)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)
Finned height × finned length, in (mm)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)	42 × 75.6 (1067 × 1920)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)	69 (31)
Condenser fans—direct drive propeller type								
No. of fans/circuit—fan dia., in (mm)	4–30 (762)		4–30 (762)		4–30 (762)		4–30 (762)	
No. of motors—hp (kW)**	4–1.5 (1.1)		4–1.5 (1.1)		4–1.5 (1.1)		4–2.0 (1.1)	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	39,600 (18,692)		39,600 (18,692)		37,228 (17,572)		43,452 (20,510)	
Evaporator—brazed plate-to-plate								
No. of evaporators	1		1		1		1	
No. of refrigerant circuits	2		2		2		2	
Dry weight, lb (kg)	146 (66)		165 (75)		183 (83)		229 (104)	
Water volume, gallons (L)	2.9 (11.0)		3.4 (12.8)		3.7 (14.0)		5.8 (22.1)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)		653 (4502)	
Max. refrig. working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)		653 (4502)	
Water inlet / outlet victaulic conn., in (mm)***	2.5 (65)		2.5 (65)		2.5 (65)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field		Field	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 065CB through 075CB, Remote Evaporator, R-410A

Physical data	AGZ model number					
	065CB		070CB		075CB	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	57.1 (200.8)		62.3 (219.1)		71.6 (251.7)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	58 (26)	58 (26)	60 (27)	60 (27)	80 (36)	80 (36)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)	
Unit operating weight, lb (kg)	3470 (1574)		3700 (1678)		5510 (2499)	
Unit Shipping Weight, lb (kg)	3350 (1520)		3580 (1624)		5460 (2477)	
Add'l weight if copper finned Coils, lb (kg)	568 (258)		568 (258)		870 (395)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	15.0	15.0	15.0 / 20.0	15. / 20.0	20.0	20.0
No. of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	110 (3119)	110 (3119)	110 (3119) 158 (4479)	110 (3119) 158 (4479)	158 (4479)	158 (4479)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-25-50-75-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-25-50-75-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	52.6 (4.9)	52.6 (4.9)	52.6 (4.9)	52.6 (4.9)	66.2 (6.1)	66.2 (6.1)
Finned height × finned length, in (mm)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	42 × 113.4 (1069 × 2880)	42 × 113.4 (1069 × 2880)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full, lb (kg)	81 (37)	81 (37)	81 (37)	81 (37)	111 (50)	111 (50)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	4–30 (762)		4–30 (762)		6–30 (762)	
No. of motors—hp (kW)**	4–2.0 (1.5)		4–2.0 (1.5)		6–2.0 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	43,452 (20,510)		43,452 (20,510)		65,178 (30,765)	
Evaporator—brazed plate-to-plate						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Dry weight, lb (kg)	251 (114)		251 (114)		243 (110)	
Water volume, gallons (L)	6.4 (24.3)		6.4 (24.3)		6.4 (24.3)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrigerant working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic conn., in (mm)***	3 (80)		3 (80)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 080CB through 100CB, Remote Evaporator, R-410A

Physical data	AGZ model number					
	080CB		090CB		100CB	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	79.5 (279.5)		86.3 (303.4)		97.8 (343.6)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-22, lb (kg)	80 (36)	80 (36)	86 (39)	86 (39)	88 (40)	88 (40)
Cabinet dimensions, L × W × H, in (mm)	134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)	
Unit operating weight, lb (kg)	5320 (2413)		5390 (2445)		5480 (2486)	
Unit shipping weight, lb (kg)	5160 (2341)		5220 (2368)		5300 (2404)	
Add'l weight if copper finned coils, lb (kg)	870 (395)		870 (395)		870 (395)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	20.0	25.0	25.0	25.0	25.0 / 30.0	25.0 / 30.0
No. of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	158 (4479)	230 (6520)	230 (6520)	230 (6520)	230 (6520) 213 (6038)	230 (6520) 213 (6038)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-22-50-72-100		0-25-50-75-100		0-22-50-72-100	
Staging, 4 stages, circuit #2 in lead	0-28-50-78-100		0-25-50-75-100		0-22-50-72-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	66.2 (6.1)	66.2 (6.1)	78.8 (7.3)	78.8 (7.3)	78.8 (7.3)	78.8 (7.3)
Finned height × finned length, in (mm)	42 × 113.4 (1067 × 2880)	42 × 113.4 (1067 × 2880)	50 × 113.4 (1270 × 2880)	50 × 113.4 (1270 × 2880)	50 × 113.4 (1270 × 2880)	50 × 113.4 (1270 × 2880)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full, lb (kg)	111 (50)	111 (50)	130 (59)	130 (59)	130 (59)	130 (59)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	6–30 (762)		6–30 (762)		6–30 (762)	
No. of motors—hp (kW)**	6–2.0 (1.5)		6–2.0 (1.5)		6–2.0 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	65,178 (30,765)		65,178 (30,765)		65,178 (30,765)	
Evaporator—brazed plate-to-plate						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Dry weight	258 (117)		287 (130)		324 9147)	
Water volume, gallons (L)	6.6 (24.9)		7.5 (28.4)		8.0 (30.2)	
Maximum water pressure, psig (kpa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrigerant working pressure, psig (kpa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic connections, in (mm)***	3 (80)		3 (80)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 110CB through 130CB, Remote Evaporator, R-410A

Physical data	AGZ model number					
	110CB		125CB		130CB	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	104.2 (366.0)		114.3 (402)		124.7 (438)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	102 (46)	102 (46)	115 (52)	115 (52)	115 (52)	115 (52)
Cabinet dimensions, L × W × H, in (mm)	173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)	
Unit operating weight, lb (kg)	6035 (2737)		6215 (2819)		6315 (2864)	
Unit shipping weight, lb (kg)	5830 (2644)		5995 (2719)		6085 (2760)	
Add'l weight if copper finned coils, lb (kg)	1155 (524)		1155 (524)		1155 (524)	
Compressors						
Type	Trio scrolls		Trio scrolls		Trio scrolls	
Nominal tonnage of each compressor	20.0	20.0	20.0	25.0	25.0	25.0
No. of compressors per circuit	3	3	3	3	3	3
Oil charge per compressor, oz (g)	158 (4479)	158 (4479)	158 (4479)	230 (6520)	230 (6520)	230 (6520)
Capacity reduction steps—percent of compressor displacement						
Staging, 6 stages, circuit #1 in lead	0-17-33-50-67-83-100		0-15-33-48-67-81-100		0-17-33-50-67-83-100	
Staging, 6 stages, circuit #2 in lead	0-17-33-50-67-83-100		0-19-33-52-67-86-100		0-17-33-50-67-83-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	88.4 (8.2)	88.4 (8.2)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)
Finned height × finned length, in (mm)	42 × 151.6 (1069 × 3851)	42 × 151.6 (1069 × 3851)	50 × 151.6 (1270 × 3851)	50 × 151.6 (1270 × 3851)	50 × 151.6 (1270 × 3851)	50 × 151.6 (1270 × 3851)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	142 (64)	142 (64)	166 (75)	166 (75)	166 (75)	166 (75)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	8–30 (762)		8–30 (762)		8–30 (762)	
No. of motors—hp (kW)**	8–2.0 (1.5)		8–2.0 (1.5)		8–2.0 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz Fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz Total unit airflow, cfm (L/s)	86,904 (41,020)		86,904 (41,020)		86,904 (41,020)	
Evaporator—shell and tube						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Dry weight, lb (kg)	324 (147)		359 (163)		410 (186)	
Water volume, gallons (L)	8.5 (32.1)		9.6 (36.3)		10.5 (39.7)	
Maximum water pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Max. refrigerant working pressure, psig (kPa)	653 (4502)		653 (4502)		653 (4502)	
Water inlet/outlet victaulic connections, in (mm)***	3 (80)		3 (80)		3 (80)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

AGZ 140CB through 180CB, Remote Evaporator, R-410A

Physical data	AGZ model number					
	140CB		160CB		180CB	
Basic data	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Unit capacity @ ARI conditions, tons (kW)*	133.7 (470.0)		151.5 (533)		169.3 (595)	
No. of refrigerant circuits	2		2		2	
Unit operating charge, R-410A, lb (kg)	135 (61)	135 (61)	140 (64)	140 (64)	140 (64)	140 (64)
Cabinet dimensions, L × W × H, in (mm)	218.6 × 88.0 × 100.4 (5552 × 2235 × 2545)		218.6 × 88.0 × 100.4 (5552 × 2235 × 2545)		218.6 × 88.0 × 100.4 (5552 × 2235 × 2545)	
Unit operating weight, lb (kg)	8380 (3801)		8510 (3860)		8630 (3915)	
Unit shipping weight, lb (kg)	8120 (3683)		8240 (3738)		8350 (3788)	
Add'l weight if copper finned coils, lb (kg)	1596 (724)		1596 (724)		1596 (724)	
Compressors						
Type	Trio scrolls		Trio scrolls		Trio scrolls	
Nominal tonnage of each compressor	25.0	25.0	25.0	30.0	30.0	30.0
No. of compressors per circuit	3	3	3	3	3	3
Oil charge per compressor, oz (g)	230 (6520)	230 (6520)	230 (6520)	213 (6038)	213 (6038)	213 (6038)
Capacity reduction steps—percent of compressor displacement						
Staging, 6 stages, circuit #1 in lead	0-17-33-50-67-83-100		0-15-33-48-67-81-100		0-17-33-50-67-83-100	
Staging, 6 stages, circuit #2 in lead	0-17-33-50-67-83-100		0-19-33-52-67-86-100		0-17-33-50-67-83-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, ft ² (m ²)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)	131.8 (12.2)
Finned height × finned length, in (mm)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)	50 × 190.0 (1270 × 4821)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 2	16 × 2
Pumpdown capacity, 90% full lb (kg)	202 (92)	202 (92)	202 (92)	202 (92)	202 (92)	202 (92)
Condenser fans—direct drive propeller type						
No. of fans/circuit—fan dia., in (mm)	10–30 (762)		10–30 (762)		10–30 (762)	
No. of motors—hp (kW)**	10–1.5 (1.0)		10–1.5 (1.0)		10–1.5 (1.0)	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz Fan tip speed, fpm (m/s)	8950 (45)		8950 (45)		8950 (45)	
60 Hz Total unit airflow, cfm (L/s)	108,630 (51,268)		108,630 (51,268)		108,630 (51,268)	
Evaporator—shell and tube						
No. of evaporators	1		1		1	
No. of refrigerant circuits	2		2		2	
Dry weight, lb (kg)	870 (395)		870 (395)		870 (395)	
Water volume, gallons (L)	58 (219.0)		58 (219.0)		58 (219.0)	
Maximum water pressure, psig (kPa)	152 (1048)		152 (1048)		152 (1048)	
Max. refrigerant working pressure, psig (kPa)	450 (3103)		450 (3103)		450 (3103)	
Water inlet/outlet victaulic connections, in (mm)***	8 (200)		8 (200)		8 (200)	
Drain—NPT int, in	1/2-in NPTF		1/2-in NPTF		1/2-in NPTF	
Vent—NPT int, in (mm)	1/2-in NPTF		1/2-in NPTF		1/2-in NPTF	

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Except for 380V/60 and 575V/60, hp = 2.0.

*** Water connection shown is nominal pipe size.

Screw Compressor Chillers—170 to 500 Tons

- Ultra-quiet operation - as low as 63 dBA per ARI Standard 370, with optional sound attenuation package
- Application flexibility - remote evaporator option allows for split system applications
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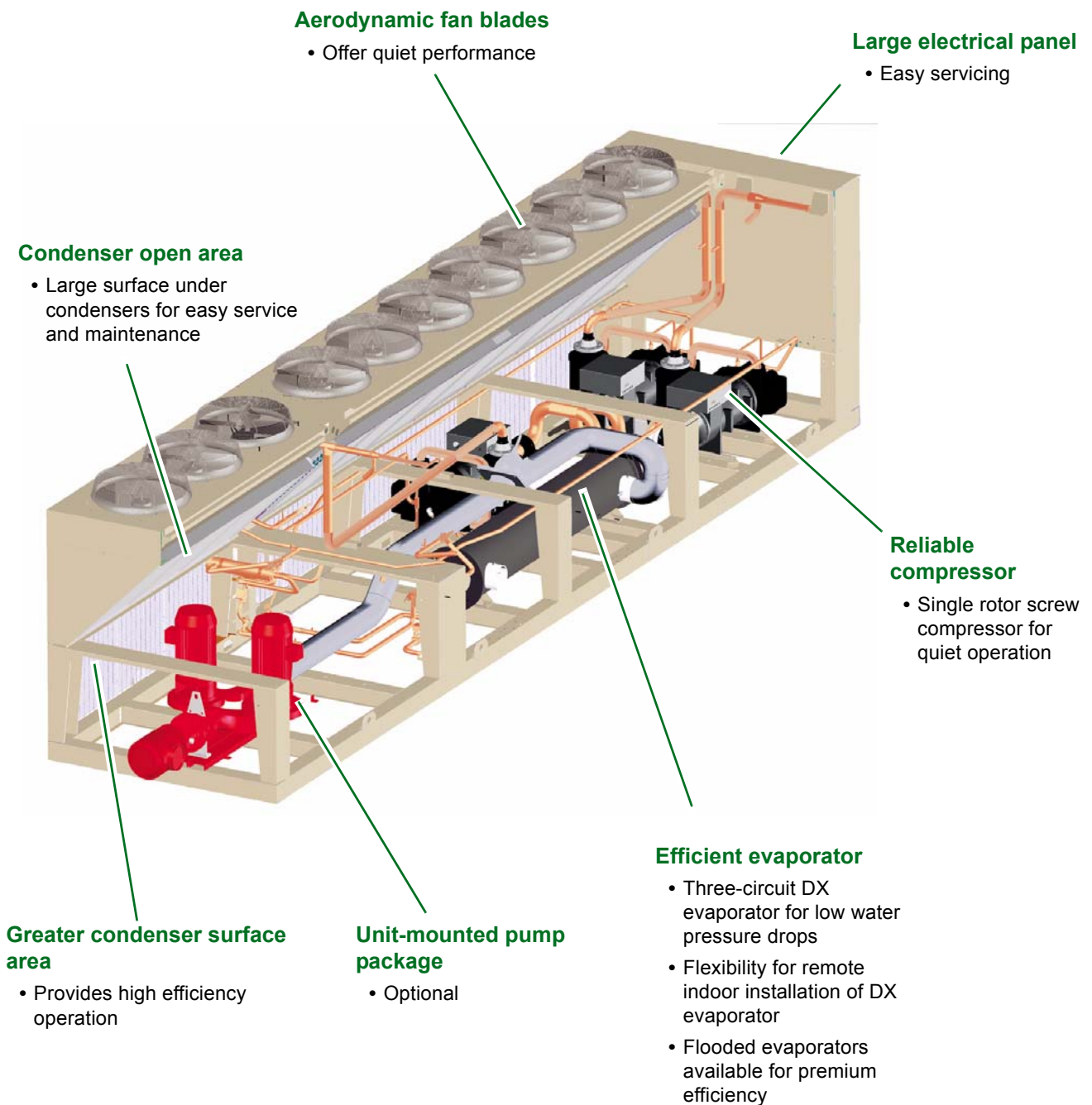
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air-cooled screw compressor
chiller—170 to 500 tons



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AGS Screw Packaged Chiller—Capacity and Physical Data—Standard Efficiency

AGS 170DS through AGS 190DS, Standard Efficiency, R-134a

Data	AGS model number			
	170DS		190DS	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	163.7 (575.7)		183.6 (645.7)	
Unit operating charge lb (kg)	170 (77)	170 (77)	190 (86)	190 (86)
Cabinet dimensions L × W × H, in (mm)	229 × 88 × 100 (5821 × 2235 × 2542)		267 × 88 × 100 (6792 × 2235 × 2542)	
Unit operating weight, lb (kg)	10,990 (4985)		11,725 (5319)	
Unit shipping weight, lb (kg)	10,415 (4724)		11,170 (5067)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	85 (299)	85 (299)	85 (229)	100 (352)
Minimum capacity (% of full load)	15	15	15	15
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lb (kg)	399 (181)	399 (181)	438 (199)	438 (199)
Coil inlet face area, ft ² (m ²)	131.8 (12.2)	131.8 (12.2)	158.3 (14.7)	158.3 (14.7)
Condenser fans, direct drive propeller type				
No. of fans/circuit–fan dia., in (mm)	5–30 (762)		6–30 (762)	
Fan motors–hp (kW)	2 (1.5)		2 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	108,630 (51,280)		130,360 (61,530)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	16 × 108 (406 × 2750)		16 × 108 (406 × 2750)	
Water volume, gallons (L)	65.8 (249.4)		63.6 (241)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

AGS 200DS through AGS 210DS, Standard Efficiency, R-134a

Data	AGS model number			
	200DS		210DS	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	190.5 (670)		202.8 (713.2)	
Unit operating charge lb (kg)	200 (91)	200 (91)	200 (91)	200 (91)
Cabinet dimensions L × W × H, in (mm)	267 × 88 × 100 (6792 × 2235 × 2542)		267 × 88 × 100 (6792 × 2235 × 2542)	
Unit operating weight, lb (kg)	11,725 (5319)		11,895 (5396)	
Unit shipping weight, lb (kg)	11,170 (5067)		11,335 (5142)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	100 (352)	100 (352)	105 (370)	105 (370)
Minimum capacity (% of full load)	15	15	15	15
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lb (kg)	438 (199)	438 (199)	438 (199)	438 (199)
Coil inlet face area, ft ² (m ²)	158.3 (14.7)	158.3 (14.7)	158.3 (14.7)	158.3 (14.7)
Condenser fans, direct drive propeller type				
No. of fans/circuit–fan dia., in (mm)	6–30 (762)		6–30 (762)	
Fan motors–hp (kW)	2 (1.5)		2 (1.5)	
Fan and motor rpm, 60 Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	130,360 (61,530)		130,360 (61,530)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	16 × 108 (406 × 2750)		16 × 108 (406 × 2750)	
Water volume, gallons (L)	63.6 (241)		63.6 (241)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS 225DS through AGS 250DS, Standard Efficiency, R-134a

Data	AGS model number			
	225DS		250DS	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	211.2 (742.6)		231.6 (814.3)	
Unit operating charge, lb (kg)	185 (84)	185 (84)	210 (95)	210 (95)
Cabinet dimensions L × W × H, in (mm)	243 × 88 × 97 (6172 × 2225 × 2464)		279 × 88 × 97 (7087 × 2225 × 2464)	
Unit operating weight, lb (kg)	12,556 (5700)		13,398 (6077)	
Unit shipping weight, lb (kg)	12,007 (5446)		12,849 (5828)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	125 (437)
Minimum capacity (% of full load)	15		15	
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lbs (kg)	249 (113)	249 (113)	287 (130)	287 (130)
Coil inlet face area, ft ² (m ²)	129.2 (12.0)	129.2 (12.0)	150.8 (14.0)	150.8 (14.0)
Condenser fans, direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	6–30 (762)	6–30 (762)	7–30 (762)	7–30 (762)
Fan motor hp (kW)	2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	137,328 (64,819)		160,216 (75,622)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	16 x 108 (406 x 2750)		16 x 108 (406 x 2750)	
Water volume, gallons (L)	65.8 (249.4)		65.8 (249.4)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

AGS 275DS through 300DS, Standard Efficiency, R-134a

Data	AGS model number			
	275DS		300DS	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	263.1 (925.1)		297.0 (1042.5)	
Unit operating charge, lb (kg)	210 (95)	240 (109)	240 (109)	240 (109)
Cabinet dimensions L × W × H, in (mm)	314 × 88 × 97 (7984 × 2225 × 2464)		314 × 88 × 97 (7984 × 2225 × 2464)	
Unit operating weight, lb (kg)	14,958 (6785)		14,903 (6759)	
Unit shipping weight, lb (kg)	14,049 (6374)		14,954 (6783)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	125 (437)	150 (525)	150 (525)	150 (525)
Minimum capacity (% of full load)	15		15	
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lbs (kg)	287 (130)	325 (148)	325 (148)	325 (148)
Coil inlet face area, ft ² (m ²)	150.8 (14.0)	172.5 (16.0)	172.5 (16.0)	172.5 (16.0)
Condenser fans, direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	8–30 (762)	8–30 (762)	8–30 (762)	8–30 (762)
Fan motor - hp (kW)	2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	183,104 (86,425)		183,104 (86,425)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)		20 x 108 (508 x 2750)	
Water volume, gallons (L)	108.5 (411.1)		103.2 (391.2)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS 330DS through AGS 360DS, Standard Efficiency, R-134a

Data	AGS model number								
	330DS			350DS			360DS		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data									
Unit cap. @ ARI conditions, tons (kW)*	318.7 (1120.5)			337.2 (1185.6)			351.1 (1234.5)		
Unit operating charge, lb (kg)	210 (95)	210 (95)	190 (86)	210 (95)	210 (95)	190 (86)	210 (95)	210 (95)	190 (86)
Cabinet dimensions L x W x H, in (mm)	403 x 88 x 97 (10,239 x 2225 x 2459)			403 x 88 x 97 (10,239 x 2225 x 2459)			403 x 88 x 97 (10,239 x 2225 x 2459)		
Unit operating weight, lb (kg)	20,507 (9302)			20,507 (9302)			20,517 (9307)		
Unit shipping weight, lb (kg)	19,596 (8889)			19,596 (8889)			19,639 (8908)		
Compressors, screw, semi-hermetic									
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	100 (350)	125 (437)	100 (350)	125 (437)	125 (437)	100 (350)
Minimum capacity, (% of full load)	10			10			10		
Condensers, high efficiency fin and tube type with integral subcooler									
Pumpdown capacity, lbs (kg)	287 (130)	287 (130)	243 (110)	287 (130)	287 (130)	243 (110)	287 (130)	287 (130)	243 (110)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	128.5 (12)	150.8 (14)	150.8 (14)	128.5 (12)	150.8 (14)	150.8 (14)	128.5 (12)
Condenser fans, direct drive propeller type									
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	6	7	7	6	7	7	6
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	228,880 (108,031)			228,880 (108,031)			228,880 (108,031)		
Evaporator, direct expansion shell and tube									
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)			20 x 108 (508 x 2750)			20 x 108 (508 x 2750)		
Water volume, gallons (L)	107.0 (405.4)			107.0 (405.4)			103.2 (391.2)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)			350 (2413)		

AGS 390DS through AGS 450DS, Standard Efficiency, R-134a

Data	AGS model number								
	390DS			400DS			450DS		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data									
Unit cap. @ ARI conditions, tons (kW)*	373.1 (1311.8)			390.4 (1373.3)			434.8 (1529.1)		
Unit operating charge, lb (kg)	210 (95)	210 (95)	230 (104)	215 (97)	215 (97)	235 (106)	140 (109)	140 (109)	140 (109)
Cabinet dimensions L x W x H, in (mm)	439 x 88 x 97 (11,140 x 2225 x 2459)			439 x 88 x 97 (11,140 x 2225 x 2459)			474 x 88 x 97 (12,040 x 2225 x 2459)		
Unit operating weight, lb (kg)	21,156 (9596)			21,708 (9847)			22,485 (10,199)		
Unit shipping weight, lb (kg)	20,278 (9198)			20,549 (9321)			21,326 (9674)		
Compressors, screw, semi-hermetic									
Nominal capacity, tons (kW)	125 (437)	125 (437)	125 (437)	125 (437)	125 (437)	150 (525)	150 (525)	150 (525)	150 (525)
Minimum capacity, (% of full load)	10			10			10		
Condensers, high efficiency fin and tube type with integral subcooler									
Pumpdown capacity, lbs (kg)	287 (130)	287 (130)	316 (144)	287 (130)	287 (130)	243 (110)	287 (130)	287 (130)	243 (110)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	171.7 (16)	150.8 (14)	150.8 (14)	171.7 (16)	172.5 (16)	172.5 (16)	171.7 (16)
Condenser fans, direct drive propeller type									
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	6	7	7	6	7	7	6
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	251,768 (118,835)			251,768 (118,835)			274,656 (129,637)		
Evaporator, direct expansion shell and tube									
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)			20 x 149 (508 x 3785)			20 x 149 (508 x 3785)		
Water volume, gallons (L)	103.2 (391.2)			97.2 (368.5)			97.2 (368.5)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)			350 (2413)		

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS Screw Packaged Chiller—Capacity and Physical Data—High Efficiency

AGS 170DE through AGS 190DE, High Efficiency, R-134a

Data	AGS MODEL NUMBER			
	170DE		190DE	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	166.9 (58)		180.3 (635.2)	
Unit operating charge, lb (kg)	180 (82)	180 (82)	210 (95)	210 (95)
Cabinet dimensions L × W × H, in (mm)	267 × 88 × 100 (6792 × 2235 × 2542)		267 × 88 × 100 (6792 × 2235 × 2542)	
Unit operating weight, lb (kg)	13,860 (6287)		13,860 (6287)	
Unit shipping weight, lb (kg)	13,305 (6035)		13,305 (6035)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	70 (246)	70 (246)	85 (299)	85 (299)
Minimum capacity (% of full load)	15	15	15	15
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lb (kg)	438 (199)	438 (199)	438 (199)	438 (199)
Coil inlet face area, ft ² (m ²)	158.3 (14.7)	158 (14.7)	158 (14.7)	158 (14.7)
Condenser fans, direct drive propeller type				
No. of fans/circuit–fan dia., in (mm)	6–30 (762)		6–30 (762)	
No. of motors–hp (kW)	2 (1.5)		2 (1.5)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8950 (45)		8950 (45)	
60 Hz total unit airflow, cfm (L/s)	130,360 (61,530)		130,360 (61,530)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	16 × 108 (406 × 2750)		16 × 108 (406 × 2750)	
Water volume, gallons (L)	63.6 (241)		63.6 (241)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

AGS 225DE through AGS 260DE, High Efficiency, R-134a

Data	AGS model number					
	225DE		250DE		260DE	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	214.9 (755.6)		235.5 (828.0)		249.6 (877.6)	
Unit operating charge, lb (kg)	210 (95)	210 (95)	210 (95)	210 (95)	240 (109)	240 (109)
Cabinet dimensions L × W × H, in (mm)	279 × 88 × 97 (7087 × 2225 × 2464)		314 × 88 × 97 (7984 × 2225 × 2464)		314 × 88 × 97 (7984 × 2225 × 2464)	
Unit operating weight, lb (kg)	13,418 (6086)		14,544 (6597)		14,913 (6765)	
Unit shipping weight, lb (kg)	12,869 (5837)		13,639 (6187)		14,008 (6354)	
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	125 (437)	125 (437)	125 (437)
Minimum capacity (% of full load)	15		15		15	
Condensers, high efficiency fin and tube type with integral subcooler						
Pump capacity, lbs (kg)	249 (113)	249 (113)	287 (130)	287 (130)	325 (147)	325 (147)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	150.8 (14)	172.5 (16)	172.5 (16)	172.5 (16)
Condenser fans, direct drive propeller type						
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	8	8	8	8
Fan motor hp (kW)	2.5 (1.8)		2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	160,216 (75,622)		183,104 (86,425)		183,104 (86,425)	
Evaporator, direct expansion shell and tube						
Shell dia. tube length, in (mm)	16 x 108 (406 x 2750)		16 x 108 (406 x 2750)		20 x 108 (508 x 2750)	
Water volume, gallons (L)	63.6 (241)		63.6 (241)		108.5 (411.1)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)		350 (2413)	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS 275DE through AGS 300DE, High Efficiency, R-134a

Data	AGS model number			
	275DE		300DE	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	267.6 (940.9)		299.5 (1053)	
Unit operating charge, lb (kg)	240 (109)	260 (118)	265 (120)	265 (120)
Cabinet dimensions L × W × H, in (mm)	350 x 88 x 97 (8890 x 2225 x 2464)		350 x 88 x 97 (8890 x 2225 x 2464)	
Unit operating weight, lb (kg)	15,671 (7109)		15,669 (7107)	
Unit shipping weight, lb (kg)	14,766 (6698)		14,808 (6717)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	125 (437)	150 (525)	150 (525)	150 (525)
Minimum capacity (% of full load)	15		15	
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lbs (kg)	325 (147)	361 (164)	361 (164)	361 (164)
Coil inlet face area, ft ² (m ²)	172.5 (16)	194.2 (18)	194.2 (18)	194.2 (18)
Condenser fans, direct drive propeller type				
No. of fans/circuit—30 in (762 mm) fan dia.	9	9	9	9
Fan motor - hp (kW)	2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	205,992 (97,228)		205,992 (97,228)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)		20 x 108 (508 x 2750)	
Water volume, gallons (L)	108.5 (411.1)		103.2 (391.2)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

AGS 330DE through AGS 350DE, High Efficiency, R-134a

Data	AGS model number					
	330DE			350DE		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	324.1 (1139.6)			342.9 (1205.6)		
Unit operating charge, lb (kg)	210 (95)	210 (95)	230 (104)	210 (95)	240 (109)	240 (109)
Cabinet dimensions L × W × H, in (mm)	439 x 88 x 97 11,140 x 2225 x 2459)			474 x 88 x 97 (12,040 x 2225 x 2459)		
Unit operating weight, lb (kg)	21,146 (9592)			21,918 (9942)		
Unit shipping weight, lb (kg)	20,235 (9178)			21,040 (9544)		
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	100 (350)	125 (437)	100 (350)
Nominal capacity, (% of full load)	10			10		
Condensers, high efficiency fin and tube type with integral subcooler						
Pumpdown capacity, lbs (kg)	287 (130)	287 (130)	316 (144)	325 (147)	325 (147)	316 (144)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	171.7 (16)	150.8 (14)	172.5 (16)	171.7 (16)
Condenser fans, direct drive propeller type						
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	8	8	8	8
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	251,768 (118,834)			274,656 (129,638)		
Evaporator, direct expansion shell and tube						
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)			20 x 108 (508 x 2750)		
Water volume, gallons (L)	103.2 (391.2)			102.1 (387)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)		

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS 400DE through AGS 450DE, High Efficiency, R-134a

Data	AGS model number					
	400DE			450DE		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	397.1 (1396.6)			413.1 (1452.5)		
Unit operating charge, lb (kg)	240 (109)	240 (109)	240 (109)	240 (109)	270 (122)	240 (109)
Cabinet dimensions L x W x H, in (mm)	474 x 88 x 97 (12,040 x 2225 x 2459)			509 x 88 x 97 12,939 x 2225 x 2459)		
Unit operating weight, lb (kg)	22,485 (10,199)			23,403 (10,616)		
Unit shipping weight, lb (kg)	21326 (9674)			22,244 (10,090)		
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	125 (437)	125 (437)	150 (525)	150 (525)	150 (525)	125 (437)
Minimum capacity (% of full load)	10			10		
Condensers, high efficiency fin and tube type with integral subcooler						
Pumpdown capacity, lbs (kg)	325 (147)	325 (147)	316 (144)	361 (164)	361 (164)	361 (164)
Coil inlet face area, ft ² (m ²)	172.5 (16)	172.5 (16)	171.7 (16)	172.5 (16.0)	194.2 (18)	171.7 (16)
Condenser fans, direct drive propeller type						
No. of fans/circuit—30 in (762 mm) fan dia.	8	8	8	9	9	9
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	274,656 (129,638)			308,988 (145,841)		
Evaporator, direct expansion shell and tube						
Shell dia. tube length, in (mm)	20 x 142 (508 x 3600)			20 x 142 (508 x 142)		
Water volume, gallons (L)	90.5 (343)			95.0 (360.0)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)		

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS Screw Packaged Chiller—Capacity and Physical Data—Premium Efficiency

AGS 226DP through AGS 251DP, Premium Efficiency, R-134a

Data	AGS model number			
	226DP		251DP	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	220.5 (774)		243.9 (856)	
Unit operating charge, lb (kg)	298 (135)	298 (135)	298 (135)	321 (145)
Cabinet dimensions L × W × H, in (mm)	278 × 88 × 100 (7087 × 2235 × 2550)		317 × 88 × 100 (8052 × 2235 × 2550)	
Unit operating weight, lb (kg)**	16,285 (7387)		17,301 (7848)	
Unit shipping weight, lb (kg)**	15,862 (7195)		16,877 (7655)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	125 (437)
Condensers, high efficiency fin and tube type with integral subcooler				
Coil face area, ft ² (m ²)	159 (14.8)	159 (14.8)	159 (14.8)	213 (19.8)
Fins per inch × rows deep	16 x 3	16 x 3	16 x 3	16 x 3
Condenser fans, direct drive propeller type				
No. of fans—fan dia., in (mm)	12–30 (762)	12–30 (762)	14–30 (762)	14–30 (762)
No. of motors—hp (kW)	12–2 (1.5)		14–2 (1.5)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	129,600 (61,190)		151,200 (71,388)	
Evaporator, flooded shell and tube				
Shell dia. tube length, in (mm)	24 x 96 (610 x 2438)		24 x 96 (610 x 2438)	
Evaporator R-134a charge, lb (kg)	182 (37)		182 (37)	
Water volume, gallons (L)	48 (182)		48 (182)	
Max. water pressure, psi (kPa)	150 (1034)		150 (1034)	
Max. refrigerant press., psi (kPa)	200 (1379)		200 (1379)	

AGS 276DP through AGS 301DP, Premium Efficiency, R-134a

Data	AGS model number			
	276DP		301DP	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	270.5 (951)		302.8 (1065)	
Unit operating charge, lb (kg)	321 (145)	321 (145)	360 (163)	
Cabinet dimensions L × W × H, in (mm)	355 × 88 × 100 (9017 × 2235 × 2550)		355 x 88 x 100 (9017 x 2235 x 2550)	
Unit operating weight, lb (kg)**	18,319 (8309)		18,787 (8522)	
Unit shipping weight, lb (kg)**	17,895 (8117)		18,272 (8288)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	125 (437)	125 (437)	150 (525)	150 (525)
Condensers, high efficiency fin and tube type with integral subcooler				
Coil face area, ft ² (m ²)	213 (19.8)	213 (19.8)	172.5 (16.0)	172.5 (16.0)
Fins per inch × rows deep	16 x 3	16 x 3	16 x 3	16 x 3
Condenser fans, direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	16–30 (762)	16–30 (762)	16–30 (762)	
No. of motors—hp (kW)	16–2 (1.5)		16–2 (1.5)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	172,800 (81,586)		172,800 (81,586)	
Evaporator, flooded shell and tube				
Shell dia. tube length, in (mm)	24 x 96 (610 x 2438)		26 x 96 (660 x 2438)	
Evaporator R-134a charge, lb (kg)	182 (37)		221 (100)	
Water volume, gallons (L)	48 (182)		59 (221)	
Max. water pressure, psi (kPa)	150 (1034)		150 (1034)	
Max. refrigerant press., psi (kPa)	200 (1379)		200 (1379)	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Add 158 lbs (72 kg) per fan for copper fin coils.

AGS 351DP through AGS 401DP, Premium Efficiency, R-134a

Data	AGS model number								
	351DP			391DP			401DP		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data									
Unit cap. @ ARI conditions, tons (kW)*	340.1 (1196)			384.3 (1349)			408.8 (1435)		
Unit operating charge, lb (kg)	285 (129)	312 (141)	312 (141)	312 (141)	312 (141)	312 (141)	335 (152)	335 (152)	335 (152)
Cabinet dimensions L × W × H, in (mm)	434 x 88 x 100 11,024 x 2235 x 2550)			510 x 88 x 100 (12,954 x 2235 x 2550)			548 x 88 x 100 (13,919 x 2235 x 2550)		
Unit operating weight, lb (kg)**	23,507 (10,662)			26,667 (12,095)			27,684 (12,557)		
Unit shipping weight, lb (kg)**	22,958 (10,414)			26,056 (11,819)			27,072 (12,280)		
Compressors, screw, semi-hermetic									
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	100 (350)	125 (437)	125 (437)	125 (437)	125 (437)	125 (437)
Condensers, high efficiency fin and tube type with integral subcooler									
Coil inlet face area, ft ² (m ²)	159 (14.8)	159 (14.8)	159 (14.8)	159 (14.8)	213 (19.9)	213 (19.9)	213 (19.9)	213 (19.9)	213 (19.9)
Fins per inch × rows deep	16 x 3	16 x 3	16 x 3	16 x 3	16 x 3	16 x 3	16 x 3	16 x 3	16 x 3
Condenser fans, direct drive propeller type									
No. of fans/circuit—fan dia., in (mm)	18–30 (762)			22–30 (762)			24–30 (762)		
No. of motors—hp (kW)	18–2 (1.5)			22–2 (1.5)			24–2 (1.5)		
Fan and motor rpm, 60Hz	1140			1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	194,400 (91,785)			237,600 (112,181)			259,200 (122,380)		
Evaporator, flooded shell and tube									
Shell dia. tube length, in (mm)	26 x 108 (660 x 2743)			30 x 108 (762 x 2743)			30 x 108 (762 x 2743)		
Evaporator R-134a charge, lb (kg)	164 (74)			191 (86)			191 (86)		
Water volume, gallons (L)	63 (237)			70 (263)			70 (263)		
Max. water pressure, psi (kPa)	150 (1034)			150 (1034)			150 (1034)		
Max. refrigerant press., psi (kPa)	200 (1379)			200 (1379)			200 (1379)		

AGS 451DP through 501DP, Premium Efficiency, R-134a

Data	AGS model number					
	451DP			501DP		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	440.5 (1546)			458.4 (1612)		
Unit operating charge, lb (kg)	358 (162)			358 (162)		
Cabinet dimensions L × W × H, in (mm)	548 x 88 x 100 13,919 x 2235 x 2550)			548 x 88 x 100 13,919 x 2235 x 2550)		
Unit operating weight, lb (kg)**	28,042 (12,720)			28,042 (12,720)		
Unit shipping weight, lb (kg)**	27,345 (12,403)			27,345 (12,403)		
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	125 (437)	150 (525)	150 (525)	150 (525)	150 (525)	150 (525)
Condensers, high efficiency fin and tube type with integral subcooler						
Coil inlet face area, ft ² (m ²)	213 (19.9)			213 (19.9)		
Fins per inch × rows deep	16 x 3			16 x 3		
Condenser fans, direct drive propeller type						
No. of fans/circuit–30 in (762 mm) fan dia.	24–30 (762)			24–30 (762)		
No. of motors–hp (kW)	24–2 (1.5)			24–2 (1.5)		
Fan and motor rpm, 60Hz	1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	259,200 (122,380)			259,200 (122,380)		
Evaporator, flooded shell and tube						
Shell dia. tube length, in (mm)	30 x 108 (762 x 2743)			30 x 108 (762 x 2743)		
Evaporator R-134a charge, lb (kg)	214 (97)			214 (97)		
Water volume, gallons (L)	79 (300)			79 (300)		
Max. water pressure, psi (kPa)	150 (1034)			150 (1034)		
Max. refrigerant press., psi (kPa)	200 (1379)			200 (1379)		

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

** Add 158 lbs (72 kg) per fan for copper fin coils.

AGS Screw Chiller (Remote Evap.)—Capacity and Physical Data—Standard Efficiency

AGS 225DM through AGS 250DM, Standard Efficiency, Remote Evaporator, R-134a

Data	AGS model number			
	225DM		250DM	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	211.2 (742.6)		231.6 (814.3)	
Unit operating charge, lb (kg)	185 (84)	185 (84)	210 (95)	210 (95)
Cabinet dimensions L × W × H, in (mm)	243 × 88 × 97 (6172 × 2225 × 2464)		279 × 88 × 97 (7087 × 2225 × 2464)	
Unit operating weight, lb (kg)	10,814 (4905)		11,518 (5224)	
Unit shipping weight, lb (kg)	10,814 (4905)		11,518 (5224)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	125 (437)
Minimum capacity (% of full load)	13		11	
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lbs (kg)	249 (113)	249 (113)	287 (130)	287 (130)
Coil inlet face area, ft ² (m ²)	129.2 (12.0)	129.2 (12.0)	150.8 (14.0)	150.8 (14.0)
Condenser fans, direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	6–30 (762)	6–30 (762)	7–30 (762)	7–30 (762)
Fan motor hp (kW)	2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	137,328 (64,819)		160,216 (75,622)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	16 x 108 (406 x 2750)		16 x 108 (406 x 2750)	
Water volume, gallons (L)	65.8 (249.4)		65.8 (249.4)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

AGS 275DM through 300DM, Standard Efficiency, Remote Evaporator, R-134a

Data	AGS model number			
	275DM		300DM	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	263.1 (925.1)		297.0 (1042.5)	
Unit operating charge, lb (kg)	210 (95)	240 (109)	240 (109)	240 (109)
Cabinet dimensions L × W × H, in (mm)	314 × 88 × 97 (7984 × 2225 × 2464)		314 × 88 × 97 (7984 × 2225 × 2464)	
Unit operating weight, lb (kg)	12,226 (5546)		12,226 (5546)	
Unit shipping weight, lb (kg)	12,226 (5546)		12,226 (5546)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	125 (437)	150 (525)	150 (525)	150 (525)
Minimum capacity (% of full load)	11		13	
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lbs (kg)	287 (130)	325 (148)	325 (148)	325 (148)
Coil inlet face area, ft ² (m ²)	150.8 (14.0)	172.5 (16.0)	172.5 (16.0)	172.5 (16.0)
Condenser fans, direct drive propeller type				
No. of fans/circuit—fan dia., in (mm)	8–30 (762)	8–30 (762)	8–30 (762)	8–30 (762)
Fan motor - hp (kW)	2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	183,104 (86,425)		183,104 (86,425)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)		20 x 108 (508 x 2750)	
Water volume, gallons (L)	108.5 (411.1)		103.2 (391.2)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS 330DM through AGS 360DM, Standard Efficiency, Remote Evaporator, R-134a

Data	AGS model number								
	330DM			350DM			360DM		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data									
Unit cap. @ ARI conditions, tons (kW)*	318.7 (1120.5)			337.2 (1185.6)			351.1 (1234.5)		
Unit operating charge, lb (kg)	210 (95)	210 (95)	190 (86)	210 (95)	210 (95)	190 (86)	210 (95)	210 (95)	190 (86)
Cabinet dimensions L × W × H, in (mm)	403 × 88 × 97 (10,239 × 2225 × 2459)			403 × 88 × 97 (10,239 × 2225 × 2459)			403 × 88 × 97 (10,239 × 2225 × 2459)		
Unit operating weight, lb (kg)	17,798 (8073)			17,798 (8073)			17,798 (8073)		
Unit shipping weight, lb (kg)	17,798 (8073)			17,798 (8073)			17,798 (8073)		
Compressors, screw, semi-hermetic									
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	100 (350)	125 (437)	100 (350)	125 (437)	125 (437)	100 (350)
Minimum capacity, (% of full load)	8			8			7		
Condensers, high efficiency fin and tube type with integral subcooler									
Pumpdown capacity, lbs (kg)	287 (130)	287 (130)	243 (110)	287 (130)	287 (130)	243 (110)	287 (130)	287 (130)	243 (110)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	128.5 (12)	150.8 (14)	150.8 (14)	128.5 (12)	150.8 (14)	150.8 (14)	128.5 (12)
Condenser fans, direct drive propeller type									
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	6	7	7	6	7	7	6
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	228,880 (108,031)			228,880 (108,031)			228,880 (108,031)		
Evaporator, direct expansion shell and tube									
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)			20 x 108 (508 x 2750)			20 x 108 (508 x 2750)		
Water volume, gallons (L)	107.0 (405.4)			107.0 (405.4)			103.2 (391.2)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)			350 (2413)		

AGS 390DM through AGS 450DM, Standard Efficiency, Remote Evaporator, R-134a

Data	AGS model number								
	390DM			400DM			450DM		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data									
Unit cap. @ ARI conditions, tons (kW)*	373.2 (1311.8)			390.4 (1373.3)			434.8 (1529.1)		
Unit operating charge, lb (kg)	210 (95)	210 (95)	230 (104)	215 (97)	215 (97)	235 (106)	140 (109)	140 (109)	140 (109)
Cabinet dimensions L × W × H, in (mm)	439 x 88 x 97 (11,140 x 2225 x 2459)			439 x 88 x 97 (11,140 x 2225 x 2459)			474 x 88 x 97 (12,040 x 2225 x 2459)		
Unit operating weight, lb (kg)	18,632 (8451)			18,632 (8451)			18,632 (8451)		
Unit shipping weight, lb (kg)	18,632 (8451)			18,632 (8451)			18,632 (8451)		
Compressors, screw, semi-hermetic									
Nominal capacity, tons (kW)	125 (437)	125 (437)	125 (437)	125 (437)	125 (437)	150 (525)	150 (525)	150 (525)	150 (525)
Minimum capacity, (% of full load)	8			8			8		
Condensers, high efficiency fin and tube type with integral subcooler									
Pumpdown capacity, lbs (kg)	287 (130)	287 (130)	316 (144)	287 (130)	287 (130)	316 (144)	287 (130)	287 (130)	316 (144)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	171.7 (16)	150.8 (14)	150.8 (14)	171.7 (16)	172.5 (16)	172.5 (16)	171.7 (16)
Condenser fans, direct drive propeller type									
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	8	7	7	8	8	8	8
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	251,768 (118,835)			251,768 (118,835)			274,656 (129,637)		
Evaporator, direct expansion shell and tube									
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)			20 x 149 (508 x 3785)			20 x 149 (508 x 3785)		
Water volume, gallons (L)	103.2 (391.2)			97.2 (368.5)			97.2 (368.5)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)			350 (2413)		

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS Screw Chiller (Remote Evap.)—Capacity and Physical Data—High Efficiency

AGS 225DF through AGS 260DF, High Efficiency, Remote Evaporator, R-134a

Data	AGS model number					
	225DF		250DF		260DF	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	214.9 (755.6)		235.5 (828.0)		249.6 (877.6)	
Unit operating charge, lb (kg)	210 (95)	210 (95)	210 (95)	210 (95)	240 (109)	240 (109)
Cabinet dimensions L × W × H, in (mm)	279 × 88 × 97 (7087 × 2225 × 2464)		314 × 88 × 97 (7984 × 2225 × 2464)		314 × 88 × 97 (7984 × 2225 × 2464)	
Unit operating weight, lb (kg)	11,518 (5224)		12,226 (5546)		12,226 (5546)	
Unit shipping weight, lb (kg)	11,518 (5224)		12,226 (5546)		12,226 (5546)	
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	125 (437)	125 (437)	125 (437)
Minimum capacity (% of full load)	13		11		13	
Condensers, high efficiency fin and tube type with integral subcooler						
Pump capacity, lbs (kg)	249 (113)	249 (113)	287 (130)	287 (130)	325 (147)	325 (147)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	150.8 (14)	172.5 (16)	172.5 (16)	172.5 (16)
Condenser fans, direct drive propeller type						
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	8	8	8	8
Fan motor hp (kW)	2.5 (1.8)		2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	160,216 (75,622)		183,104 (86,425)		183,104 (86,425)	
Evaporator, direct expansion shell and tube						
Shell dia. tube length, in (mm)	16 x 108 (406 x 2750)		16 x 108 (406 x 2750)		20 x 108 (508 x 2750)	
Water volume, gallons (L)	63.6 (241)		63.6 (241)		108.5 (411.1)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)		350 (2413)	

AGS 275DF through AGS 300DF, High Efficiency, Remote Evaporator, R-134a

Data	AGS model number			
	275DF		300DF	
	Circuit 1	Circuit 2	Circuit 1	Circuit 2
Basic data				
Unit cap. @ ARI conditions, tons (kW)*	267.6 (940.9)		299.5 (1053)	
Unit operating charge, lb (kg)	240 (109)	260 (118)	265 (120)	265 (120)
Cabinet dimensions L × W × H, in (mm)	350 x 88 x 97 (8890 x 2225 x 2464)		350 x 88 x 97 (8890 x 2225 x 2464)	
Unit operating weight, lb (kg)	13,027 (5909)		13,027 (5909)	
Unit shipping weight, lb (kg)	13,027 (5909)		13,027 (5909)	
Compressors, screw, semi-hermetic				
Nominal capacity, tons (kW)	125 (437)	150 (525)	150 (525)	150 (525)
Minimum capacity (% of full load)	11		13	
Condensers, high efficiency fin and tube type with integral subcooler				
Pumpdown capacity, lbs (kg)	325 (147)	361 (164)	361 (164)	361 (164)
Coil inlet face area, ft ² (m ²)	172.5 (16)	194.2 (18)	194.2 (18)	194.2 (18)
Condenser fans, direct drive propeller type				
No. of fans/circuit—30 in (762 mm) fan dia.	9	9	9	9
Fan motor - hp (kW)	2.5 (1.8)		2.5 (1.8)	
Fan and motor rpm, 60Hz	1140		1140	
60 Hz fan tip speed, fpm (m/s)	8954 (45)		8954 (45)	
60 Hz total unit airflow, cfm (L/s)	205,992 (97,228)		205,992 (97,228)	
Evaporator, direct expansion shell and tube				
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)		20 x 108 (508 x 2750)	
Water volume, gallons (L)	108.5 (411.1)		103.2 (391.2)	
Max. water pressure, psi (kPa)	152 (1048)		152 (1048)	
Max. refrigerant press., psi (kPa)	350 (2413)		350 (2413)	

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGS 330DF through AGS 350DF, High Efficiency, Remote Evaporator, R-134a

Data	AGS model number					
	330DF			350DF		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	324.1 (1139.6)			342.9 (1205.6)		
Unit operating charge, lb (kg)	210 (95)	210 (95)	230 (104)	210 (95)	240 (109)	240 (109)
Cabinet dimensions L x W x H, in (mm)	439 x 88 x 97 11,140 x 2225 x 2459)			474 x 88 x 97 (12,040 x 2225 x 2459)		
Unit operating weight, lb (kg)	18,632 (8451)			19,305 (8757)		
Unit shipping weight, lb (kg)	18,632 (8451)			19,305 (8757)		
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	100 (350)	100 (350)	100 (350)	100 (350)	125 (437)	100 (350)
Nominal capacity, (% of full load)	8			8		
Condensers, high efficiency fin and tube type with integral subcooler						
Pumpdown capacity, lbs (kg)	287 (130)	287 (130)	316 (144)	325 (147)	325 (147)	316 (144)
Coil inlet face area, ft ² (m ²)	150.8 (14)	150.8 (14)	171.7 (16)	150.8 (14)	172.5 (16)	171.7 (16)
Condenser fans, direct drive propeller type						
No. of fans/circuit—30 in (762 mm) fan dia.	7	7	8	8	8	8
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	251,768 (118,834)			274,656 (129,638)		
Evaporator, direct expansion shell and tube						
Shell dia. tube length, in (mm)	20 x 108 (508 x 2750)			20 x 108 (508 x 2750)		
Water volume, gallons (L)	103.2 (391.2)			102.1 (387)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)		

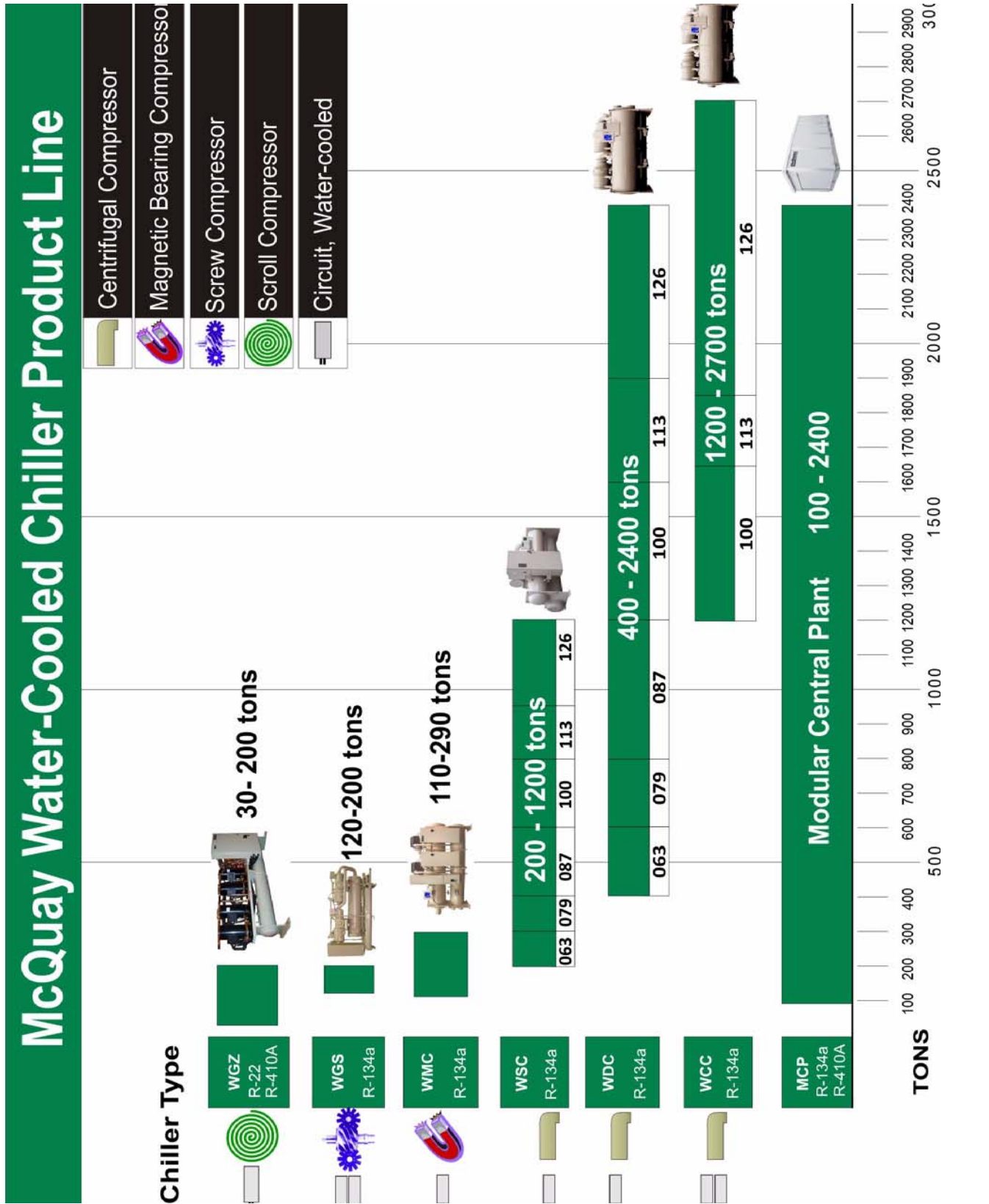
AGS 400DF through AGS 450DF, High Efficiency, Remote Evaporator, R-134a

Data	AGS model number					
	400DF			450DF		
	Circuit 1	Circuit 2	Circuit 3	Circuit 1	Circuit 2	Circuit 3
Basic data						
Unit cap. @ ARI conditions, tons (kW)*	397.1 (1396.6)			438.0 (1540.0)		
Unit operating charge, lb (kg)	240 (109)	240 (109)	240 (109)	270 (122)	270 (122)	240 (109)
Cabinet dimensions L × W × H, in (mm)	474 x 88 x 97 (12,040 x 2225 x 2459)			509 x 88 x 97 12,939 x 2225 x 2459)		
Unit operating weight, lb (kg)	19,305 (8757)			20,294 (9205)		
Unit shipping weight, lb (kg)	19,305 (8757)			20,383 (9205)		
Compressors, screw, semi-hermetic						
Nominal capacity, tons (kW)	125 (437)	125 (437)	150 (525)	150 (525)	150 (525)	150 (525)
Minimum capacity (% of full load)	8			7		
Condensers, high efficiency fin and tube type with integral subcooler						
Pumpdown capacity, lbs (kg)	325 (147)	325 (147)	316 (144)	361 (164)	361 (164)	316 (144)
Coil inlet face area, ft ² (m ²)	172.5 (16)	172.5 (16)	171.7 (16)	172.5 (16.0)	194.2 (18)	171.7 (16)
Condenser fans, direct drive propeller type						
No. of fans/circuit—30 in (762 mm) fan dia.	8	8	8	9	9	8
Fan motor - hp (kW)	2.5 (1.8)			2.5 (1.8)		
Fan and motor rpm, 60Hz	1140			1140		
60 Hz fan tip speed, fpm (m/s)	8954 (45)			8954 (45)		
60 Hz total unit airflow, cfm (L/s)	274,656 (129,638)			297,544 (140,440)		
Evaporator, direct expansion shell and tube						
Shell dia. tube length, in (mm)	20 x 142 (508 x 3600)			20 x 142 (508 x 142)		
Water volume, gallons (L)	90.5 (343)			90.5 (343.0)		
Max. water pressure, psi (kPa)	152 (1048)			152 (1048)		
Max. refrigerant press., psi (kPa)	350 (2413)			350 (2413)		

* Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

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Water-Cooled Chiller Selection Chart



Scroll Compressor Chillers—30 to 120 Tons

- Meets or exceeds ASHRAE Standard 90.1-2004—15.2 EER at full load, up to 20.6 EER at part load (IPLV)
- Scroll compressor technology is quiet for installation in sound sensitive environments
- Available for water-cooled or remote air-cooled condenser applications
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- Designed for easy retrofit—fits through a standard three ft. door
- Units with R-410A available in early 2008

For more detail, refer to Catalog WGZ.
For the most current information, refer to www.mcquay.com.



Model WGZ scroll compressor chiller—30 to 120 tons



Available LONMARK certified



Packaged Water-Cooled—Capacity and Physical Data

WGZ 030AW through WGZ 055AW, R-22

WGZ unit size	030AW		035AW		040AW		045AW		050AW		055AW	
Unit capacity @ ARI conditions tons, (kW) ¹	31.6 (111.1)		34.9 (122.7)		40.1 (141)		44.2 (155)		48.6 (171)		54.3 (191)	
Number of circuits	2		2		2		2		2		2	
Compressors												
Nominal tons	7.5	9	9	9	10	10	13	10	13	13	13	15
Number ²	2	2	2	2	2	2	2	2	2	2	2	2
Unloading steps	27/50/77		25/50/75		25/50/75		28/50/78		25/50/75		27/50/77	
Oil charge per compressor, oz (L)	140 (4.1)		140 (4.1)		140 (4.1)		140 (4.1)		140 (4.1)		140 (4.1)	
Condenser												
Number	1		1		1		1		1		1	
Number of refrigerant circuits	2		2		2		2		2		2	
Diameter, in (mm)	10 (254)		10 (254)		10 (254)		10 (254)		10 (254)		10 (254)	
Tube length, in (mm)	120 (3048)		120 (3048)		120 (3048)		120 (3048)		120 (3048)		120 (3048)	
Design W.P. psig, (kPa): refrigerant side	450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)	
Design W.P. psig, (kPa): water side	232 (1599)		232 (1599)		232 (1599)		232 (1599)		232 (1599)		232 (1599)	
Number of passes	2		2		2		2		2		2	
Pump-out capacity, lb (kg) ³	279 (126.6)		273 (123.8)		260 (117.9)		253 (114.8)		240 (108.9)		234 (106.1)	
Connections												
Water in and out, in (mm) victaulic	4 (102)		4 (102)		4 (102)		4 (102)		4 (102)		4 (102)	
Relief valve, flare, in (mm)	½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)	
Purge valve, flare, in (mm)	½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)	
Vent and drain, in (mm) FPT	½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)		½ (12.7)	
Liquid subcooling	Integral		Integral		Integral		Integral		Integral		Integral	
Evaporator												
Number	1		1		1		1		1		1	
No. refrigerant circuits	2		2		2		2		2		2	
Water volume, gallons, (L)	3.9 (14.7)		4.3 (16.4)		5 (18.9)		5.7 (21.4)		6.3 (23.9)		7.2 (27.3)	
Refrig. side D.W.P. (working pressure) psig, (kPa)	450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)	
Water side D.W.P. (working pressure) psig, (kPa)	363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)	
Water connections												
Inlet and outlet, in (mm) victaulic	3 (76)		3 (76)		3 (76)		3 (76)		3 (76)		3 (76)	
Drain and vent (NPT int.)	Field		Field		Field		Field		Field		Field	
Unit dimensions												
Length, in (mm)	134.1 (3406)		134.1 (3406)		134.1 (3406)		134.1 (3406)		134.1 (3406)		134.1 (3406)	
Width, in (mm)	32 (813)		32 (813)		32 (813)		32 (813)		32 (813)		32 (813)	
Height, in (mm)	63.5 (1613)		63.5 (1613)		63.5 (1613)		63.5 (1613)		63.5 (1613)		63.5 (1613)	
Unit weights												
Operating weight, lb (kg)	2691 (1223)		2760 (1252)		2864 (1299)		2966 (1345)		3058 (1387)		3213 (1457)	
Shipping weight, lb (kg)	2641 (1198)		2696 (1223)		2772 (1257)		2853 (1294)		2918 (1324)		3063 (1389)	
Cir # 1, operating charge, lb (kg) R-22	50 (599)		50 (22.5)		47 (21.3)		46 (20.8)		44 (20.0)		45 (20.2)	
Cir # 2, operating charge, lb (kg) R-22	50 (599)		50 (22.5)		47 (21.3)		46 (20.8)		44 (20.0)		45 (20.2)	

1. Certified in accordance with ARI Standard 550/590-98.

2. All units have two compressors per circuit in parallel.

3. 80% Full R-22 at 90°F (32°C) per refrigerant circuit.

WGZ 060AW through WGZ 120 AW, R-22

WGZ unit size	060AW	070AW	080AW	090AW	100AW	110AW	120AW
Unit capacity @ ARI conditions tons, (kw) ¹	59.6 (209)	68.0 (239)	78.0 (274)	84.4 (297)	93.7 (330)	106.2 (373)	117.2 (411)
Number of circuits	2	2	2	2	2	2	2
Compressors							
Nominal tons	15	15	15	20	20	20	25
Number ²	2	2	2	2	2	2	2
Unloading steps	25/50/75	28/50/78	25/50/75	27/50/77	25/50/75	27/50/77	25/50/75
Oil charge, per compressor, oz (L)	140 (4.1)	140 (4.1)	148 (4.3)	148 (4.3)	200 (5.9)	200 (5.9)	200 (5.9)
Condenser							
Number	1	1	1	1	1	1	1
No. refrigerant circuits	2	2	2	2	2	2	2
Diameter, in (mm)	14 (356)	14 (356)	14 (356)	14 (356)	14 (356)	14 (356)	14 (356)
Tube length, in (mm)	120 (3048)	120 (3048)	120 (3048)	120 (3048)	120 (3048)	120 (3048)	120 (3048)
Design W.P., psig (kPa)							
Refrigerant side	450 (3102)	450 (3102)	450 (3102)	450 (3102)	450 (3102)	450 (3102)	450 (3102)
Water side	232 (1599)	232 (1599)	232 (1599)	232 (1599)	232 (1599)	232 (1599)	232 (1599)
No. of passes	2	2	2	2	2	2	2
Pump-out capacity, lb (kg) ³	481 (218.2)	462 (209.6)	449 (203.7)	429 (194.6)	409 (185.5)	409 (185.5)	409 (185.5)
Connections							
Water in and out, in (mm) ⁴	5 (127)	5 (127)	5 (127)	5 (127)	5 (127)	5 (127)	5 (127)
Relief valve, flare, in (mm)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)
Purge valve, flare, in (mm)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)
Vent and drain, in (mm) FPT	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)	½ (12.7)
Liquid subcooling	Integral	Integral	Integral	Integral	Integral	Integral	Integral
Evaporator							
Number	1	1	1	1	1	1	1
No. refrigerant circuits	2	2	2	2	2	2	2
Water volume, gallons (L)	8.1 (30.7)	9.2 (34.9)	10.8 (40.7)	12.8 (48.3)	13.9 (52.5)	13.9 (52.5)	13.9 (52.5)
Refrig. side D.W.P., psig (kPa)	450 (3102)	450 (3102)	450 (3102)	450 (3102)	450 (3102)	450 (3102)	450 (3102)
Water side D.W.P., psig (kPa)	363 (2503)	363 (2503)	363 (2503)	363 (2503)	363 (2503)	363 (2503)	363 (2503)
Water connections							
In and out, in (mm) ⁴	3 (76)	3 (76)	3 (76)	3 (76)	3 (76)	3 (76)	3 (76)
Drain and vent	Field	Field	Field	Field	Field	Field	Field
Unit dimensions							
Length, in (mm)	144.2 (3663)	146.7 (3726)	146.7 (3726)	149 (3784)	149 (3784)	149 (3784)	149 (3784)
Width, in (mm)	32 (813)	32 (813)	32 (813)	32 (813)	32 (813)	32 (813)	32 (813)
Height, in (mm)	66 (1676)	66 (1676)	66 (1676)	66 (1676)	66 (1676)	66 (1676)	66 (1676)
Unit weights							
Operating wt, lb (kg)	3809 (1728)	4025 (1826)	4289 (1945)	4478 (2031)	4627 (2099)	4828 (2190)	5010 (2273)
Shipping wt, lb (kg)	3590 (1628)	3806 (1726)	4037 (1831)	4178 (1895)	4287 (1945)	4488 (2036)	4670 (2118)
Cir # 1, operating charge, lb (kg) R-22	87 (39.3)	84 (37.9)	82 (37.0)	76 (34.3)	76 (34.3)	85 (39)	85 (39)
Cir # 2, operating charge, lb (kg) R-22	87 (39.3)	84 (37.9)	82 (37.0)	76 (34.3)	76 (34.3)	85 (39)	85 (39)

1. Certified in accordance with ARI Standard 550/590-98.

2. All units have two compressors per circuit in parallel.

3. 80% full R-22 at 90°F (32°C) per refrigerant circuit.

4. Victaulic connections.

Remote Condenser—Capacity and Physical Data

WGZ 030AA through WGZ 055AA, R-22

WGZ unit size	030AA		035AA		040AA		045AA		050AA		055AA	
Cap @ 44°F LWT, 125°F SDT tons, (kW)	29 (103)		31.6 (112)		36.6 (130)		40.7 (144)		44.7 (158)		49.8 (177)	
No. circuits	2		2		2		2		2		2	
Compressors												
Nominal tons	7.5	9	9	9	10	10	13	10	13	13	13	15
Number ¹	2	2	2	2	2	2	2	2	2	2	2	2
Unloading steps	27/50/77		25/50/75		25/50/75		28/50/78		25/50/75		27/50/77	
Oil charge per compressor, oz (L)	140 (4.1)		140 (4.1)		140 (4.1)		140 (4.1)		140 (4.1)		140 (4.1)	
Discharge valve, in (mm)	1.125 (28)		1.125 (28)		1.125 (28)		1.125 (28)		1.125 (28)		1.125 (28) 1.375 (35)	
Evaporator												
No. refrigerant circuits	2		2		2		2		2		2	
Water volume, gallons (L)	3.9 (14.7)		4.3 (16.4)		5 (18.9)		5.7 (21.4)		6.3 (23.9)		7.2 (27.3)	
Refrigerant side D.W.P. psig, (kPa)	450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)	
Water side D.W.P. psig, (kPa)	363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)	
Water connections: inlet and outlet, in (mm) ^{2,3}	3 (76)		3 (76)		3 (76)		3 (76)		3 (76)		3 (76)	
Water connections: drain and vent	Field		Field		Field		Field		Field		Field	
Unit dimensions												
Length, in (mm)	122.4 (3109)		122.4 (3109)		122.4 (3109)		122.4 (3109)		122.4 (3109)		123.4 (3134)	
Width in, (mm)	32 (813)		32 (813)		32 (813)		32 (813)		32 (813)		32 (813)	
Height, in (mm)	63.5 (1613)		63.5 (1613)		63.5 (1613)		63.5 (1613)		63.5 (1613)		63.5 (1613)	
Unit weights												
Operating weight, lb (kg)	2169 (983)		2211 (1002)		2263 (1025)		2335 (1058)		2376 (1076)		2510 (1137)	
Shipping weight, lb (kg)	2248 (1018)		2285 (1035)		2331 (1056)		2392 (1084)		2424 (1098)		2558 (1159)	
Holding charge, lb (kg) R-22	6.0 (2.7)		6.1 (2.8)		6.4 (2.9)		6.6 (3)		7.0 (3.2)		9.7 (4.4)	

WGZ 060AA through WGZ 120AA, R-22

WGZ unit size	060AA		070AA		080AA		090AA		100AA		110AA		120AA	
Cap @ 44°F LWT, 125°F SDT tons, (kW)	54.9 (195)		62.1 (220)		73.0 (256)		80.0 (281)		87.5 (307)		99.1 (348)		109.2 (384)	
No. circuits	2		2		2		2		2		2		2	
Compressors														
Nominal horsepower	15	15	15	20	20	20	20	25	25	25	25	30	30	30
Number ¹	2	2	2	2	2	2	2	2	2	2	2		2	
Unloading steps	25/50/75		28/50/78		25/50/75		27/50/77		25/50/75		27/50/77		25/50/75	
Oil charge, oz (L)	140 (4.1)	140 (4.1)	140 (4.1)	148 (4.3)	148 (4.3)	148 (4.3)	148 (4.3)	200 (5.9)	200 (5.9)	200 (5.9)	200 (5.9)	200 (5.9)	200 (5.9)	200 (5.9)
Evaporator														
No. refrigerant circuits	2		2		2		2		2		2		2	
Water volume, gallons (L)	8.1 (30.7)		9.2 (34.9)		10.8 (40.7)		12.8 (48.3)		13.9 (52.5)		13.9 (52.5)		13.9 (52.5)	
Refrigerant side D.W.P. (working pressure) psig, (kPa)	450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)		450 (3102)	
Water side D.W.P. (working press. psig, (kPa)	363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)		363 (2503)	
Water connections: inlet and outlet, in (mm) ^{2,3}	3 (76)		3 (76)		3 (76)		3 (76)		3 (76)		3 (76)		3 (76)	
Water connections: drain and vent	Field		Field		Field		Field		Field		Field		Field	
Unit dimensions														
Length, in (mm)	140 (3556)		142.5 (3620)		142.5 (3620)		144.8 (3677)		144.8 (3677)		144.8 (3677)		144.8 (3677)	
Width, in (mm)	32 (813)		32 (813)		32 (813)		32 (813)		32 (813)		32 (813)		32 (813)	
Height, in (mm)	66 (1676)		66 (1676)		66 (1676)		66 (1676)		66 (1676)		66 (1676)		66 (1676)	
Unit weights														
Operating wt, lb (kg)	2784 (1261)		2953 (1338)		3164 (1433)		3280 (1486)		3345 (1515)		3345 (1515)		3405 (1544)	
Shipping wt, lb (kg)	2833 (1283)		3001 (1359)		3198 (1449)		3295 (1493)		3238 (1468)		3239 (1468)		3298 (1495)	
Cir #1 holding chg, lb (kg) R-22 per circuit	10.0 (4.5)		10.5 (4.7)		11.1 (5)		11.8 (5.4)		12.3 (5.6)		15 (6.8)		15 (6.8)	

1. All units have two compressors per circuit in parallel.

2. Victaulic connections.

3. Condenser and field piping not included.

Screw Compressor Chillers—120 to 190 Tons

- Meets ASHRAE Standard 90.1-2004 for efficiency
- Single main rotor compressor means inherently quieter operation than dual rotor compressors
- Two refrigerant circuits improve part load efficiency
- Compact size fits through a 3-foot door for lower installed costs
- Solid state starters are standard to provide controlled acceleration and deceleration with less compressor stress and vibration
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- R-134a refrigerant has no ozone depletion potential and no phase-out schedule

For more detail, refer to Catalog WGS. For the most current information, refer to www.mcquay.com.



Model WGS water-cooled screw compressor chiller—120 to 190 tons



Available LONMARK certified



WGS-AW Water-Cooled—Capacity and Physical Data

WGS 130AW through WGS 190AW, R-134a

WGS unit size	130AW	140AW	160AW	170AW	190AW
Unit capacity @ ARI conditions tons, (kW) ¹	130.0 (457.1)	140.7 (494.7)	156.7 (551.0)	169.6 (596.3)	182.1 (640.3)
No. circuits	2	2	2	2	2
Compressors					
Nominal horsepower	65 / 65	65 / 80	80 / 80	80 / 95	95 / 95
Number ²	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
% minimum capacity (modulated) ⁴	15	13/17	15	14/16	15
Oil charge per compressor, oz (L)	256 (7.6)	256 (7.6)	256 (7.6)	256 (7.6)	256 (7.6)
Condenser					
Number	2	2	2	2	2
No. refrigerant circuits per condenser	1	1	1	1	1
Diameter, in (mm)	12 (305)	12 (305)	12 (305)	12 (305)	12 (305)
Tube length, in (mm)	120 (3048)	120 (3048)	120 (3048)	120 (3048)	120 (3048)
Design w.p. psig, (kPa): refrigerant side	350 (2413)	350 (2413)	350 (2413)	350 (2413)	350 (2413)
Design w.p. psig, (kPa): water side	225 (1551)	225 (1551)	225 (1551)	225 (1551)	225 (1551)
No. of passes	2	2	2	2	2
Pump-out capacity per circuit, lb (kg) ⁴	330 (150)	330 (150)	330 (150)	296 (134)	296 (134)
Connections: water in and out, in, (mm) victaulic	4.0 (101)	4.0 (101)	4.0 (101)	4.0 (101)	4.0 (101)
Connections: relief valve, in (mm)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)
Connections: purge valve, flare in (mm)	.625 (15.9)	.625 (15.9)	.625 (15.9)	.625 (15.9)	.625 (15.9)
Connections: vent and drain, in (mm) FPT	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)
Connections: liquid subcooling	Integral	Integral	Integral	Integral	Integral
Evaporator					
Number	1	1	1	1	1
No. refrigerant circuits	2	2	2	2	2
Water volume, gallons, (L)	68 (257)	68 (257)	115 (435)	115 (435)	115 (435)
Refrig. side D.W.P., psig, (kPa)	354 (2441)	354 (2441)	354 (2441)	354 (2441)	354 (2441)
Water side D.W.P., psig, (kPa)	150 (1034)	150 (1034)	150 (1034)	150 (1034)	150 (1034)
Water connections: inlet and outlet, in (mm) victaulic	6.0 (152)	6.0 (152)	8.0 (203)	8.0 (203)	8.0 (203)
Water connections: drain and vent (NPT int.)	0.5	0.5	0.5	0.5	0.5
Unit dimensions⁵					
Length, in (mm)	169.9 (4315)	169.9 (4315)	169.9 (4315)	169.9 (4315)	169.9 (4315)
Width, in (mm)	34 (864)	34 (864)	34 (864)	34 (864)	34 (864)
Height, in (mm)	74.6 (1895)	74.6 (1895)	76.6 (1946)	76.6 (1946)	76.6 (1946)
Unit weights					
Operating weight, lb (kg)	8557 (3881)	8557 (3881)	9314 (4225)	9505 (4311)	9505 (4311)
Shipping weight, lb (kg)	7840 (3556)	7840 (3556)	8206 (3722)	8345 (3785)	8345 (3785)
Operating charge per circuit, R-134a, lb (kg)	127 (58)	127 (58)	128 (58)	124 (56)	124 (56)

Notes:

1. Certified in accordance with ARI Standard 550/590-98.
2. All units have one compressor per circuit.
3. 80% full R-134a at 90°F (32°C) per refrigerant circuit.
4. On units with mixed capacity compressors, the minimum capacity depends on which compressor is lag.
5. Without sound enclosure – see dimension drawing in CAT AGS for enclosure dimensions.

WGS-AA Remote Condenser—Capacity and Physical Data

WGS 130AA through WGS 190AA, R-134a

WGS unit size	130AA	140AA	160AA	170AA	190AA
Unit capacity @ 44°F LWT and 125°F SDT tons, (kW) ¹	116.0 (407.9)	125.9 (442.7)	136.1 (478.5)	148.0 (520.4)	160.1 (562.9)
No. circuits	2	2	2	2	2
Compressors, frame 3					
Nominal horsepower	65 / 65	65 / 80	80 / 80	80 / 95	95 / 95
Number ²	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
% minimum capacity (modulated) ³	15	13/17	15	14/16	15
Oil charge per compressor, oz (L)	256 (7.6)	256 (7.6)	256 (7.6)	256 (7.6)	256 (7.6)
Condenser (remote)					
Evaporator					
Number	1	1	1	1	1
No. refrigerant circuits per condenser	2	2	2	2	2
Water volume, gallons (L)	68 (257)	68 (257)	115 (435)	115 (435)	115 (435)
Refrig. side D.W.P., psig, (kPa)	354 (2441)	354 (2441)	354 (2441)	354 (2441)	354 (2441)
Water side D.W.P., psig, (kPa)	150 (1034)	150 (1034)	150 (1034)	150 (1034)	150 (1034)
Water connections: inlet and outlet, in (mm) victaulic	6.0 (152)	6.0 (152)	8.0 (203)	8.0 (203)	8.0 (203)
Water connections: drain and vent (npt int.)	0.5	0.5	0.5	0.5	0.5
Unit dimensions⁴					
Length, in (mm)	179.3 (4554)	179.3 (4554)	179.3 (4554)	179.3 (4554)	179.3 (4554)
Width, in (mm)	34.0 (864)	34.0 (864)	34.0 (864)	34.0 (864)	34.0 (864)
Height, in (mm)	60.8 (1544)	60.8 (1544)	62.8 (1595)	62.8 (1595)	62.8 (1595)
Unit weights⁵					
Operating weight, lb (kg)	6265 (2841)	6265 (2841)	7022 (3185)	7022 (3185)	7022 (3185)
Shipping weight, lb (kg)	5659 (2567)	5659 (2567)	6024 (2732)	6024 (2732)	6024 (2732)
Operating charge per circuit, lb (kg) ⁶	35 (15.9)	35 (15.9)	36 (16.5)	36 (16.5)	36 (16.5)

1. Certified in accordance with ARI Standard 550/590-98.

2. All units have one compressor per circuit.

3. On units with mixed capacity compressors, the minimum capacity depends on which compressor is lag.

4. Without sound enclosure – see dimension drawing for enclosure dimensions.

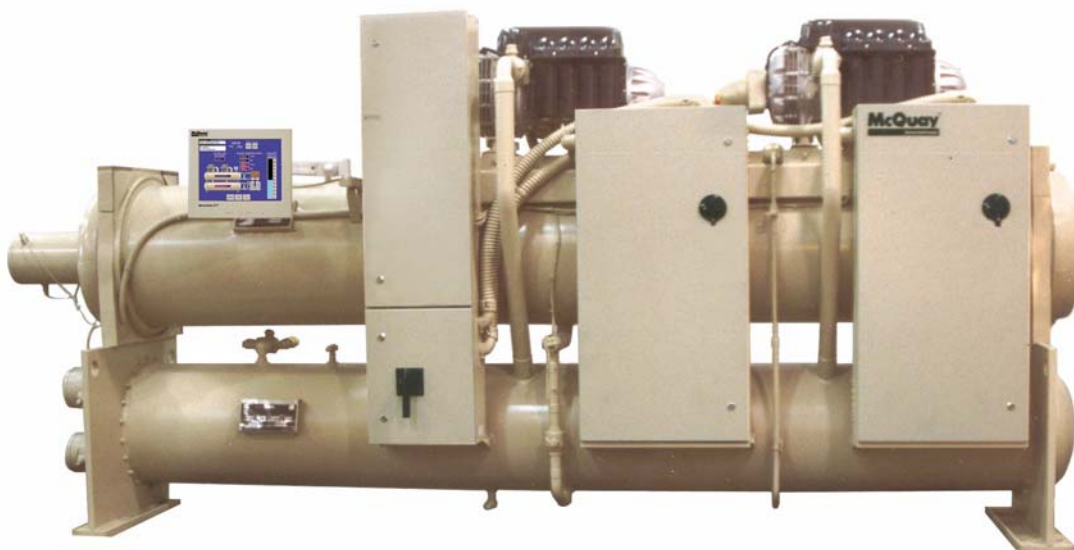
5. Add 650 lbs (295 kg) for sound enclosure.

6. Indoor unit only. Does not include field piping or condenser charge. System charge of R-134a supplied by the installing contractor.

Frictionless Centrifugal Chillers—110 to 290 Tons

- Energy savings with part load performance as low as 0.33 kW/ton IPLV; full load performance as low as 0.62 kW/ton
- Quietest sound levels in the industry with sound pressure ratings as low as 77 dBA per ARI Standard 575
- Lower maintenance costs because the frictionless, magnetic bearing compressor design eliminates the oil support system
- R-134a refrigerant with no ozone depletion potential or phase-out schedule
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice

For more detail, refer to Catalog WMC.
For the most current information, refer to www.mcquay.com.



Model WMC water-cooled frictionless centrifugal compressor chiller—110 to 290 tons



Magnetic frictionless compressor technology delivers unsurpassed efficiency by eliminating the high friction losses of typical centrifugal compressors.



Available LONMARK certified



Features

Easy integration with your choice of BAS vendors using LONWORKS[®], BACnet[®], or Modbus[®] communication

Part load performance as low as 0.33 kW/ton IPLV

Magnetic bearing compressor simplicity with removal of oil handling system

User-friendly touch screen operator panel



Variable frequency drives unload chiller to 10% of full load

Sound pressure as low as 77 dBA per ARI Standard 575

R-134a refrigerant has no phaseout schedule and no ozone depletion potential

WMC Evaporator Physical Data

WMC model	Evaporator model	Tube length	Unit refrigerant charge lb (kg)	Evaporator water volume gal (L)	Insulation area sq ft (m ²)	Number of relief valves
145S, 145D	E2209	9 ft.	550 (249)	38 (145)	66 (6.1)	1
150D	E2212	12 ft.	790 (358)	45 (170)	90 (8.3)	1
250D	E2609	9 ft.	850 (386)	61 (231)	76 (7.1)	1
290D	E2612	12 ft.	1150 (522)	72 (273)	102 (9.4)	1

Notes: 1. Refrigerant charge is approximate since the actual charge depends on other variables. Actual charge is shown on unit nameplate.
2. Water capacity is based on standard tube configuration and standard dished heads.

WMC Condenser Physical Data

WMC model	Condenser model	Tube length	Maximum pumpdown capacity lb (kg)	Evaporator water volume gal (L)	Number of relief valves
145S, 145D	C2009	9 ft.	728 (330)	47 (147)	2
150D	C2012	12 ft.	971 (440)	62 (236)	2
250D	C2209	9 ft.	883 (401)	50 (223)	2
290D	C2212	12 ft.	1174 (533)	72 (273)	2

Notes: 1. Condenser pumpdown capacity based on 90% full at 90°F.
2. Water capacity is based on standard configuration and standard heads and can be less with lower tube counts.

WMC Overall Dimensions, 2-Pass Vessels

Data	WMC 145S, 145D		WMC 150		WMC 250		WMC 290	
	Same end	Opp. end	Same end	Opp. end	Same end	Opp. end	Same end	Opp. end
Length, in (mm)	135 (3429)	141 (3581)	171 (4343)	176 (4470)	136 (3454)	141 (3581)	171 (4343)	176 (4470)
Width, in (mm)	35 (889)	35 (889)	35 (889)	35 (889)	43 (1092)	43 (1092)	43 (1092)	43 (1092)
Height, in (mm)	79 (2006)	79 (2006)	79 (2006)	79 (2006)	83 (2108)	83 (2108)	83 (2108)	83 (2108)
Overall shipping weight, lb (kg)	5413 (2455)	7052 (3199)	7851 (3561)	7851 (3561)	7591 (3443)	7591 (3443)	9076 (4117)	9076 (4117)

Centrifugal Compressor Water Chillers—200 to 2700 Tons

- R-134a refrigerant with no ozone depletion potential and no phase-out schedule
- Smallest footprint per ton in the industry to optimize equipment room space
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- Variable speed drives help to provide superior part load performance IPLV
- Dual compressor chiller models offer efficiency choices: WDC for superior part load efficiency and WCC for exceptional full load efficiency

For more detail, refer to Catalog WSCWDC. For the most current information, refer to www.mcquay.com.



**WDC dual compressor—single circuit
water-cooled centrifugal chiller—400 to 2400 tons**



**WSC single compressor
water-cooled centrifugal chiller—200 to 1200 tons**

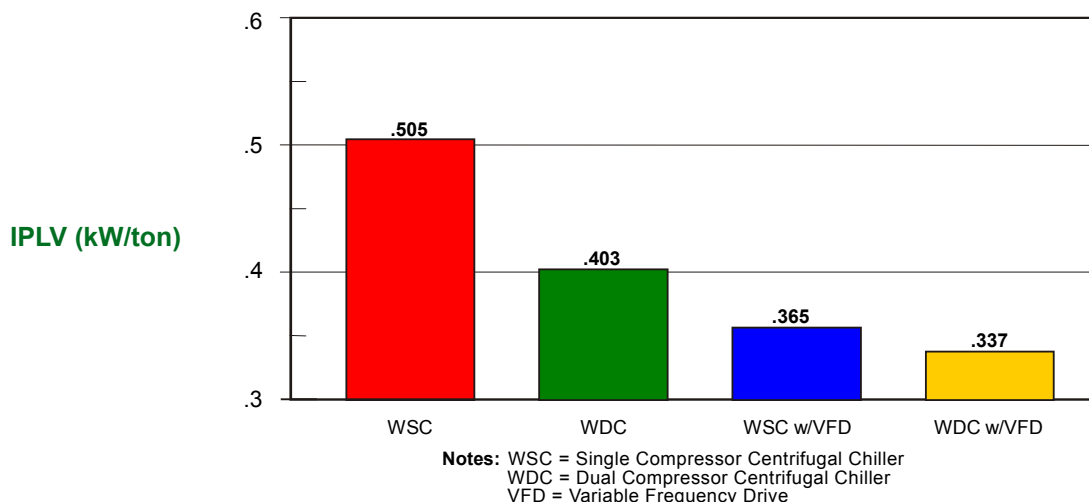


**WCC dual compressor—dual circuit
water-cooled centrifugal chiller—1200 to 2700 tons**



Available LONMARK certified

Relative IPLV efficiencies of various McQuay options for 500-ton selection.



Capacity and Physical Data

WSC Series Single Compressor Chiller

Chiller model	Nominal capacity tons (kW)	Dimensions (in)			Max. unit operating weight (lb)
		Maximum length	Maximum width (w/o starter)	Maximum height	
WSC 063	200–300 (700–1050)	175 (4445)	96 (2438)	96 (2438)	16,769 (7606)
WSC 079/087	300–600 (1050–2100)	175 (4445)	80 (2032)	105 (2667)	24,999 (11,340)
WSC 100/113/126	600–1300 (2100–4550)	181 (4597)	104 (2642)	106 (2692)	43,017 (19,513)

WDC and WCC Dual Compressor Chiller

Chiller model	Nominal capacity tons (kW)	Dimensions (in)			Max. unit operating weight (lb)
		Maximum length	Maximum width (w/o starter)	Maximum height	
WDC 063	400–600 (1400–2100)	221 (5623)	64 (1619)	90 (2280)	28,815 (13,070)
WDC 079	600–700 (2100–2450)	224 (5698)	74 (1865)	106 (2686)	38,515 (17,470)
WDC 087	700–1200 (2450–4200)	224 (5698)	74 (1865)	106 (2686)	39,875 (18,087)
WDC100/113/126	1200–2700 (4200–8750)	230 (5848)	110 (2792)	116 (2956)	68,996 (31,296)
WDC100/113/126	1200–2700 (4200–9450)	278 (7071)	104 (2651)	110 (2084)	65,806 (29,849)

Notes: Lengths in inches (mm), weight in pounds (kg).

Centrifugal Compressor Water Chillers

MicroTech II controls

- Color touch screen operator panel
- Easy integration with most building automation systems

Positive pressure R-134a design

- Sustainable performance for the life of the chiller
- No refrigerant phase-out or availability issues



Variable frequency drive option

- Improves part-load efficiency
- Reduces annual energy costs



Standard bolt-together construction

- Allows for easier field disassembly and re-assembly
- Facilitates the difficult rigging work often associated with retrofit installations

Compact design

- Provides the smallest footprint per ton in the industry
- Fits in most tight equipment rooms

Power failure coastdown protection

- Lubricated compressor coastdown
- Protects bearings from damage after a power failure



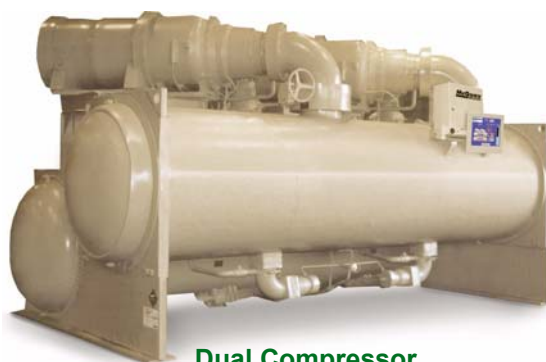
A compressed spring pressurizes an oil reservoir in the compressor, providing force to lubricate bearings in a coastdown.

Excellent unloading capability

- Compressor unloading down to 5% without hot gas bypass (Models WDC and WCC)
- Movable discharge diffuser increases stability and reduces vibration



Dual Compressor Centrifugal Chiller



**Dual Compressor,
Single Circuit**



Dual Compressor, Dual Circuit

All the features and benefits of the single compressor models *plus*:

- Single circuit parallel-flow model provides superior part load efficiency, especially with optional variable frequency drives
- Dual circuit series-counterflow model delivers exceptional full load efficiency
- Automatic backup with at least 60% of the chiller design capacity available on single circuit units and 50% on dual circuit units
- Positive pressure R-134a design has a significantly smaller footprint than R-123 designs

Templifier™ Heating Units—3000 to 24,000 MBh

- Designed to economically turn waste heat into useful heat for loads such as space heating and domestic hot water
- Heats water more economically than fossil fuel or electric resistance heaters
- Can reduce the burden on overloaded boilers and/or cooling towers, thereby delaying or eliminating the capital expenditure required to increase their capacity
- Model TSC Templifier units are equipped with centrifugal compressors. Capacities range from 3000 to 24,000 MBh with hot water temperatures up to 140°F (60°C)
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice

For more detail, refer to Catalog Templifier. For the most current information, refer to www.mcquay.com.



Model TSC Templifier Heating Unit
3000 to 24,000 MBh (880 to 7000 kW)



Available LONMARK certified



TSC Centrifugal—Physical Data

TSC 063 through TSC 126

TSC unit size	TSC 063	TSC 079	TSC 087	TSC 100	TSC 126
Compressor					
Model	CE 063	CE 079	CE 087	CE 100	CE 126
Number	1	1	1	1	1
Motor speed 60/50 Hz	3550/2960	3550/2960	3550/2960	3550/2960	3550/2960
Condenser					
Diameter/length, in/ft	22/12	26/12	36/12	36/12	36/12
Diameter/length, (mm/mm)	(559/3658)	(660/3658)	(914/3658)	(914/3658)	(914/3658)
Water volume, gal (L)	76 (290)	111 (419)	234 (884)	234 (884)	234 (884)
Two pass connection size, in (mm)	8 (203)	8 (203)	12 (305)	12 (305)	12 (305)
Working press., water, psi (kPa)	150 (1034)	150 (1034)	150 (1034)	150 (1034)	150 (1034)
Working press., refriger, psi (kPa)	300 (2070)	300 (2070)	300 (2070)	300 (2070)	300 (2070)
Evaporator					
Diameter/length, in/ft	26/12	30/12	42/12	42/12	48/12
Diameter/length, (mm/mm)	(660/3658)	(762/3658)	(1067/3658)	(1067/3658)	(1219/3658)
Water volume, gal (L)	72 (273)	101 (381)	222 (841)	222 (841)	327 (1237)
Two pass connection size, in (mm)	8 (203)	10 (254)	14 (356)	14 (356)	18 (457)
Working press., water, psi (kPa)	150 (1034)	150 (1034)	150 (1034)	150 (1034)	150 (1034)
Working press., refriger, psi (kPa)	200 (1380)	200 (1380)	200 (1380)	200 (1380)	200 (1380)
Dimensions					
Length, in (mm)	169 (4293)	175 (4445)	175 (4445)	175 (4445)	175 (4445)
Width w/o starter, in (mm)	48 (1219)	56 (1422)	86 (2184)	86 (2184)	104 (2642)
Height, in (mm)	80 (2032)	88 (2235)	111 (2819)	99 (2515)	99 (2515)
Weights, (w/starter)					
Shipping, lb (kg)	12,777 (5796)	15,835 (7183)	24,657 (11,170)	27,657 (13,545)	33,224 (15,070)
Operating, lb (kg)	14,017 (6358)	17,501 (7938)	28,460 (12,892)	31,460 (14,270)	38,823 (17,610)
Weights, (w/o starter)					
Shipping, lb (kg)	11,577 (5251)	14,635 (6638)	23,457 (10,626)	26,457 (12,001)	32,024 (14,526)
Operating, lb (kg)	12,517 (5678)	16,301 (7394)	27,260 (12,349)	30,260 (13,726)	37,623 (17,066)

Modular Central Plants—100 to 600 Tons Per Single Package, up to 2400 Total Tons

- The high efficiency, low cost alternative to site-built central plants
- Combines chiller, cooling tower, pumps, and interconnecting condenser water piping in pre-engineered and pre-assembled modules
- Sizes from 100 to 600 tons in a single compact package with a modular design that allows central plants up to 2400 tons
- Reduces trade coordination costs and site assembly time
- Lower costs per ton compared to traditional site-built plants
- Available with McQuay water-cooled scroll, screw, centrifugal, and magnetic bearing compressor chillers

For more detail, refer to ASP 31-235.

For the most current information, refer to www.mcquay.com.



Modular Central Plant



Available LONMARK certified



Single / Multiple / Dual-Module, Water-Cooled Chiller Options



Scroll Chiller
MCP-WGZ-SCS

Module capacity—
Single: 75 to 100 tons
Multiple: 150 to 500 tons



Screw Chiller
MCP-WGS-SCS

Module capacity—
Single: 125 to 175 tons
Multiple: 250 to 975 tons

MCP-WMC-CCS

Dual: 250 to 350 tons



Magnetic Bearing Centrifugal Chiller
MCP-WMC-SCS

Module capacity—
Single: 100 to 300 tons
Multiple: 200 to 1500 tons

MCP-WMC-CCS

Dual: 200 to 500 tons



Standard Centrifugal Chiller
MCP-WSC-SCS

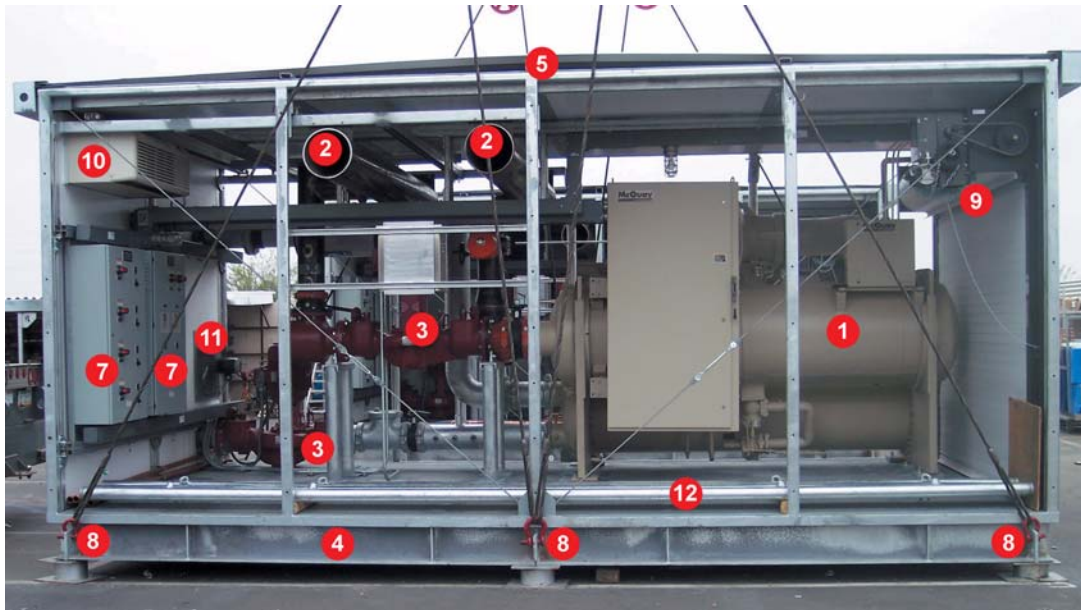
Module capacity—
Single: 200 to 600 tons
Multiple: 400 to 2400 tons

Available Options

- Redundant primary and condenser water pumps
- Redundant cooling towers
- Tower basin filtration
- Tower basin heater
- Stainless steel hot and cold water basins
- Complete stainless steel tower construction
- Air separator
- Air and dirt separator
- Chiller 65,000 AIC breakers
- MCP extended parts and labor warranty
- Waterside economizer
- Chilled and condenser water pipe insulation

The Modular Central Plant Advantage

Innovation inside...

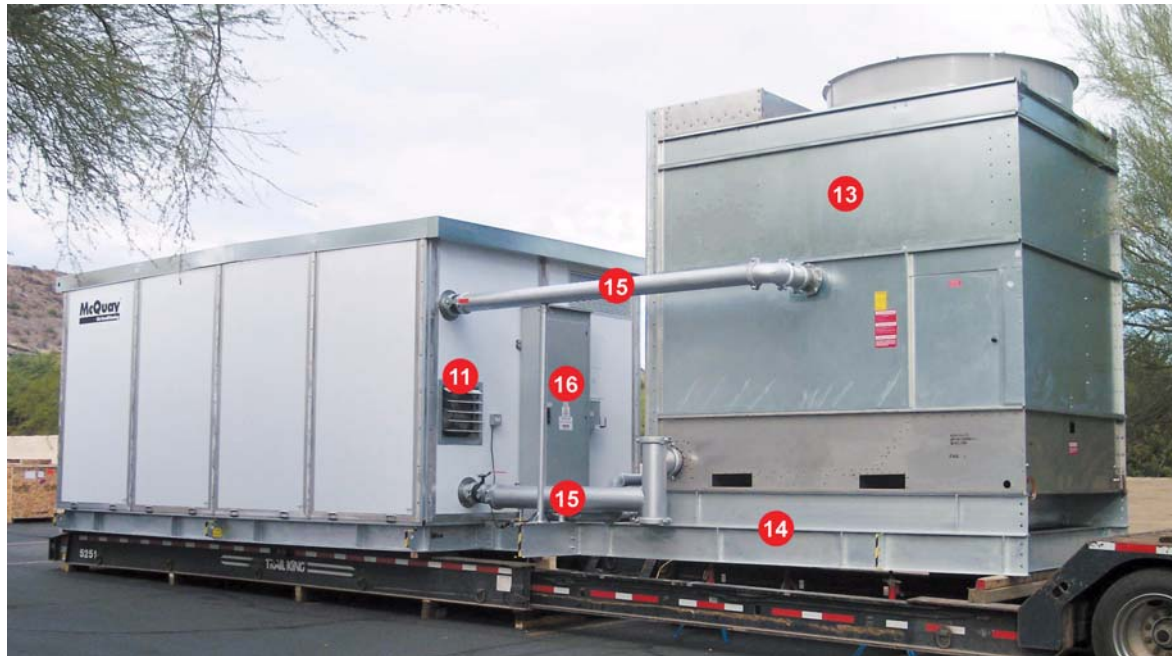


...and outside the box



- 1 Chiller—scroll, screw, or centrifugal
- 2 Interconnecting chilled water supply and return pipe headers
- 3 Split-coupled, in-line pump
- 4 Fully engineered, galvanized, welded, and point-loading steel structure, with seismic bracing where required
- 5 Removable roof with integral gutters and flashing
- 6 Removable wall panel with lifting handles
- 7 UL listed motor starter and VFD panels
- 8 Lifting and multiple-module connecting lugs
- 9 Motorized roll-up access door
- 10 Packaged terminal air-conditioner unit
- 11 Enclosure ventilation fan
- 12 Complete interconnecting hardware provided and shipped with modules

Complete with cooling tower, interconnecting condenser water piping...



- 13** Cooling tower—cross flow type with stainless steel hot and cold water basins optional
- 14** Fully engineered, galvanized, welded, and point-loading steel structure, with seismic bracing where required
- 15** Interconnecting galvanized condenser water supply and return piping and pipe supports
- 16** Main distribution panel with single point electrical 480 volt/3-phase connection (one per module)
- 17** Chemical treatment tanks, metering pumps, controller, coupon rack, pot feeder, and containment pan skid mounted for either internal or external insulation

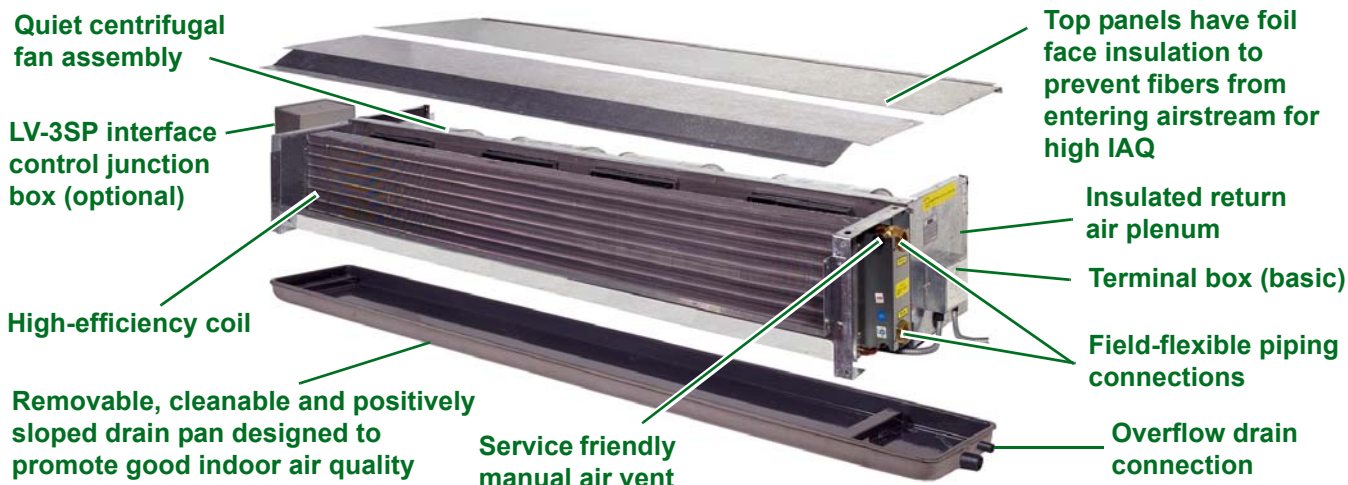
...and chemical water treatment equipment



Model THC Ceiling Concealed Fan Coils—200 to 1200 cfm

- Compact, lightweight design conserves space
- Coil design provides good air mixing for high thermal efficiency
- High-efficiency centrifugal fan assembly minimizes vibration and noise
- Field-flexible design for easy, low cost installation
- Service-friendly design
- Full faced, insulated plenum with rear return
- 1" supply air duct collar, removable from both sides and bottom
- 1" throwaway filter
- Units available in stock
- ARI certified performance
- ETL and CETL safety agency approval listing

For more detail, refer to Catalog 700. For the most current information, refer to www.mcquay.com.



THC Fan Coils—Capacity and Performance Data

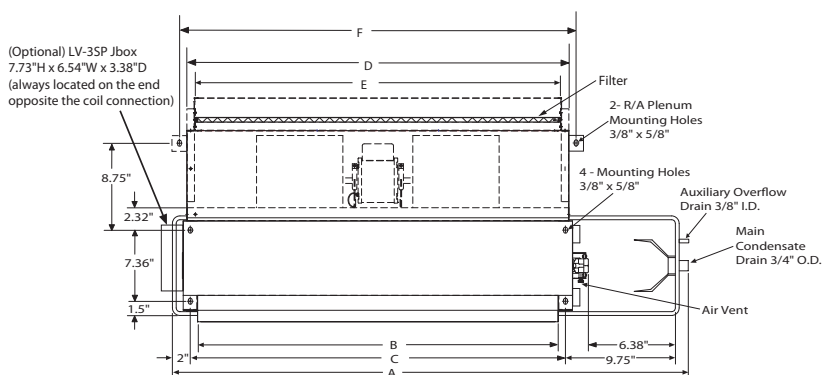
Model	THCH02		THCH03		THCH04		THCH06		THCH08		THCH10		THCH12		
System	2-pipe	4-pipe	2-pipe	4-pipe	2-pipe	4-pipe	2-pipe	4-pipe	2-pipe	4-pipe	2-pipe	4-pipe	2-pipe	4-pipe	
Air flow (cfm)	200		300		400		600		800		1000		1200		
ARI total cooling cap. (Btuh)	8500		11,100		14,500		21,200		22,700		25,300		34,200		
ARI sensible clog. cap. (Btuh)	6100		8400		10,800		16,100		18,000		20,000		27,000		
ARI heating cap. (Btuh)	14,900	11,500	20,300	16,300	26,800	20,400	37,600	29,600	42,400	36,100	48,300	40,300	68,800	49,800	
Water flow—3-row (gpm)	1.94		2.51		3.26		4.70		5.14		5.70		7.75		
Water flow—1-row (gpm)	N/A	0.64	N/A	0.91	N/A	1.12	N/A	1.65	N/A	2.00	N/A	2.24	N/A	2.76	
Water PD—3-row (ft WC)	5.10		3.26		5.80		12.82		3.68		4.76		8.29		
Water PD—1-row (ft WC)	N/A	1.47	N/A	2.89	N/A	5.32	N/A	10.72	N/A	3.24	N/A	4.07	N/A	6.45	
Fan(s)	Type	Centrifugal fan (forward curved galvanized steel fan wheel)													
	Number	1		1		2		2		3		3		4	
	Fan housing	Galvanized steel													
Coil	Type	Water													
	Rows*	3-row	3/1-row	3-row	3/1-row	3-row	3/1-row	3-row	3/1-row	3-row	3/1-row	3-row	3/1-row	3-row	3/1-row
	Testing press.	425 psi for 1 minute; leak test: 225 psi for 5 minutes													
Motor(s)	Type	PSC													
	Number	1		1		1		1		2		2		2	
	Power supply	115/60/1, 208-230/50-60/1, 277/60/1													
Watts—high speed	50 Hz	62		91		109		171		242		249		321	
	60 Hz	75		109		131		205		291		299		385	
Coil connection		3/4" FPT													
Drain pipe		3/4" MPT													
Ship weight (lbs.)**		61.00	63.00	69.00	73.00	83.00	88.00	97.00	102.00	127.00	134.00	137.00	143.00	146.00	153.00

Notes: Conditions: Cooling capacity: Entering air temperature 80°F (OB), 67°F (WB); Entering water temperature 45°F, Leaving Water Temperature 55°F. Heating capacity: Entering air temperature 70°F (OB); Entering water temperature 140°F, the same amount of water flow as with cooling. Nominal air flow: Under dry coil conditions; Fan speed high.

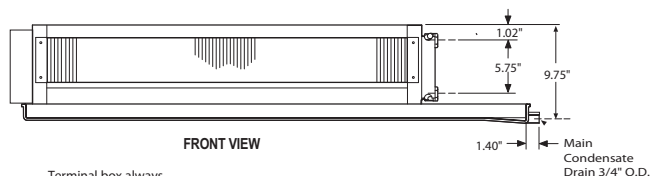
*3-Row = 3-row chilled water/hot water coil; 4-Row = 3-row chilled water, 1-row hot water coil.

**Weight includes return air plenum and packing.

Dimensional Data

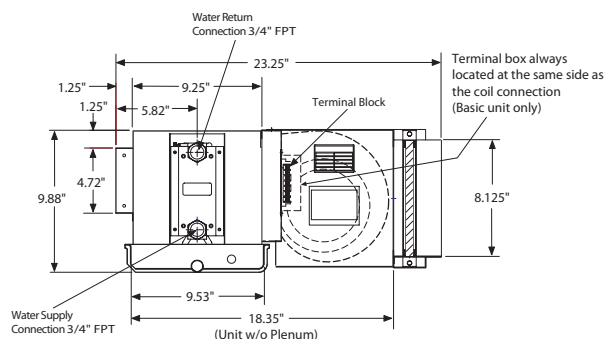
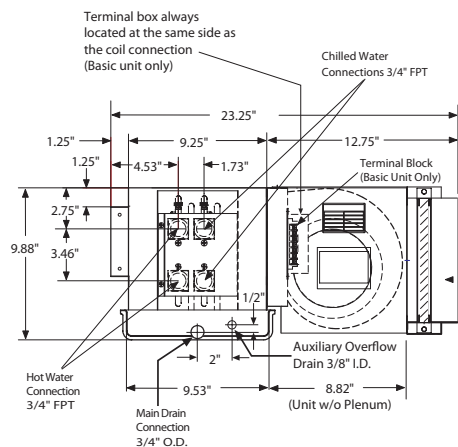
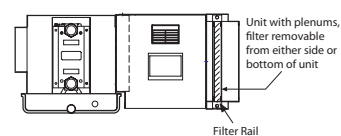


TOP VIEW



FRONT VIEW

Plenum Back with Filter



Model	A	B	C	D	E	Number of Fans	Filters	
							Size	Qty
THCH02	32.05"	17.64"	19.17"	19.96"	18.46"	1	18 1/8" x 8" x 1"	1
THCH03	38.74"	24.33"	25.87"	26.65"	25.15"	1	24 7/8" x 8" x 1"	1
THCH04	43.86"	29.45"	30.98"	31.77"	30.20"	2	29 7/8" x 8" x 1"	1
THCH06	51.73"	37.32"	38.86"	39.65"	38.07"	2	18 7/8" x 8" x 1"	2
THCH08	61.57"	47.17"	48.70"	49.49"	47.91"	3	23 3/4" x 8" x 1"	2
THCH10	65.51"	51.10"	52.64"	53.43"	51.85"	3	25 3/4" x 8" x 1"	2
THCH12	75.75"	61.34"	62.87"	63.66"	62.09"	4	30 7/8" x 8" x 1"	2

Note: Dimensions based on unit with return air plenum and filter.

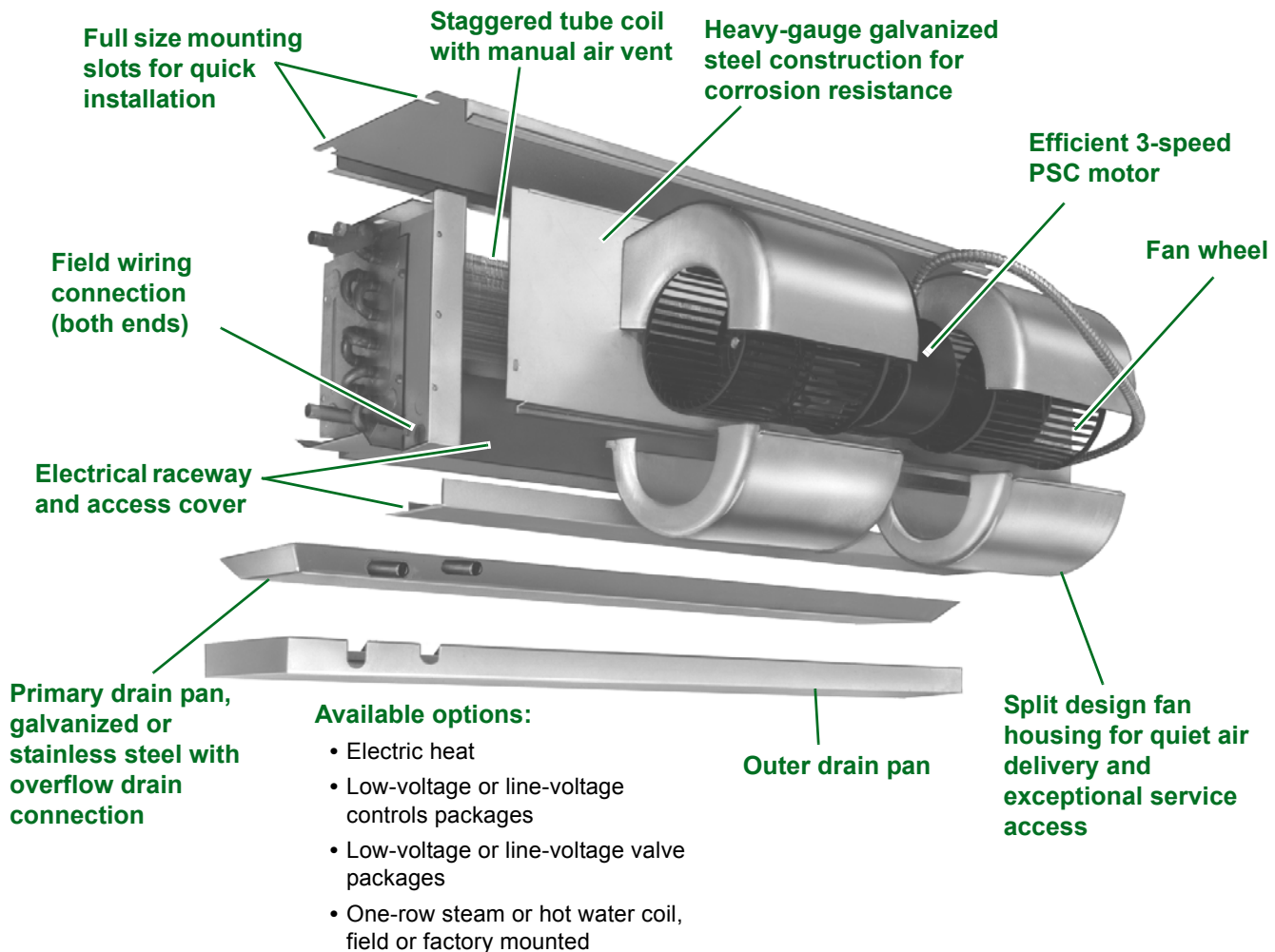
Available options:

- Two-pipe or four-pipe systems
- 120-volt valve packages
- Three-speed control switch
- Wall mounted, low and high-voltage thermostats
- A variety of factory and field installed valve packages
- Stainless steel drain pan with overflow drain connection
- Condensate overflow detection kits
- Transformers

ThinLine™ Model TSH and TSC—Horizontal Design—300 to 1200 cfm

- Six unit sizes from 300 to 1200 cfm
- Heavy-gauge galvanized steel construction for longer life
- Fully concealed, exposed or recessed applications
- 2-pipe or 4-pipe configuration
- Electric heat
- ARI-certified performance
- ETL and CETL safety agency approval listing

For more detail, refer to Catalog 720.
For the most current information, refer to www.mcquay.com



TSC ceiling unit



TSC ceiling unit with optional trim flange



TSH hideaway unit

ThinLine TSH and TSC Models Horizontal Design—Capacity and Performance Data

ARI Certified Standard Ratings—Ceiling Units

Standard coil water cooling capacity ratings.¹ High capacity and heating capacity detail is available in Catalog 720.

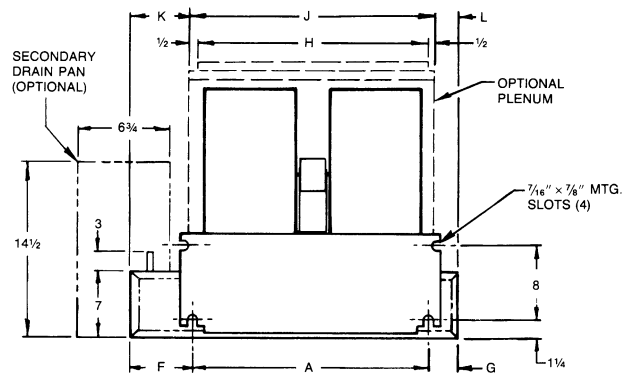
Unit size	TSH hideaway units				TSH ceiling units			
	Cooling capacity ²		Water flow (gpm)	Water flow p.d. ft. w.c.	Cooling capacity ²		Water flow (gpm)	Water flow p.d. ft. w.c.
	Total Btuh	Sensible Btuh			Total Btuh	Sensible Btuh		
S03	8100	6800	1.7	3.7	5800	4600	1.2	2.0
S04	11,900	10,100	2.5	8.0	10,900	9100	2.2	6.5
S06	19,100	15,200	4.0	3.0	17,100	13,000	3.4	2.4
S08	22,100	17,600	4.6	3.9	19,900	15,200	3.9	2.8
S10	29,000	23,500	6.2	11.5	26,500	20,300	5.3	8.8
S12	38,300	29,700	7.8	21.6	34,500	25,300	6.9	17.2

Notes:

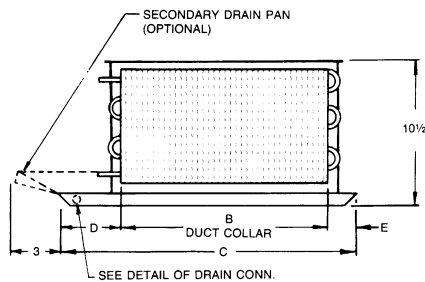
1. Rated in accordance with ARI Standard 440. Cooling capacities based on 80°F DB/67°F WB entering air, 45°F entering water, 10°F water temperature rise and high fan speed with standard 115/60/1 motor.
2. For cooling coil capacity ratings at conditions other than those listed, consult your McQuay representative.

Dimensional Data

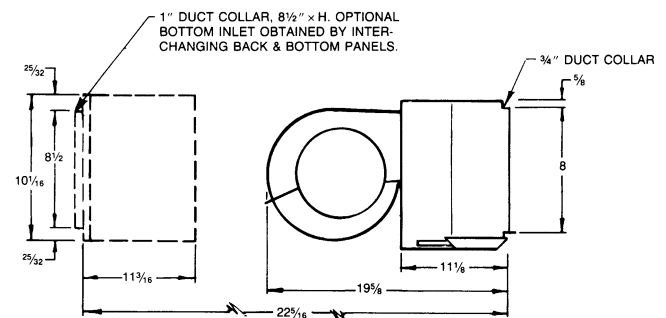
Left hand unit shown. Unit connection on left when facing front of unit.



Top view

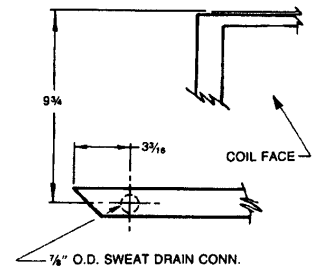


Front view

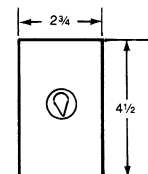


Optional plenum
(side view)

Drain connection detail
(front view)



REMOTE THREE-SPEED
FAN SWITCH WITH OFF
POSITION
P/N 107112101



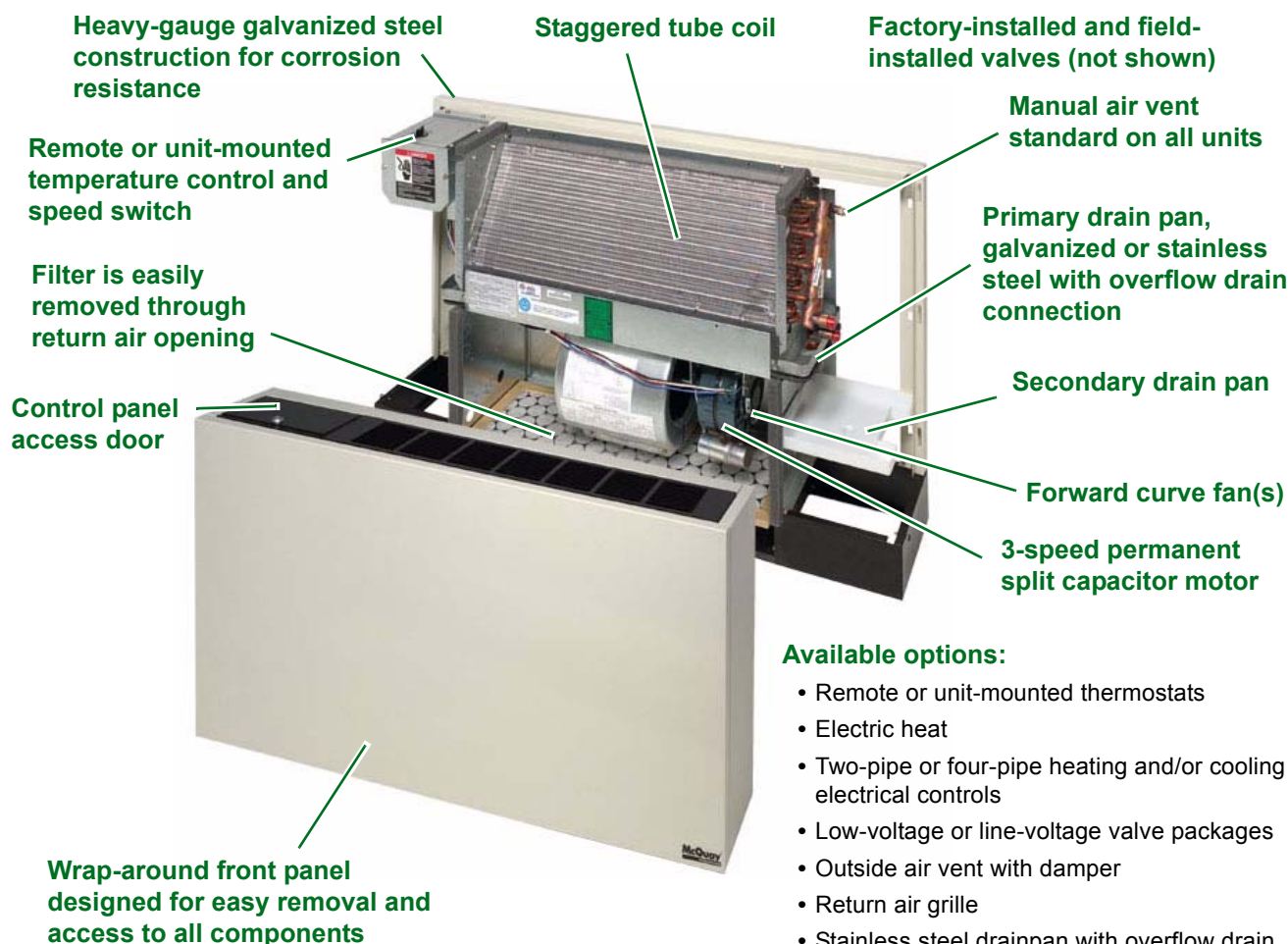
Unit size	Unit dimensions (in)										
	A	B	C	D	E	F	G	H	J	K	L
S03	20 1/4	19	27	5 1/2	2 1/2	4 7/8	1 7/8	21	22	4	1
S04	26 1/4	25	33	5 1/2	2 1/2	4 7/8	1 7/8	27	28	4	1
S06	35 1/4	34	42	5 1/2	2 1/2	4 7/8	1 7/8	36	37	4	1
S08	35 1/4	34	42	5 1/2	2 1/2	4 7/8	1 7/8	36	37	4	1
S10	43 1/4	42	50	5 1/2	2 1/2	4 7/8	1 7/8	44	45	4	1
S12	59 1/4	58	68	6 1/2	3 1/2	5 7/8	2 7/8	60	51	5	2

Note: All dimensions approximate. Certified drawings available upon request.

ThinLine™ Model TSS, TPF, TSF and TSB—Vertical Design—200 to 1200 cfm

- Seven unit sizes from 200 to 1200 cfm
- 2-pipe or 4-pipe configurations
- Heavy-gauge galvanized steel construction for longer life
- Fully concealed, exposed or recessed applications
- ARI certified performance
- ETL and CETL safety agency approval listing

For more detail, refer to Catalog 720.
For the most current information, refer to www.mcquay.com.



Available options:

- Remote or unit-mounted thermostats
- Electric heat
- Two-pipe or four-pipe heating and/or cooling electrical controls
- Low-voltage or line-voltage valve packages
- Outside air vent with damper
- Return air grille
- Stainless steel drainpan with overflow drain connection
- Condensate overflow detection kits



TSB basic unit
(top discharge shown)



TPF, TSF flat top floor unit



TSS slope top floor unit

ThinLine Models—Capacity and Performance Data

ARI Certified Standard Ratings—TSF and TSB Floor Units

Standard coil water cooling capacity ratings TSS, TPF, TSF, and TSB units.¹ High capacity and heating capacity detail is available in Catalog 720.

Unit size	Cooling capacity ²		Water flow (GPM)	Water flow P.D. FT. W.C.
	Total Btuh	Sensible Btuh		
S02	5600	4400	1.2	1.4
S03	8000	6100	1.7	1.1
S04	10,900	8800	2.3	1.6
S06	15,600	11,700	3.1	6.4
S08	20,100	15,900	4.1	6.5
S10	28,300	21,600	6.0	6.6
S12	30,100	24,600	6.4	11.3

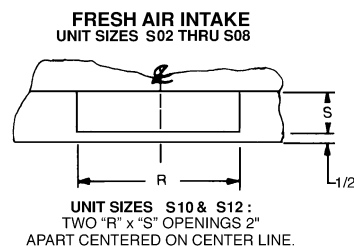
Notes:

1. Rated in accordance with ARI Standard 440. Cooling capacities based on 80°F DB/67°F WB entering air, 45°F entering water, 10°F water temperature rise, and high fan speed with standard 115/60/1 motor.
2. For cooling coil capacity ratings at conditions other than those listed, consult your McQuay representative.

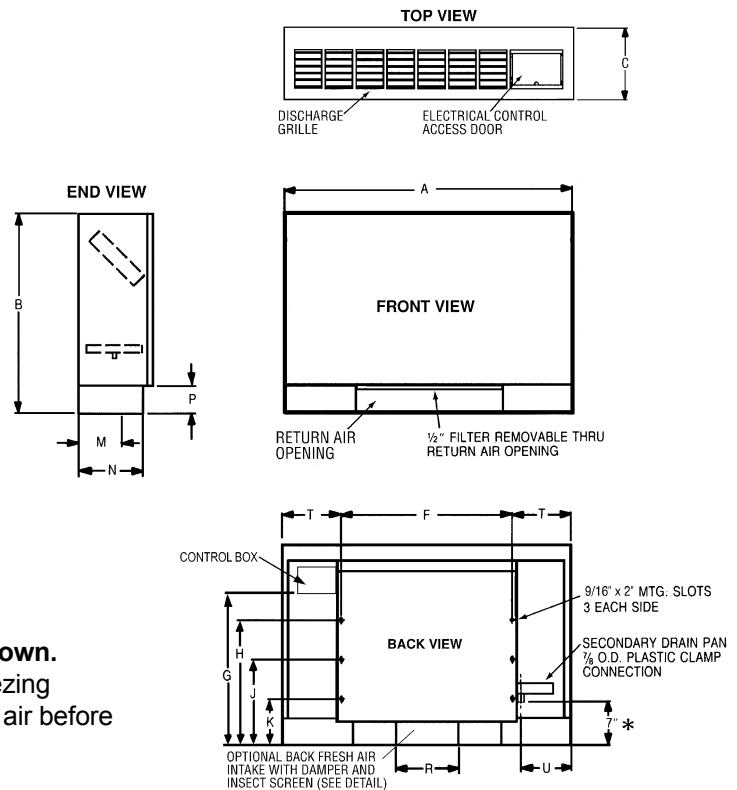
Dimensional Data—TSF Model

TSF models are shown. For TSB and TSF dimension details, refer to Catalog 720.

Left-hand unit shown. Unit connection on left when facing front of unit.



NOTE: Optional top duct discharge unit shown.
Front discharge units are also available. If freezing conditions are expected, temper outside fresh air before entering the unit.



Unit size	Unit dimensions (in)																
	A	B	C	D	E	F	G	H	J	K	M	N	P	R	S	T	U
TSB-S02	37	25	9 1/4	2 7/8	19	21 7/8	19 3/4	15 7/8	10 7/8	5 7/8	4 11/16	8 1/16	3 1/2	10	2 1/2	7 9/16	4 15/16
TSB-S03	43	25	9 1/4	2 7/8	25	27 7/8	19 3/4	15 7/8	10 7/8	5 7/8	4 11/16	8 1/16	3 1/2	10	2 1/2	7 9/16	4 15/16
TSB-S04	51	25	9 1/4	2 7/8	34	36 7/8	19 3/4	15 7/8	10 7/8	5 7/8	4 11/16	8 1/16	3 1/2	16	2 1/2	7 1/16	4 11/16
TSB-S06	61	25	9 1/4	2 7/8	44	46 7/8	19 3/4	15 7/8	10 7/8	5 7/8	4 11/16	8 1/16	3 1/2	16	2 1/2	7 1/16	4 11/16
TSB-S08	61	28	12 1/4	5 7/8	44	46 7/8	21 3/8	17	12	6	7 7/16	10 13/16	3 1/2	16	3	7 1/16	4 11/16
TSB-S10	75	28	12 1/4	5 7/8	56	58 7/8	21 3/8	17	12	6	7 7/16	10 13/16	3 1/2	16	3	8 1/16	5 7/16
TSB-S12	75	28	12 1/4	5 7/8	56	58 7/8	21 3/8	17	12	6	7 7/16	10 13/16	3 1/2	16	3	8 1/16	5 7/16

Note: All dimensions are approximate. Certified drawings available upon request.

Low Boy Models LC and LH—Low Profile Horizontal Design—200 to 600 cfm

- 2-pipe or 4-pipe systems
- 2- or 3-row primary coil; 1-row steam/hot water coil
- 120, 208, 240 or 277/60/1 voltages with 3-speed motor
- 16-gauge heavy duty front panel
- Closed cell insulation
- Sloped drain pans, polymer or stainless steel
- Factory wired/mounted valve packages available
- Manual or motorized fresh air dampers
- Cam-lock fasteners are standard on access doors
- Hideaway unit with flange outlet connections
- 1" throwaway filters
- ARI certified performance, ETL and CSA Approved

For more detail, refer to Catalog 701.
For the most current information, refer to www.mcquay.com



Cabinet unit
(model LC)



Hideaway unit
(model LH)

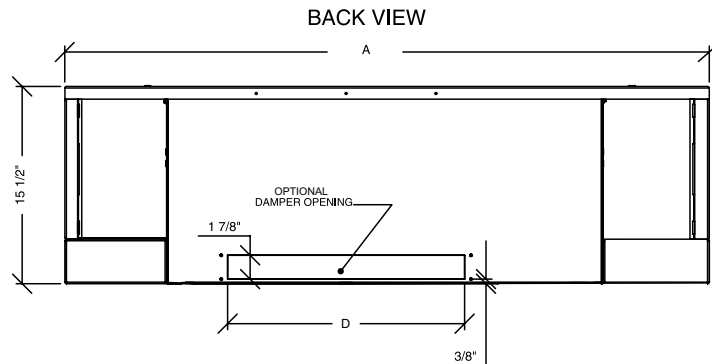
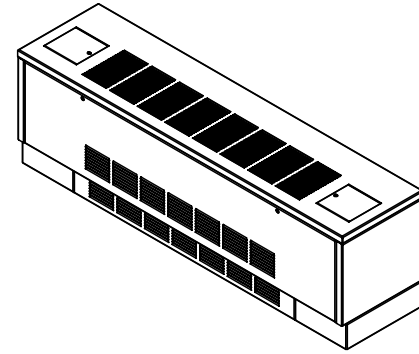
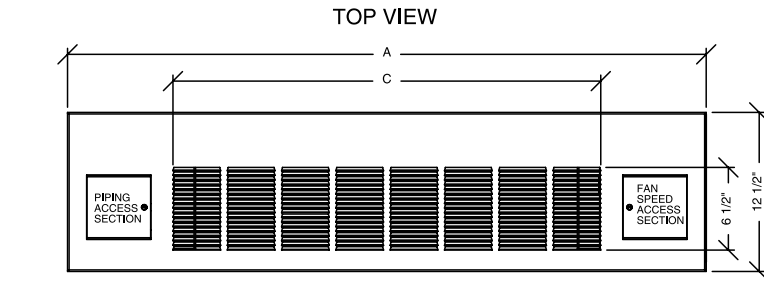
Low Boy LC and LH Models—Capacity and Performance Data

Model		02	03	04	06
Air flow (cfm) ¹		200	300	400	600
ARI total cooling cap. (Btuh)		5000	8200	9600	16,600
ARI sensible cooling cap. (Btuh) ²		3600	5800	7400	12,200
ARI heating cap. (Btuh) ³		18,000	27,100	35,400	54,000
Water flow—2-row cooling (gpm)		1.0	1.6	1.9	3.3
Water flow—2-row heating (gpm)		1.9	2.8	3.7	5.6
Water PD—2-row cooling (ft WC) ⁴		1.5	4.4	1.0	3.4
Water PD—2-row heating (ft WC) ⁴		3.2	8.1	2.2	6.2
Fan(s)	Type	Centrifugal fan (forward curved galvanized steel fan wheel)			
	Number	1	1	2	2
	Fan housing	Galvanized steel			
Coil	Type	Water			
	Rows	2 or 3	2 or 3	2 or 3	2 or 3
	Testing press.	Factory tested at 350 psi air			
Motor(s)	Type	PSC			
	Number	1	1	1	1
	Power supply	120/60/1, 203/60/1, 277-265/60/1, 240/60/1			
	HP	1/12	1/12	1/10	1/7
	RPM high	1550	1550	1550	1550
	RPM medium	1320	1320	1320	1320
	RPM low	1000	1000	1000	1000
	Amps	1.05	1.05	1.2	1.7
	Power input – watts	85	105	125	180
Voltage	Volts	120	120	120	120
	Hz	60	60	60	60
	Phase	1	1	1	1
Filter	Number	1	1	1	1
	L × W × H (in)	22 × 8.5 × 1	28 × 8.5 × 1	34 × 8.5 × 1	46 × 8.5 × 1
Cabinet size	L × W × H (in)	38.2 × 12.5 × 15.5	44.2 × 12.5 × 15.5	50.2 × 12.5 × 15.5	62.2 × 12.5 × 15.5
Min. free area	Inlet, in ²	67	86	105	144
	Outlet, in ²	92	110	129	184
Ship weight (lbs.)		75	90	110	130

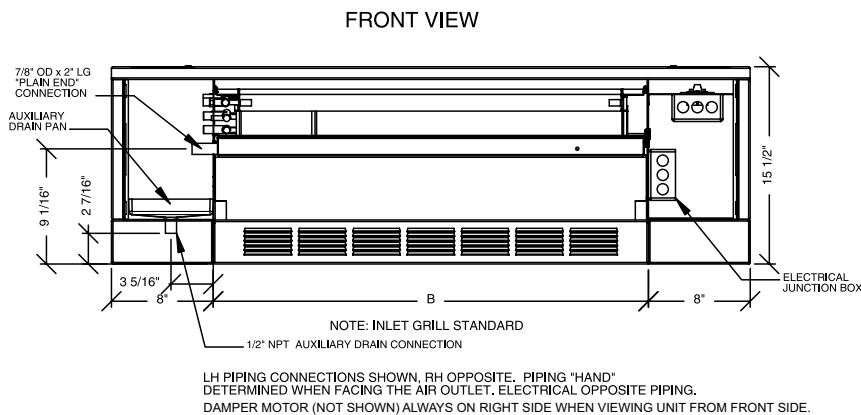
Notes:

1. Airflow under dry conditions. Inlet air 70-80°F DB.
2. Cooling capacity based on inlet air 80°F DB, 67°F WB, 45°F entering water, 55°F leaving water, high fan speed.
3. Heating capacity based on inlet air 60°F DB, 180°F entering water, 160°F leaving water, high fan speed.
4. Pressure drop (PD) shown in feet of water.

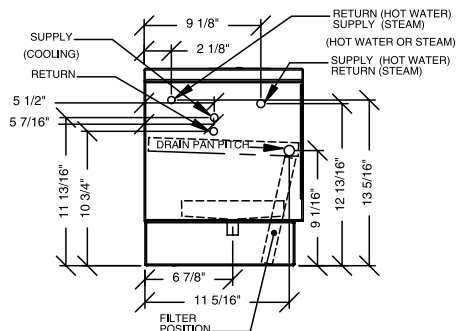
Low Boy Dimensional Data—LC Model



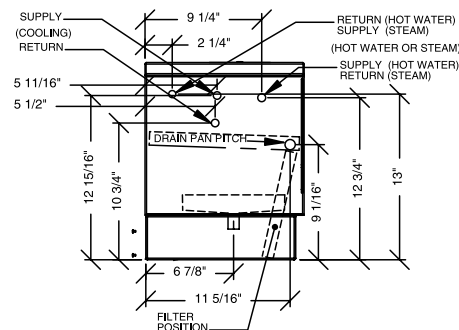
Dimensional Data (in)				
Unit	A	B	C	D
02	38 3/16	22 3/16	22	18 5/8
03	44 3/16	28 3/16	28	18 5/8
04	50 3/16	34 3/16	34	23 5/8
06	62 3/16	46 3/16	46	33 5/8



**SIDE VIEW
(STANDARD 2 ROW COOLING ONLY
& 1 ROW HOT WATER OR STEAM)**

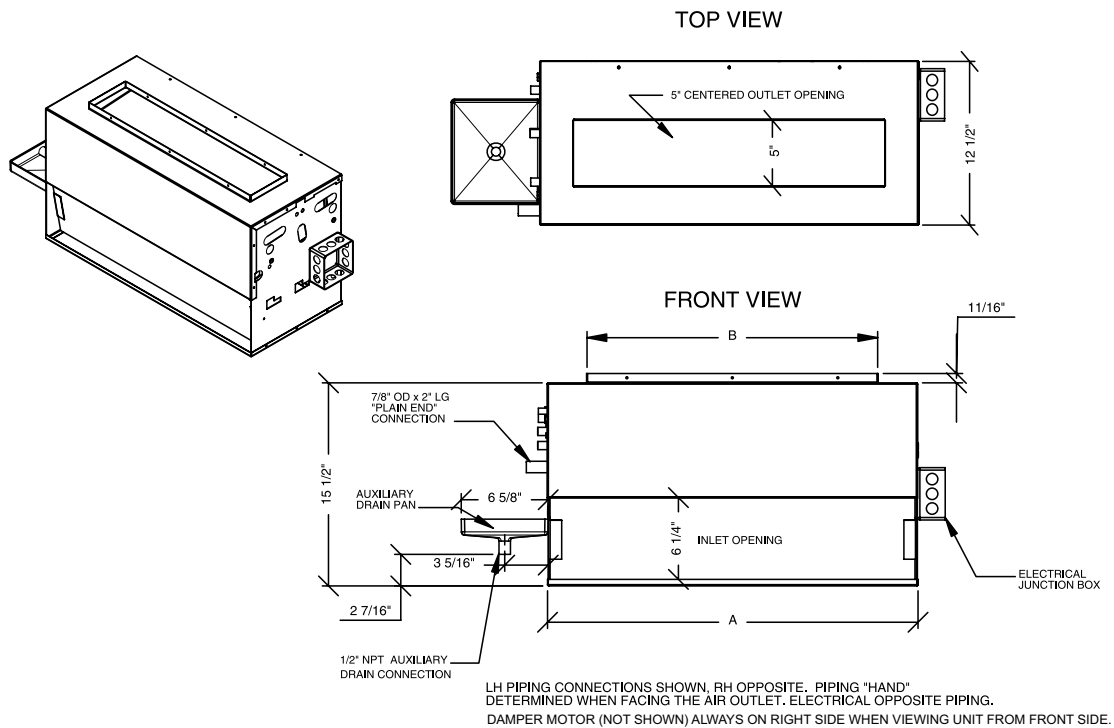


**SIDE VIEW
(HIGH CAPACITY 3 ROW COOLING ONLY
& 1 ROW HOT WATER OR STEAM)**



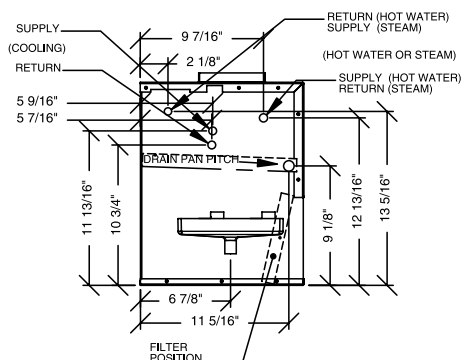
ALL COIL CONNECTIONS ARE 1/2" NOMINAL (5/8" OD) ALL SIZES

Low Boy Dimensional Data—LH Model

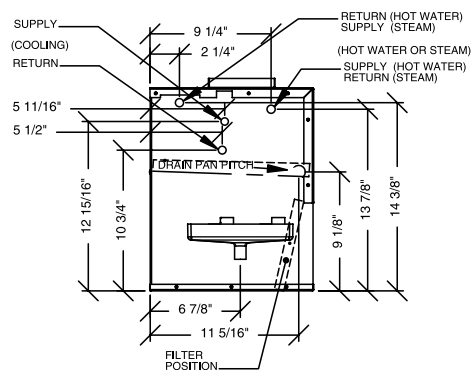


Dimensional Data (in)			
Unit	A	B	C
02	22 5/16	16 3/16	18 5/8
03	28 5/16	22 3/16	18 5/8
04	34 5/16	28 3/16	23 5/8
06	46 5/16	40 3/16	33 5/8

**SIDE VIEW
(STANDARD 2-ROW COOLING ONLY
& 1 ROW HOT WATER OR STEAM)**



**SIDE VIEW
(HIGH CAPACITY 3-ROW COOLING ONLY
& 1 ROW HOT WATER OR STEAM)**



ALL COIL CONNECTIONS ARE 1/2" NOMINAL (5/8" OD) ALL SIZES

HiLine™ Model HSS Vertical Stacking Fan Coils—300 to 1200 cfm

- Four unit sizes from 300 to 800 cfm, blow-through configuration
- Two unit sizes, 1000 and 1200 cfm, draw-through configuration
- Low cfm design for individual rooms
- Quiet operation
- ARI certified performance

For more detail, refer to Catalog 770.
For the most current information, refer to www.mcquay.com.

Note: Picture below is for 300 to 800 cfm only.

Low sound level operation

- Quiet, energy efficient motor and fan assembly within a fully insulated cabinet

Risers

- Risers from 100–115" long. No on-the-job cutting required. Supply and return risers are factory insulated and have sweat ball valves (union ball valve combination optional)

Discharge arrangements

- Single, double, triple and top discharge arrangements

Controls

- Face-mounted or remote thermostat

Fast and simple installation

- Installs by stacking one unit above another
- Unique couplings require only one person for setting and connecting

Cabinet

- Heavy gauge galvanized steel
- Fully insulated
- Aluminum foil face or closed cell insulation available

Coils

- High efficiency type
- ARI certified

Valve packages

- Low-voltage or line-voltage
- Factory installed

Removable chassis

- All components mounted on a single removable chassis
- Different capacity chassis can be installed in the future if required

Fresh air damper

- Two-position
- Motorized or manual

Drain pan options

- Galvanized (standard)
- Stainless steel
- Overflow detection

Motor and fan assembly

- Energy efficient and quiet
- Fan motor is easily removed

Filter

- Easily accessible by simple removal of air grille panel

Access and sound baffle

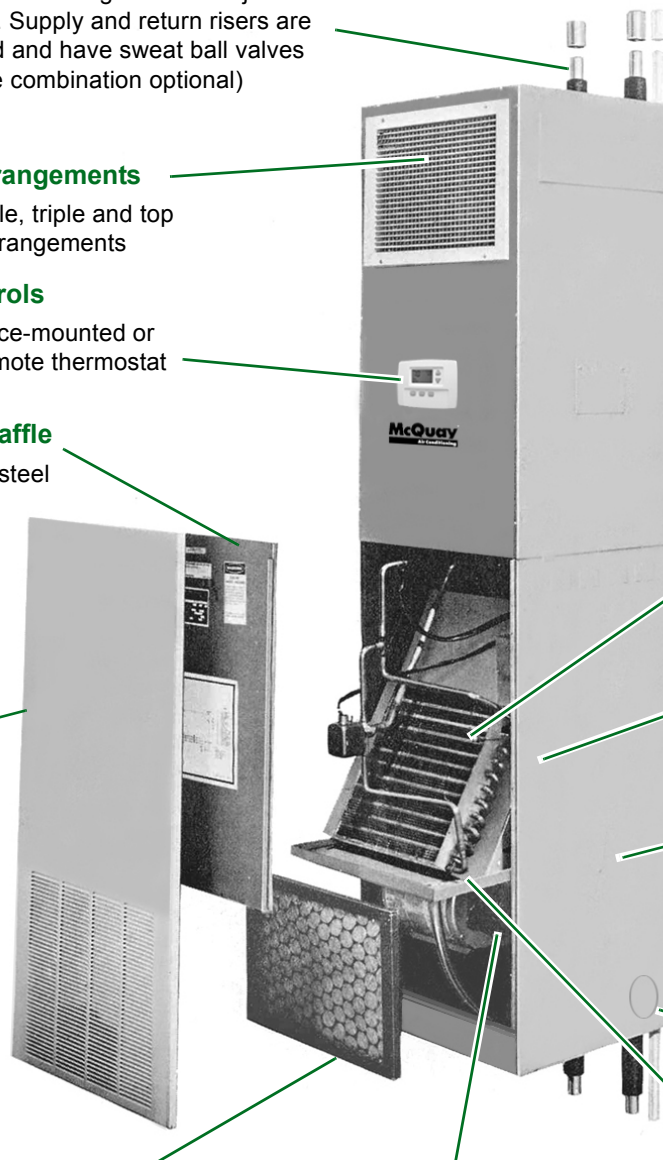
- Insulated galvanized steel
- Easily removed for complete access
- Reduces sound level

Return air grille panel

- Heavy gauge steel with stamped grille and attractive finish

Twin Units

- Two adjacent room units can be connected to a single set of risers and still retain individual room temperature control



HiLine Model HSS Vertical Stacking Fan Coil Units—Capacity and Performance Data

ARI Certified Standard Ratings

Standard coil water cooling capacity ratings.¹ Capacity rating details available in Catalog 770.

Unit size	Cooling capacity ²		Water flow (gpm)	Water flow p.d. ft. w.c.
	Total Btuh	Sensible Btuh		
S03	11,000	7,200	2.3	14.6
S04	17,000	11,400	3.5	44.7
S06	23,000	16,100	4.7	28.8
S08	28,800	20,600	6.0	44.1
S10	39,600	26,600	8.2	29.7
S08	44,900	30,400	9.3	39.6

Notes:

1. Rated in accordance with ARI Standard 440. Cooling capacities based on 80°F DB/67°F WB entering air, 45°F entering water, 10°F water temperature rise and high fan speed with standard 115/60/1 motor.
2. For cooling coil capacity ratings at conditions other than those listed, consult your McQuay representative.
Riser sizes available from 3/4" to 2 1/2".

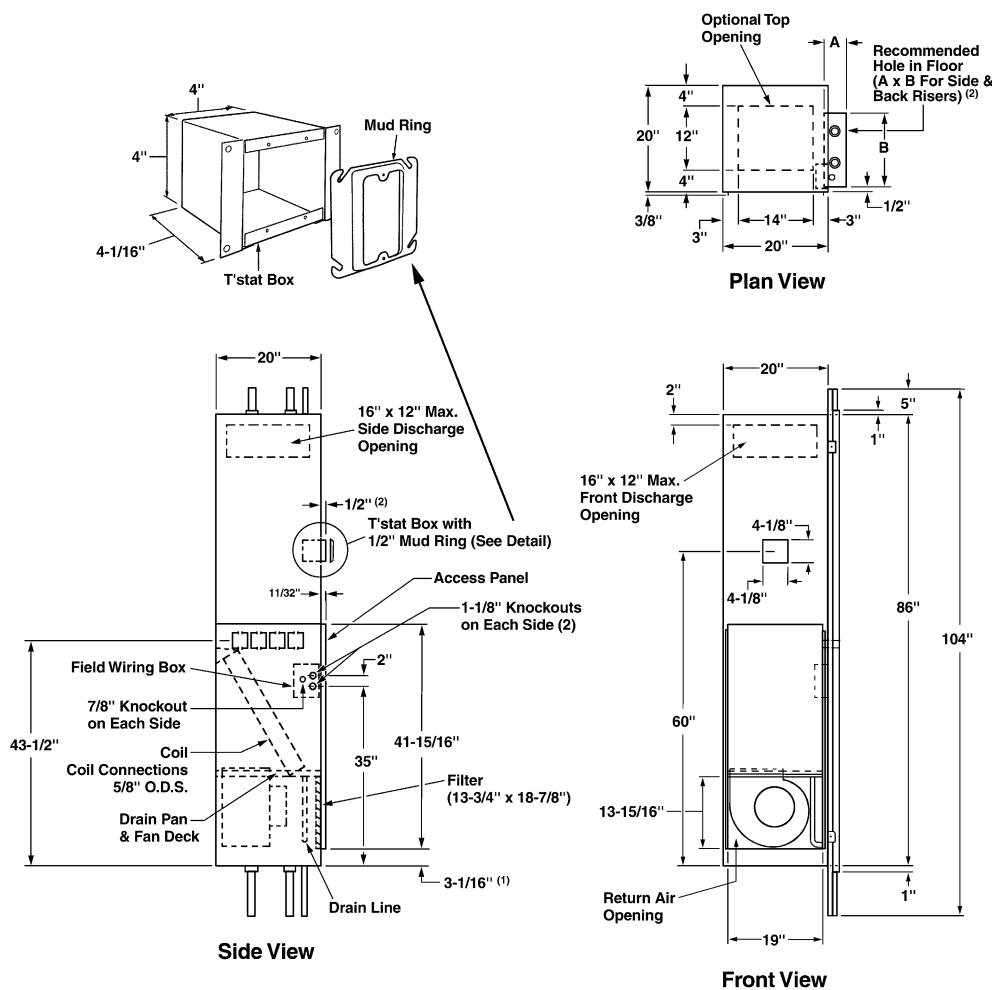
Dimensional Data—sizes 03 to 08.

Right hand unit shown. Hand of unit determined by facing return air opening.

Risers on left = Left hand of unit.

Risers on back = Neutral unit.

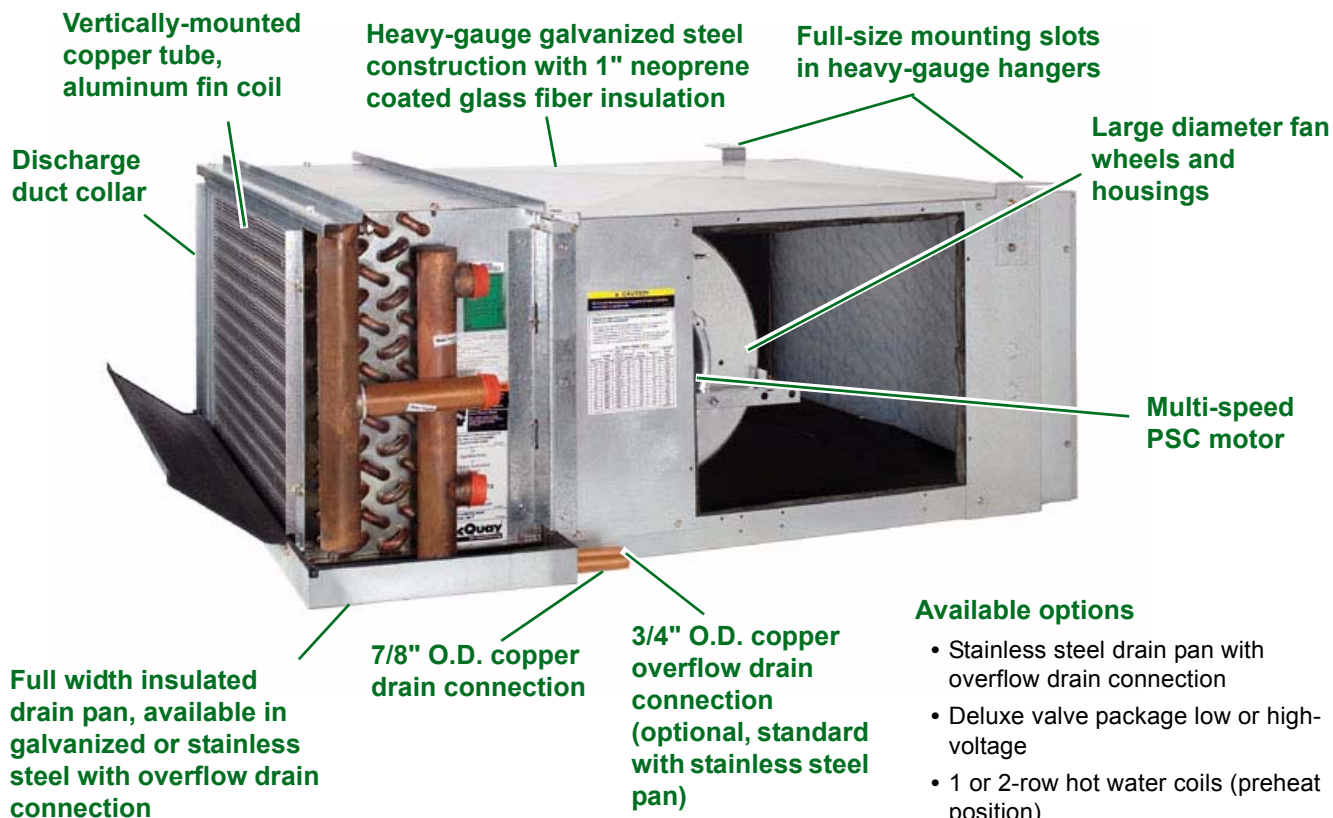
Risers on right = Right hand of unit.



Large Capacity Fan Coil Units—600 to 3000 cfm

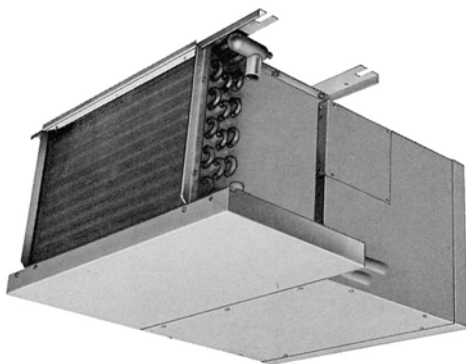
- Five direct drive hideaway or cabinet ceiling unit sizes from 600 to 2000 cfm
- Five belt drive hideaway or cabinet ceiling unit sizes from 800 to 3000 cfm
- 3-row to 6-row primary coil; 1-row or 2-row secondary heating coil
- Heavy-gauge, galvanized steel construction for longer life
- UL listing

For more detail, refer to Catalog 735.
For the most current information, refer to www.mcquay.com.

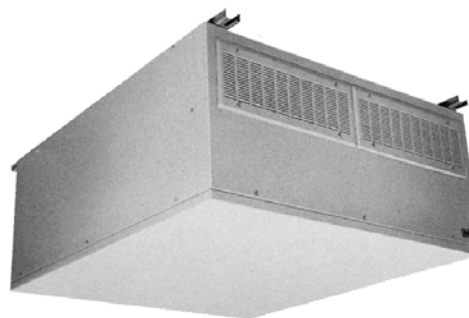


Available options

- Stainless steel drain pan with overflow drain connection
- Deluxe valve package low or high-voltage
- 1 or 2-row hot water coils (preheat position)
- Condensate overflow detection kits
- Disconnect



Direct drive hideaway unit



Direct drive cabinet ceiling unit

Large Capacity Fan Coil Units, Direct Drive—Capacity and Performance Data

Standard Coil Water Cooling Capacity Ratings¹

High capacity and heating capacity detail is available in Catalog 720.

Unit types	Size	Cooling capacity ²		Water flow (gpm)	Water flow p.d. (ft. w.c.)
		Total Btuh	Sensible Btuh		
SCD, SHD	S06	17,600	14,500	3.5	5.7
SCD, SHD	S08	26,000	19,700	5.2	3.5
SCD, SHD	S12	37,000	26,800	7.4	8.1
SCD, SHD	S16	53,000	40,000	10.6	3.2
SCD, SHD	S20	61,000	48,000	12.2	3.2

Notes:

1. Cooling capacities based on 80°F DB/67°F WB entering air, 45°F entering water, 10°F water temperature rise in SHD unit with plenum operating at high fan speed with no external static pressure.
2. For cooling coil capacity ratings at conditions other than those listed, consult your McQuay representative.

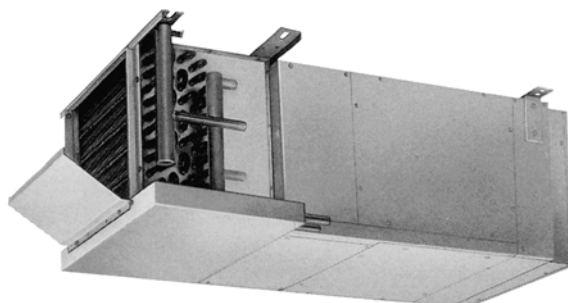
Large Capacity Fan Coil Units, Belt Drive—Capacity and Performance Data

Standard Coil Water Cooling Capacity Ratings¹

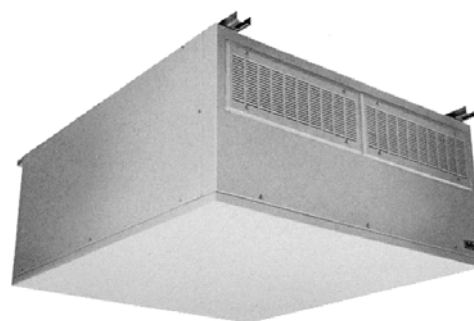
Unit types	Size	Airflow (cfm)	Cooling capacity ²		Water flow (gpm)	Water flow p.d.(ft. w.c.)
			Total Btuh	Sensible Btuh		
Cabinet and hideaway	S08	800	24,000	17,700	4.8	3.1
		900	25,615	19,241	5.1	3.4
	S12	1200	37,265	27,027	7.5	8.2
		1300	38,898	28,581	7.8	8.8
	S16	1600	48,121	35,472	9.7	2.7
		1800	51,121	38,482	10.3	3.0
	S20	2000	57,596	45,014	11.5	2.9
		2200	60,565	48,102	12.1	3.1
	S30	3000	91,633	66,864	18.3	2.9
		3200	94,813	69,923	19.0	3.1

Notes:

1. Cooling capacities based on 80°F DB/67°F WB entering air, 45°F entering water, 10°F water temperature rise.
2. For cooling coil capacity ratings at conditions other than those listed, consult your McQuay representative.



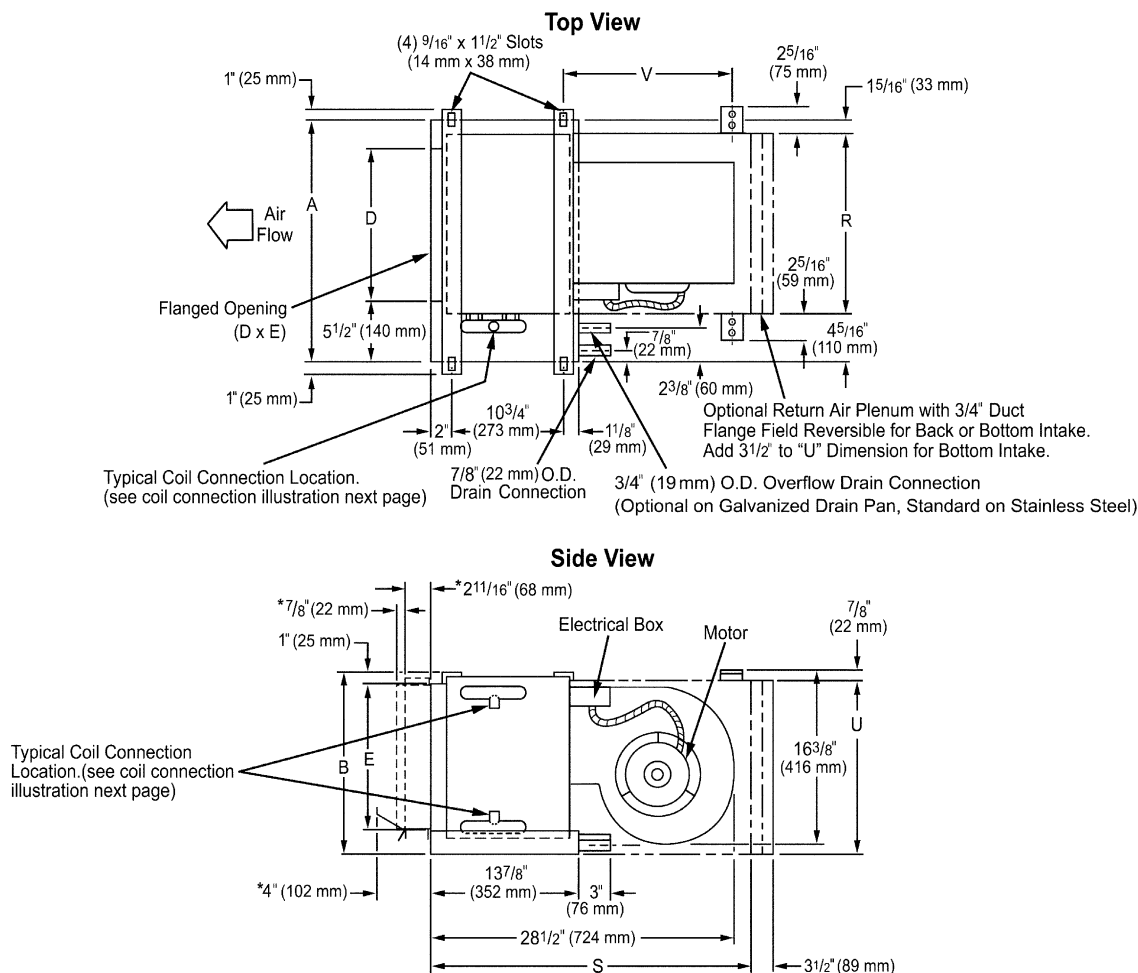
Belt drive hideaway unit



Belt drive cabinet ceiling unit

Large Capacity Fan Coil Units, Direct Drive Units—Dimensional Data—SHD Model

Right-hand unit shown. (Hand of unit determined by cooling unit connection *when facing discharge*.)

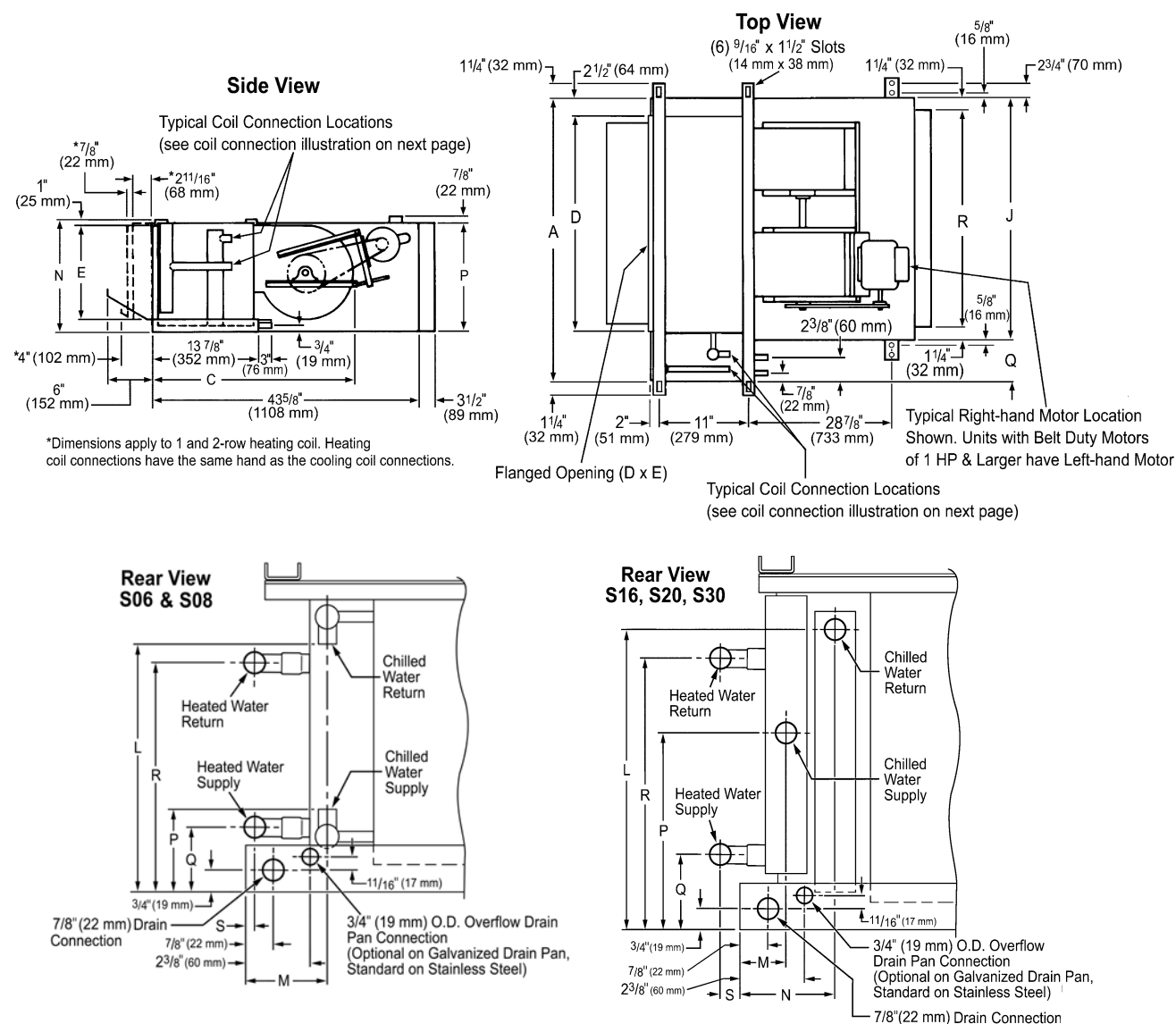


SHD model	Unit dimensions (in)							
	A	B	D	E	R	S	U	V
S06	22	14	14	10 7/8	16 3/8	29 5/8	15 3/4	15 3/8
S08	24	16 1/2	16	13 3/8	18 3/8	29 5/8	15 3/4	15 3/8
S12	31	16 1/2	23	13 3/8	25 3/8	29 5/8	15 3/4	15 3/8
S16	39	16 1/2	31	13 3/8	33 3/8	29 5/8	15 3/4	15 3/8
S20	41	19	33	15 5/8	35 3/8	32 1/8	18 1/4	17 3/8

Note: All dimensions approximate. Certified drawings available upon request.

Large Capacity Fan Coil Units, Belt Drive Units—Dimensional Data—HZ Model

Right-hand unit shown. (Hand of unit determined by cooling unit connection *when facing discharge*.)

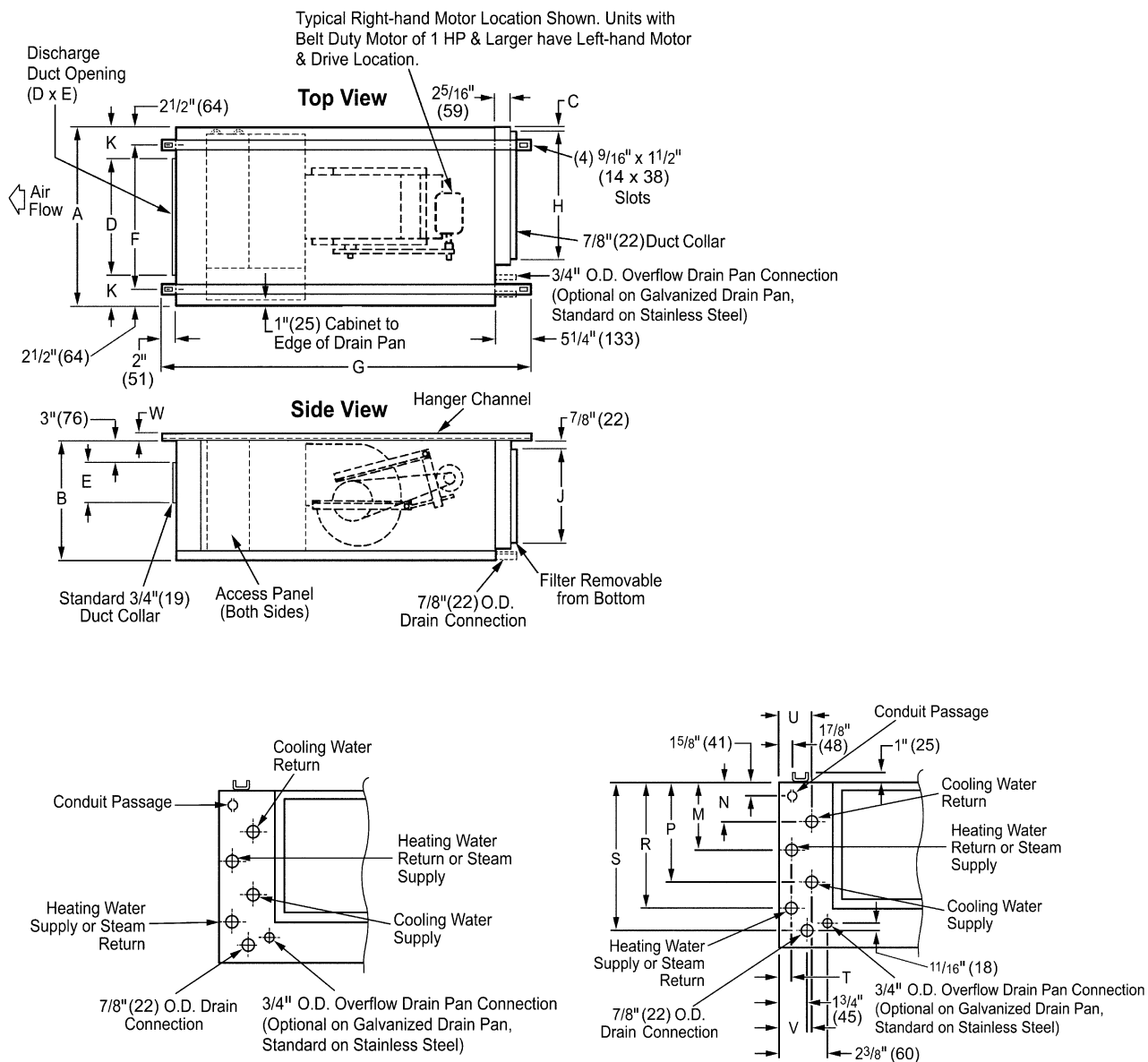


HZ model	No. of fans	Unit dimensions (in)									
		A	C	D	E	F	J	N	P	Q	R
S08	1	24	28 1/2	16 1/4	13 3/8	24	21	16 1/2	15 3/4	3	18 1/2
S12	1	31	28 1/2	23	13 3/8	31	28	16 1/2	15 3/4	3	25 1/2
S16	2	39	28 1/2	31	13 3/8	39	36	16 1/2	15 3/4	3	33 1/2
S20	2	41	28 1/2	33 1/4	15 3/8	41	38	18 3/4	18 1/4	3	35 1/2
S30	2	60	30	49	15 3/8	57	54	18 3/4	18 1/4	6	51 1/2

Note: All dimensions approximate. Certified drawings available upon request.

Large Capacity Fan Coil Units, Belt Drive Units—Dimensional Data—CZ Model

Right-hand unit shown. (Hand of unit determined by cooling unit connection *when facing discharge*.)



CZ model	No. of fans	Unit dimensions (in)									
		A	C	D	E	F	J	N	P	Q	R
S08	1	24	28 1/2	16 1/4	13 3/8	24	21	16 1/2	15 3/4	3	18 1/2
S12	1	31	28 1/2	23	13 3/8	31	28	16 1/2	15 3/4	3	25 1/2
S16	2	39	28 1/2	31	13 3/8	39	36	16 1/2	15 3/4	3	33 1/2
S20	2	41	28 1/2	33 1/4	15 3/8	41	38	18 3/4	18 1/4	3	35 1/2
S30	2	60	30	49	15 3/8	57	54	18 3/4	18 1/4	6	51 1/2

Note: All dimensions approximate. Certified drawings available upon request.

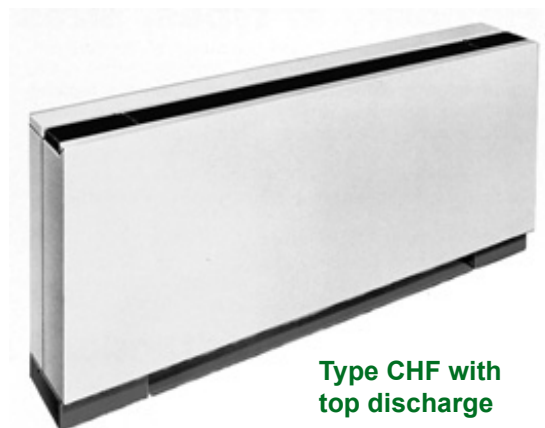
McQuay Cabinet Unit Heaters

- ARI certified and C-UL listed
- Heavy-gauge decorative steel cabinet with powder coat finish
- Heavy-gauge galvanized steel basic cabinet
- Top or front discharge available
- Left-hand coil connections when facing air discharge
- Solid-state fan speed control
- Split design, die-formed fan housings for quiet air delivery
- High performance, forward curve, centrifugal fan wheels
- 115/60/1 three-speed, permanent split capacitor motor(s)

For more detail, refer to Catalog 355.
For the most current information, refer to www.mcquay.com.

Model	Height	Width	Depth
CHF-S03	25"	37"	9 1/4"
CHF-S04	25"	43"	9 1/4"
CHF-S06	25"	52"	9 1/4"
CHF-S08	25"	62"	9 1/4"
CHF-S10	28"	62"	12"
CHF-S12	28"	74"	12"
CHF-S15	28"	74"	12"
CHB-S03	25"	20 5/8"	8 3/4"
CHB-S04	25"	26 5/8"	8 3/4"
CHB-S06	25"	35 5/8"	8 3/4"
CHB-S08	25"	45 5/8"	8 3/4"
CHB-S10	28"	45 5/8"	11 1/2"
CHB-S12	28"	57 5/8"	11 1/2"
CHB-S15	28"	57 5/8"	11 1/2"

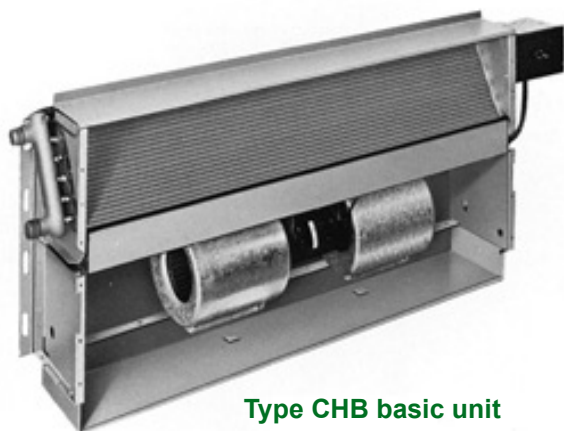
Note: CHF dimensions are for top discharge arrangement



Type CHF with top discharge



Type CHF with front discharge



Type CHB basic unit



Type CHF with field-installed ceiling conversion kit

Water Coil Heating Capacities

Standard Coil Base Ratings—Btuh/Degree Initial Temperature Difference (ITD)

Sensible heating capacity = base rating × ITD (entering water—entering air)

Unit size	Fan speed	Water flow rate (gpm)													
		0.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0	14.0	16.0
S03	High	114	145	158	166	175	180	183	185	187	188	—	—	—	—
	Low	87	102	108	111	114	116	117	118	118	119	—	—	—	—
S04	High	140	184	205	216	230	237	242	245	247	—	—	—	—	—
	Low	109	132	140	145	150	153	155	156	157	—	—	—	—	—
S06	High	173	231	276	296	319	332	340	346	—	—	—	—	—	—
	Low	143	181	197	206	215	220	223	225	—	—	—	—	—	—
S08	High	134	242	288	323	362	385	401	412	421	427	437	444	450	454
	Low	120	188	223	241	260	271	278	283	287	290	294	297	299	300
S10	High	131	251	328	381	442	477	501	519	532	543	558	570	578	585
	Low	119	210	259	288	319	335	345	353	358	363	369	373	376	379
S12	High	146	289	381	445	520	564	594	615	632	645	664	678	688	696
	Low	135	247	308	345	384	405	419	428	435	441	449	454	458	461
S15	High	149	299	400	473	562	614	650	677	698	714	738	756	769	779
	Low	138	258	326	369	416	441	458	470	479	485	495	502	508	511

Steam Coil Heating Capacities

Sensible Capacity Based on 60°F Entering Air and 2 psig Steam Pressure

Unit size	Factor	cfm																
		150	200	250	300	350	400	500	600	700	800	900	100	1100	1200	1300	1400	1500
S03	MBh		20.8	24.4	27.4													
	ATR (°F)	101	95.5	89.7	83.8													
	# cond/hr	17.1	21.6	25.3	28.4													
	EDR	69	87	102	114													
S04	MBh		22.6	26.4	30	33.4	36.4											
	ATR (°F)		104	97	91.8	87.5	83.5											
	# cond/hr		23.4	27.3	31	34.6	37.7											
	EDR		94	110	125	139	152											
S06	MBh				32.6	36.8	40.2	45.1	51									
	ATR (°F)				100	96	92.1	82.8	81.5									
	# cond/hr				33.7	38.1	41.6	46.7	52.8									
	EDR				136	153	167	188	213									
S08	MBh					43.6	49	54.4	58.5	62.7								
	ATR (°F)					100	90	83	76.7	72								
	# cond/hr					45.1	50.7	56.2	60.5	81								
	EDR					182	204	226	244	263								
S10	MBh						56.4	63	68.5	72.6	76	78.2						
	ATR (°F)						103	96.5	90	83.5	77.5	71.7						
	# cond/hr						58.4	65.2	71	75.2	78.7	81						
	EDR						235	262	285	303	317	263						
S12	MBh							68.9	75.7	82.5	87.5	93	96	100				
	ATR (°F)							105	99	94.5	89	85.4	80	76.4				
	# cond/hr							71.4	78.3	85.5	90.5	96.4	99.5	103.5				
	EDR							287	315	343	365	388	400	417				
S15	MBh								75.7	82.5	87.5	93	96	100	104	108.2	112	
	ATR (°F)								99	94.5	89	85.4	80	76.4	73.5	71	68.5	
	# cond/hr								78.3	85.5	90.5	96.4	99.5	103.5	108	112	116	
	EDR								315	343	365	388	400	417	434	451	471	

Steam/Hot Water Unit Heaters, Horizontal Model—UH and Vertical Model—UD

- Two-pipe applications, up to 150 psig steam or 220 psig, 375°F water
- Copper coils, 1/2" diameter, with aluminum fins (12 per inch)
- Horizontal louvers standard, vertical louvers an option on all models
- Intermittent or continuous fan operation controls (optional)
- Standard 115/60/1 PSC motors, enclosed with thermal overload protection
- 230/60/1; 200/60/3; 230/460/60/3 motors available
- Explosion proof motors available
- Finger-proof fan guards standard
- CSA Listed
- Baked-on, textured paint
- Optional air deflectors: cone jet, truncone, louvers and 3 or 4 cone anemostat

For more detail, refer to Catalog FC-UH00. For the most current information, refer to www.mcquay.com.

Model UH



Model UD



Model UH and Model UD Performance Data—2 lbs Steam*, 60°F Entering Air, High Motor Speed

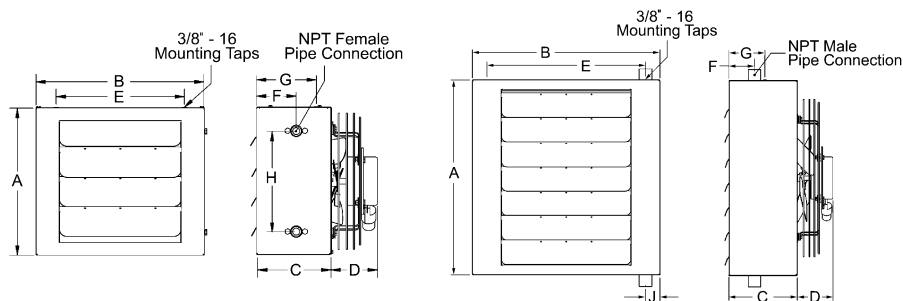
Model	Btu/hr	Condensate lb/hr	Sq ft EDR	Cfm	Outlet velocity (fpm)	Final air temp (°F)	Air Data					Heat spread @ max height	Sound class
							Max. mounting height (ft)**	Heat spread @ max height	Sound class	Heat spread @ max height	Sound class		
Horizontal Units													
UH-18	18,000	18	75	400	510	102	9	15	17	11	II	1/30	1550
UH-24	24,000	25	100	450	580	109	9	18	18	13	II	1/30	1550
UH-33	33,000	35	138	630	510	109	10	19	20	14	II	1/15	1550
UH-47	47,000	49	196	730	600	120	12	21	25	16	III	1/15	1550
UH-63	63,000	66	263	1120	605	112	14	24	29	18	III	1/10	1550
UH-86	86,000	89	358	1340	730	119	15	28	31	21	III	1/10	1550
UH-108	108,000	111	450	1550	625	125	15	31	32	23	III	1/8	1075
UH-121	121,000	126	504	1775	715	123	16	34	33	25	III	1/8	1075
UH-165	165,000	170	688	2500	750	121	17	37	34	26	IV	1/4	1075
UH-193	193,000	200	804	2900	870	122	18	37	37	30	IV	1/4	1075
UH-258	258,000	267	1075	3900	920	121	19	36	40	30	V	1/3	1075
UH-290	290,000	300	1208	4300	1010	122	20	44	44	37	V	1/2	1100
UH-340	340,000	352	1417	5130	965	121	20	43	46	36	V	1/2	1100
Vertical Units													
UD-42	42,000	43	175	950	779	103	11	15	17	11	II	1/20	1550
UD-59	59,000	61	246	1150	943	111	13	18	20	13	II	1/20	1550
UD-78	78,000	81	325	1550	992	110	14	19	22	14	II	1/8	1550
UD-95	95,000	99	396	1775	1136	113	16	21	24	16	II	1/8	1550
UD-139	139,000	144	579	2500	1284	116	18	24	27	18	III	1/4	1075
UD-161	161,000	167	671	2900	1490	115	21	28	31	21	III	1/4	1075
UD-193	193,000	200	804	3900	1643	109	23	31	34	23	IV	1/2	900
UD-212	212,000	219	883	4300	1812	109	25	33	37	25	IV	1/2	1075
UD-247	247,000	256	1029	5130	1805	107	26	34	39	26	IV	5/8	900
UD-279	279,000	288	1163	5800	2040	107	30	37	45	30	V	5/8	1075
UD-333	333,000	345	1388	6600	1968	110	30	37	45	30	V	1	1075
UD-385	385,000	398	1604	7860	1930	106	30	36	45	30	VI	1	1140
UD-500	500,000	518	2083	10,790	2490	103	37	44	56	37	VI	1 1/2	1140
UD-610	610,000	631	2542	12,350	2345	106	36	43	54	36	VI	1 1/2	1140

Notes: *For hot water performance data, see Catalog FC-UH00

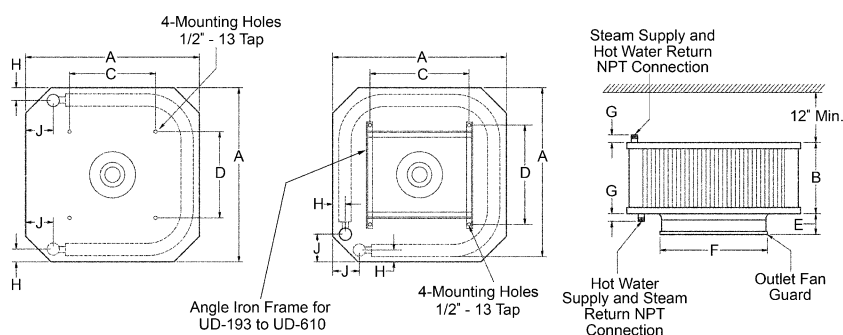
** Applies to most popular motor

Dimensional Data

Model UH



Model UD



Model UH and Model UD Dimensions

Model	A	B	C	D	E	F	G	H	J	NPT connections	Fan dia.	Approx. shipping weight (lbs)
Horizontal Units												
UH-18	15"	16 7/8"	7 1/2"	4 1/2"	12"	3 1/2"	5"	10"	—	3/4"	9"	18
UH-24	15"	16 7/8"	7 1/2"	4 1/2"	12"	3 1/2"	5"	10"	—	3/4"	9"	19
UH-33	19"	19 3/4"	7 1/2"	4 3/4"	12"	3 1/2"	5"	14"	—	3/4"	12"	35
UH-47	19"	19 3/4"	7 1/2"	4 3/4"	12"	3 1/2"	5"	14"	—	3/4"	12"	36
UH-63	19"	25 3/4"	8 1/2"	4 3/4"	18"	3 1/2"	5"	14"	—	3/4"	14"	51
UH-86	19"	25 3/4"	8 1/2"	4 3/4"	18"	3 1/2"	5"	14"	—	3/4"	14"	52
UH-108	27"	25 7/8"	9 1/2"	6 1/4"	18"	3 1/2"	5 1/4"	—	2"	1 1/2"	18"	76
UH-121	27"	25 7/8"	9 1/2"	6 1/4"	18"	3 1/2"	5 1/4"	—	2"	1 1/2"	18"	77
UH-165	27"	31 7/8"	10"	6 1/4"	24 7/8"	3 1/2"	6 1/4"	—	2"	1 1/2"	20"	95
UH-193	27"	31 7/8"	10"	8 3/8"	24 7/8"	3 1/2"	6 1/4"	—	2"	1 1/2"	20"	96
UH-258	33"	40 13/16"	11"	8 3/8"	32 7/8"	3 1/2"	6 1/4"	—	2 1/4"	2"	22"	165
UH-290	33"	40 13/16"	11"	8 3/8"	32 7/8"	3 1/2"	6 1/4"	—	2 1/4"	2"	22"	167
UH-340	39"	40 13/16"	12"	8 3/8"	32 7/8"	3 1/2"	7 1/4"	—	2 1/4"	2"	24"	182
Vertical Units												
UD-42, UD-59	23"	6 3/8"	12"	12"	3 1/8"	15"	2 3/4"	1 7/8"	3 1/4"	1 1/2"	13 3/4"	52
UD-78, UD-95	25"	6 3/8"	13"	13"	3 1/8"	17"	2 3/4"	1 7/8"	3 1/4"	1 1/2"	15 3/4"	64
UD-139, UD-161	35"	10 3/8"	14 7/16"	14 7/16"	3 1/8"	18 7/8"	2 3/4"	2"	3 1/4"	1 1/2"	17 3/4"	99
UD-193, UD-212	30"	12 3/8"	19"	17"	4"	20 7/8"	2 3/4"	2"	3 5/8"	2"	19 3/4"	126
UD-247, UD-279	35"	12 3/8"	20"	18"	4"	22 7/8"	2 3/4"	2"	3 5/8"	2"	21 3/4"	154
UD-333, UD-385	35"	18 3/8"	21"	21"	4"	24 3/4"	2 3/4"	2 1/2"	4 1/2"	2 1/2"	23 3/4"	189
UD-510	43"	18 3/8"	25"	25"	4"	28 3/4"	2 3/4"	2 1/2"	4 1/2"	2 1/2"	27 3/4"	270
UD-610	43"	18 3/8"	27"	27"	4"	30 3/4"	2 3/4"	2 1/2"	4 1/2"	2 1/2"	29 3/4"	290

AAF®—HermanNelson® Unit Ventilators

- Built-up floor and ceiling units, plus air source air conditioner, air-to-air heat pump or water source heat pump (boiler/tower and geothermal)
- Draw-through design with face and bypass damper control for superior temperature and dehumidification control
- GentleFlo™ Air Moving System for very quiet operation
- Welded frame construction and industrial strength cabinet and finish for long life
- Controls flexibility—MicroTech II® controls with our Open Choices™ feature for easy integration with the BAS of your choice
- Digital Ready™ feature provides industry standard Direct Digital Control (DDC) components for easy integration of unit controllers by others
- Economizer, Demand Control Ventilation (DCV) and Part Load, Variable Air options allow you to reduce operating costs while closely matching classroom comfort requirements

For more detail, refer to Catalogs UV1600, UV1610, and UV-1-231. For the most current information, refer to www.mcquay.com.



Models AHF, AHB, AHV, and AHR ceiling units



Models AVS, AVB, AVV, and AVR floor units



Models AZS, AZQ, AZV, AZR, AED, AEQ, ERQ, and ARQ self-contained floor units

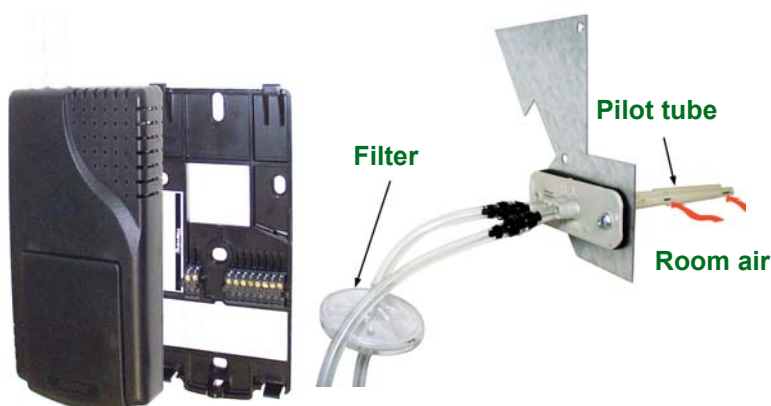


Available LONMARK certified

Options

**MicroTech II DDC controls**

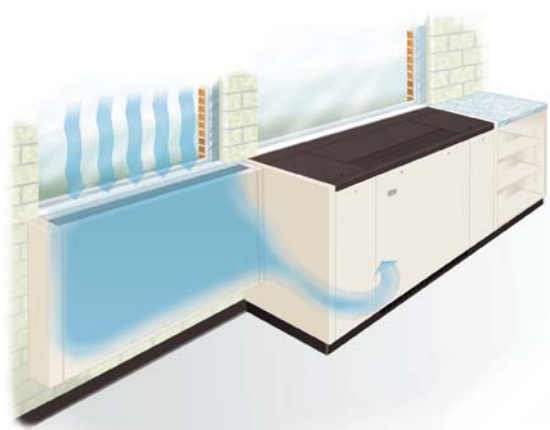
- Precise, efficient operation
- User-friendly keypad with visual display
- Plug-in interface to BAS of your choice (LONWORKS® SCC, BACnet® MS/TP, Metasys® N2 Open)
- Part-load, variable air option varies fan speed automatically to meet room load, helping to provide comfort and reduce operating costs

**CO² sensor and unit-mounted sensing device**

- Modulates amount of outside air to meet ASHRAE Standard 62.1-2004 requirements and lower operating costs

Three different economizer types for “free” cooling

- Basic—compares inside and outside temperature
- Expanded—compares inside and outside temperature, and outside air relative humidity to help prevent the entrance of humid outside air
- Leading Edge—compares temperature and relative humidity of inside and outside air (a true enthalpy economizer) to help prevent the entrance of humid outside air

**Draftstop® system**

- Intercepts cold drafts from windows

**DDC room air sensor**

- Individual room temperature control

AAF®—HermanNelson® Unit Ventilators

Louvers

- Constructed of heavy gauge aluminum (painted or unpainted) for maximum durability
- Designed to maximize outdoor air intake and keep rain and moisture out



Front



Back

AV/AH horizontal and vertical blade louvers



Front

Back

Self-contained louver

Self-contained wall sleeve

- Heavy duty construction
- Simplifies installation and service



Dual top hinged access doors

- Provides easy access to motor and end bearing

Non-glare top

- Scuff resistant

Fan housing

- Logarithmic expansion for quieter operation

Welded frame construction

- Promotes long life

Three sectionalized front access panels

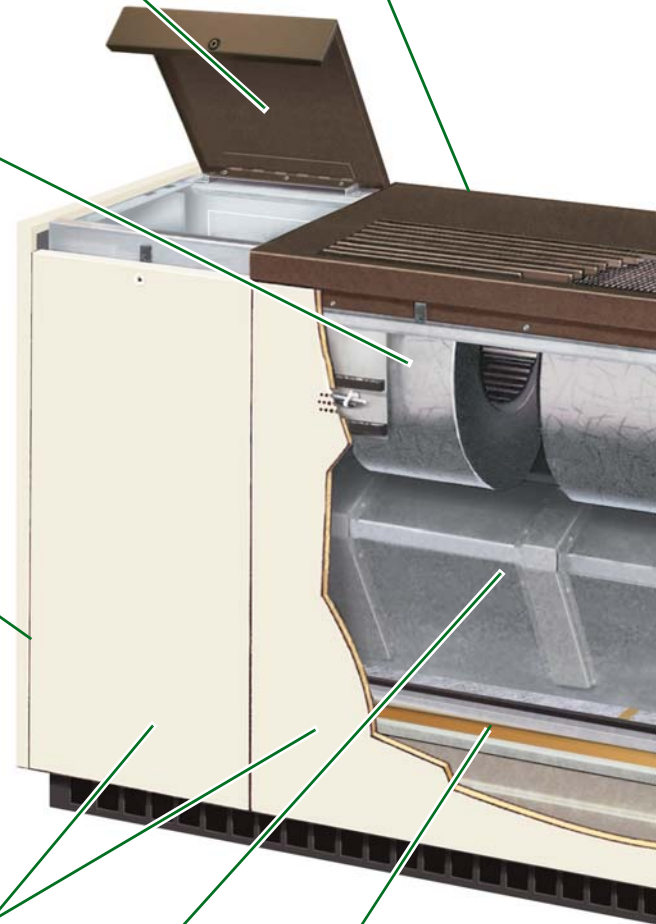
- Easy access to unit interior

Face and bypass damper

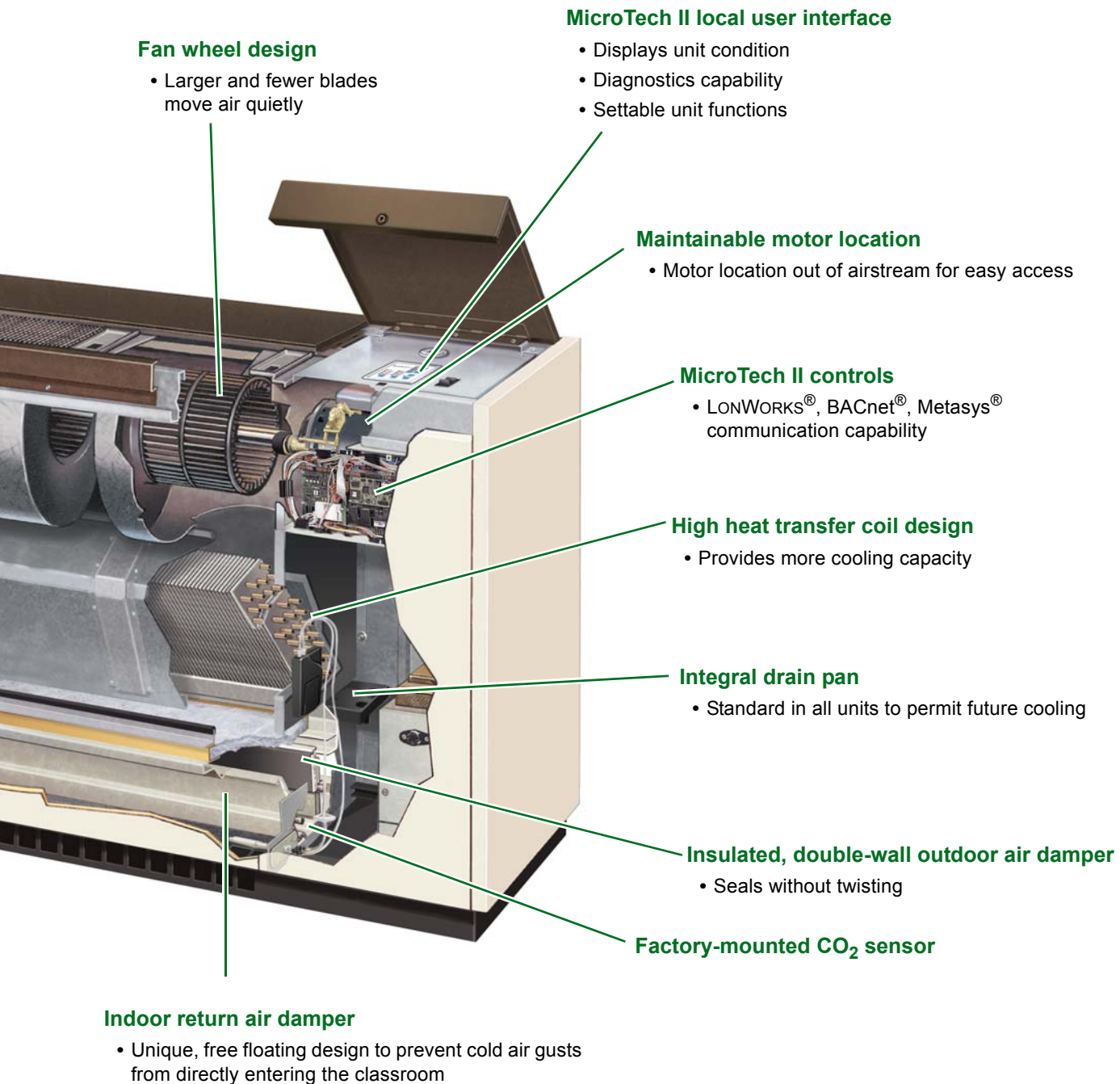
- Superior dehumidification control

Full length filter

- All air delivered into the classroom is filtered
- One piece design makes filter changes quick and easy



Features



Capacity and Physical Data

AV Floor Unit Physical Data

Unit series			S07	S10	S13	S15
Nominal airflow, cfm (L/s)			750 (354)	1000 (472)	1250 (590)	1500 (708)
Filter data	Nominal size	inches	10 × 36 1/2 × 1	10 × 48-1/2 × 1	10 × 60-1/2 × 1	10 × 36-1/2 × 1
		mm	254 × 927 × 25	254 × 1232 × 25	254 × 1537 × 25	254 × 927 × 25
	Area	ft² (m²)	2.54 (.24)	3.37 (.31)	4.2 (.39)	5.08 (.47)
	Quantity		1	1	1	2
Shipping weight, lb (kg) ⁽¹⁾	16 5/8" deep units		350 (158)	425 (193)	495 (225)	570 (259)
	21 7/8" deep units		370 (168)	445 (202)	525 (238)	600 (272)
Height, inches (mm)			30 1/8 (765)			
Depth, inches (mm)			16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)
			21 7/8 (556)	21 7/8 (556)	21 7/8 (556)	21 7/8 (556)
Width, inches (mm) ²			62 (1575)	74 (1880)	86 (2184)	98 (2489)

1. Approximate weights based on face and bypass damper controlled unit with 4-row cooling coil, high capacity hot water coil and MicroTech II controls.

2. Measurement is without end panels.

AH Ceiling Unit Physical Data

Unit series			S07, H07	S10, H10	S13, H13	S15, H15	S20, H20
Nominal airflow, cfm (L/s)			750 (354)	1000 (472)	1250 (590)	1500 (708)	2000 (994)
Filter data	Nominal size	inches	10 × 36 1/2 × 1	10 × 48 1/2 × 1	10 × 60 1/2 × 1	10 × 36 1/2 × 1	10 × 36 1/2 × 1
		mm	254 × 927 × 25	254 × 1232 × 25	254 × 1537 × 25	254 × 927 × 25	254 × 914 × 25
	Area	ft ² (m ²)	2.54 (.24)	3.37 (.31)	4.2 (.39)	5.08 (.47)	5.08 (.47)
	Quantity		1	1	1	2	2
Shipping weight, lb (kg) ¹	Discharge air arrangement	AH, AT, BD, FD, FG	385 (179)	465 (211)	540 (245)	600 (272)	680 (309) ²
Height, inches (mm)			16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)
Depth, inches (mm)		AH, AT	36 (914)	36 (914)	36 (914)	36 (914)	—
		BD, FD, FG	40 (1016)	40 (1016)	40 (1016)	40 (1016)	40 (1016)
Width, inches (mm) ³			62 (1575)	74 (1880)	86 (2184) 98	98(2489)	98 (2489)

1. Approximate weights based on face and bypass damper controlled unit with 4-row cooling coil, high capacity hot water coil and MicroTech II controls.

2. FD and FG are for 2000 cfm only.

3. Measurement is without end panels.

Nominal Capacity Data—Models AV/AH

Unit series ¹		S07	S10	S13	S15	S20 ²
Cooling capacity (Btuh) ³	cfm	750	1000	1250	1500	2000
	2-row	17,900	23,600	31,500	38,800	44,900
	3-row	21,700	33,300	41,100	51,200	50,800
	4-row	27,800	35,600	43,400	56,700	62,200
Steam heat (Btuh) ⁴	cfm	750	1000	1250	1500	2000
	Standard	50,300	75,200	89,000	111,500	140,800
	High	66,500	89,900	112,500	128,500	227,900
Electric heat (Btuh)	Low	20,500	27,300	34,100	41,000	41,000
	High	41,000	54,600	68,300	81,900	81,900
Hot water heat ⁵	1-row	37,000	49,500	57,000	66,000	69,800
	2-row	48,300	62,000	74,100	97,200	96,700
	3-row	56,800	72,000	84,500	97,500	115,000
	4-row	62,500	81,000	95,000	110,000	142,100

1. All data is for F Vintage units.

2. Ceiling unit only.

3. 80°F/67°F entering air temperature; 45°F entering water temperature; 10°F water temperature rise.

4. 0°F entering air temperature; 2 PSI steam at 218.5°F.

5. 60°F entering air temperature; 160°F entering water temperature; 6 gpm water flow.

Capacity and Physical Data

Self-Contained Floor Unit Physical Data—Models AZ, AE, AR/ER

Unit series			024	030	036	040	044 ¹	048	054
Nominal airflow, cfm (L/S)			960 (453)	960 (453)	1160 (548)	1160 (548)	1430 (675)	1430 (675)	1430 (675)
Filter data	Nominal size	inches	10 × 48 1/2 × 1	10 × 48 1/2 × 1	10 × 60 1/2 × 1	10 × 60 1/2 × 1	10 × 36 1/2 × 1	10 × 36 1/2 × 1	10 × 36 1/2 × 1
		mm	254 × 1232 × 25	254 × 1232 × 25	254 × 1537 × 25	254 × 1537 × 25	254 × 927 × 25	254 × 927 × 25	254 × 927 × 25
	Area	ft² (m²)	3.37 (.31)	3.37 (.31)	4.2 (.39)	4.2 (.39)	5.08 (.47)	5.08 (.47)	5.08 (.47)
	Quantity		1	1	1	1	2	2	2
Shipping weight, lb (kg)			885 (402)	885 (402)	975 (442)	975 (442)	1075 (448)	1075 (448)	1075 (448)
Height, inches (mm)			30 (762)	30 (762)	30 (762)	30 (762)	30 (762)	30 (762)	30 (762)
Room depth, inches (mm)			16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)	16 5/8 (422)
			21 7/8 (556)	21 7/8 (556)	21 7/8 (556)	21 7/8 (556)	21 7/8 (556)	21 7/8 (556)	21 7/8 (556)
			28(711)	28(711)	28(711)	28(711)	28(711)	28(711)	28(711)
Width inches, (mm) ¹			86 (2184)	86 (2184)	98 (2489)	98 (2489)	110 (2794)	110 (2794)	110 (2794)

1. AE/AZ only

2. Measurement is without end panels.

Nominal Capacity Data—Model AZ

Unit series			AZ024	AZ030	AZ036	AZ040	AZ044	AZ048	AZ054
Cooling capacity ¹	Total	Btuh	26,837	31,475	36,821	39,194	43,900	48,500	53,300
		Watts	7865	9225	10,792	11,487	12,864	14,210	15,617
	Sensible	Btuh	21,531	23,447	28,314	29,123	30,100	32,100	34,100
		Watts	6310	6852	8298	8535	8816	9405	9991
	EER		11.1	10.5	11.1	10.5	9.5	9.3	9.1
Steam heat ²	Low capacity (68)	Btuh	52,000	52,000	64,000	64,000	77,800	77,800	77,800
		Watts	15,236	15,236	18,752	18,752	22,795	22,795	22,795
	High capacity (69)	Btuh	85,700	85,700	105,000	105,000	128,500	128,500	128,500
		Watts	25,110	25,110	30,765	30,765	37,650	37,650	37,650
Electric heat	Low	kW	8.0	8.0	10.0	10.0	12.0	12.0	12.0
		MBh	27.3	27.3	34.1	34.1	41.0	41.0	41.0
	High	kW	16.0	16.0	20.0	20.0	24.0	24.0	24.0
		MBh	54.6	54.6	68.3	68.3	81.9	81.9	81.9
Hot water heat ³	1-row coil	Btuh	45,700	45,700	54,100	54,100	63,800	63,800	63,800
		Watts	13,390	13,390	15,851	15,851	18,693	18,693	18,693
	2-row coil	Btuh	62,500	62,500	73,500	73,500	88,600	88,600	88,600
		Watts	18,313	18,313	21,536	21,536	25,959	25,959	25,959

1. 80°/67°F (27/19°C) Entering Air Temperature; 95°F Ambient.

2. Steam Heating @ 2 psig Steam (13.8 KPa); 60°F Entering Air Temperature.

3. 60°F Entering Air Temperature; 160°F Entering Water Temperature; 6 gpm Water Flow.

Nominal Capacity Data—Model AE

Unit series			AE024	AE030	AE036	AE040	AE044	AE048	AE054
Cooling capacity ¹	Total	Btuh	26,837	31,475	36,821	39,194	43,900	48,500	53,300
		Watts	7865	9225	10,792	11,487	12,864	14,210	15,617
	Sensible	Btuh	21,531	23,447	28,314	29,123	30,100	32,100	34,100
		Watts	6310	6872	8298	8535	8822	9408	9994
	EER		11.1	10.5	11.1	10.5	9.5	9.3	9.1
	COP		3.3	3.1	3.3	3.1	2.8	2.7	2.6
	Power	kW	2.4	3.0	3.3	3.7	4.6	5.2	5.9
Heating capacity ²	Total	Btuh	21,900	26,900	34,600	39,200	41,900	47,300	52,300
		Watts	6419	7884	10,141	11,489	12,280	13,863	15,328
	COP		2.9	2.8	3.0	2.9	2.7	2.6	2.5
	power	kW	2.19	2.77	3.39	3.99	4.57	5.24	6.10
Electric heat	Low	kW	8.0	8.0	10.0	10.0	12.0	12.0	12.0
		MBh	27.3	27.3	34.1	34.1	41.0	41.0	41.0
	High	kW	16.0	16.0	20.0	20.0	24.0	24.0	24.0
		MBh	54.6	54.6	68.3	68.3	81.9	81.9	81.9

1. Based on ASHRAE and ARI test conditions of 95°F (35°C) DB/75°F (21°C) WB outside; 80°F (27°C)/67°F (19°C) inside.

2. Based on ASHRAE and ARI test conditions of 47°F (8°C) DB/43°F (6°C) WB outside; 70°F (21°C) inside.

Nominal Capacity Data—Models AR/ER

Unit series			AR/ER024	AR/ER030	AR/ER036	AR/ER040	AR/ER048	AR/ER054	
Boiler/ tower	Water flow		Gpm	6.6	8.4	9.7	11.2	12.8	14.5
			L/s	0.42	0.53	0.61	0.71	0.81	0.92
	Cooling ¹	Total	Btuh	25,075	32,005	37,104	42,098	48,503	55,128
			Watts	7349	9380	10,875	12,338	14,210	15,617
		Sensible	Btuh	18,330	21,539	22,818	27,439	33,116	36,838
			Watts	5372	6313	6688	8042	9706	10,797
		EER		11.0	10.7	10.9	10.4	10.5	10.7
		COP		4.1	4.5	4.5	4.3	4.0	3.9
	Heating ²	Total	Btuh	28,783	35,826	43,505	47,100	54,208	61,846
			Watts	8436	10,500	12,749	13,804	15,887	18,126
		COP		3.23	3.14	3.19	3.05	3.07	3.13
Geothermal	Water flow		gpm	6.0	7.5	9.0	9.0	10.0	10.0
			L/s	0.38	0.47	0.57	0.57	0.63	0.63
	Cooling ³	Total	Btuh	26,200	30,500	37,000	41,300	48,000	54,000
			Watts	7679	8939	10,844	12,104	14,210	15,617
		Sensible	Btuh	17,162	18,453	22,874	25,772	31,474	33,967
			Watts	5030	5408	6704	7553	9225	9955
		EER		14.0	15.2	15.5	14.6	13.6	13.3
		COP		4.10	4.50	4.50	4.30	4.00	3.90
	Heating ⁴	Total	Btuh	19,000	23,000	28,000	33,000	35,200	41,000
			Watts	5569	6741	8206	9672	10,317	12,016
		COP		3.1	2.9	3.0	3.0	2.9	2.8
Electric heat	Low		kW	8.0	8.0	10.0	10.0	12.0	12.0
			MBh	27.3	27.3	34.1	34.1	41.0	41.0
	High		kW	16.0	16.0	20.0	20.0	24.0	24.0
			MBh	54.6	54.6	68.3	68.3	81.9	81.9

1. Based on ASHRAE and ARI test conditions of 95°F (35°C) DB/75°F (21°C) WB outside; 80°F (27°C)/67°F (19°C) inside; 85°F (29°C) EWT.

2. Based on ASHRAE and ARI test conditions of 47°F (8°C) DB/43°F (6°C) WB outside; 70°F (21°C) inside; 70°F (21°C) EWT.

3. Based on ASHRAE and ARI Standard 330 conditions of 77°F (25°C) entering temperature of 15% brine solution.

4. Based on ASHRAE and ARI Standard 330 conditions of 32°F (0°C) entering temperature of 15% brine solution.

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Model PDAC/PDHP Applied Packaged Terminal Air Conditioners and Heat Pumps— 7900 to 14,800 Btuh

- Ideal for new construction or replacement applications
- Fits standard 16" x 42" and 16" x 44" wall sleeve
- Broadest selection of features and customizable options allow you to choose the ideal unit for each space in your building
- Top-mounted or sub-base hydronic selections
- High energy efficiency and COP ratings provide lower operating costs
- Exceptionally quiet, reliable cooling/heating operation maximize comfort
- Easy to install and maintain
- Engineered and manufactured in the U.S.A.

For more detail,
refer to Catalog 1300.
For the most current
information, refer to
www.mcquay.com.



Standard 16" x 42" slope top
(new construction or replacement)



16" x 42" top-mounted hydronic
(new construction or replacement)



Replacement 16" x 44" flat top
(replacement)



Replacement Guide

Manufacturer	Model	Wall opening dimensions				Discharge		Return air		Heat type	
		16 1/4" x 42 1/4"		16 3/8" x 44 7/8"		Slope	Flat	Bottom	Front	Electric	Hydronic
		AC	HP	AC	HP						
Amana	PTC	•				•			•	•	•
	PTH		•			•			•	•	
Carrier	52SC	•				•			•		
	52SE	•				•			•	•	
	52SQ		•			•			•	•	
Climate Master	PTA	•				•			•	•	
	PTP		•			•			•		•
	PTH	•				•			•	•	
CNI	PC	•				•			•	•	
	PH		•			•			•	•	
Friedrich	PD					•			•	•	
	PE					•			•	•	
	PH					•			•	•	
	TE	•				•			•	•	
	TH		•			•			•	•	
	TW	•				•			•		•
GE	AZ	•	•			•			•	•	
Ice Air	RSK	•					•	•			•
Island Aire	ED	•					•				
	NE			•			•				
McQuay	PDE	•				•	•	•		•	•
	PSE	•					•	•		•	•
	MQE	•				•	•		•	•	•
	MQR		•			•				•	
	MQS		•			•				•	
	NR		•				•			•	
	PMEG			•			•			•	
	PMES			•			•			•	
	MEA			•			•			•	
	MQA			•			•		•	•	•
	EA			•			•		•	•	•
	PMRS				•		•		•	•	
	MQT				•		•	•		•	
	RS				•		•	•		•	
	PTAC	•				•			•	•	
	PTHP		•			•			•	•	
Remington	PREA			•			•		•	•	
Retro Aire	RC35			•	•		•		•	•	
Singer	N	•					•	•		•	
	NE	•					•	•		•	
	NH		•				•	•			•
	NR		•				•	•		•	
	EA			•			•		•	•	
	ES			•			•		•		•
Trane	PTE	•				•			•	•	•
	PTH		•			•			•	•	

Not finding what you are looking for? Consult your McQuay representative for information on other replacement PTAC/PTHP products from McQuay.

	= Not applicable
•	= AAF Series 16

Features

Standard 16" × 42" slope top
PTAC/PTHP



Coming Soon
Size 17!

Replacement 16" × 44" flat top
PTAC/PTHP



1 Heating/cooling chassis

- Heat pump or cooling with electric and/or hydronic heat

2 Evaporator & condenser coil

- Optimized heat transfer technology maximizes comfort, reduces energy consumption

3 Basic wall sleeve

- Heavy-gauge steel construction
- Pre-painted for durability and corrosion resistance

4 Room cabinet

- Heavy-gauge steel construction
- Baked on powder coat paint provides maximum scratch and dent resistance

5 Combination room cabinet and wall sleeve

- Heavy-gauge steel construction
- Baked on powder coat paint provides maximum scratch and dent resistance

6 Digital control module

- Provides reliable control and diagnostic information
- Optional premium control with infra-red remote control capability (select models)

7 Digital control touchpad

- Easy to use when selecting fan speed, mode of operation, and temperature setting.
- Digital temperature display provides guests with an exact comfort setting to avoid overheating/overcooling
- Fahrenheit or Celsius temperature display
- Standard (non-programmable) or optional premium (7-day programmable)

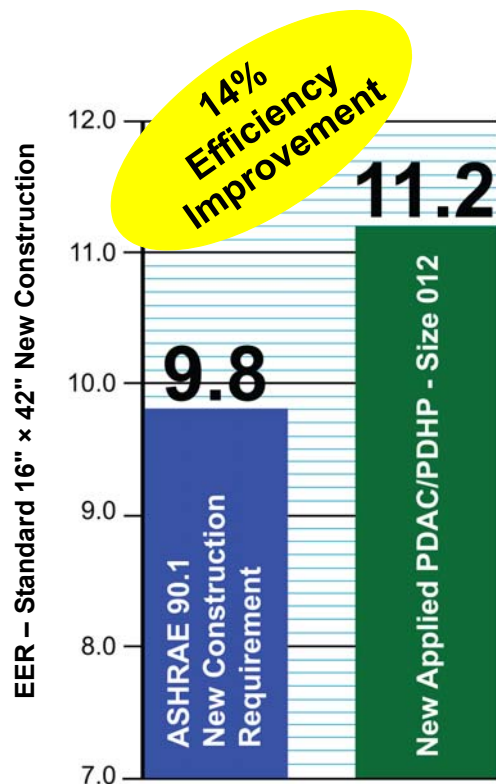
8 Louver (accessory)

- Flush stamped or architectural style
- Anodized aluminum to resist corrosion

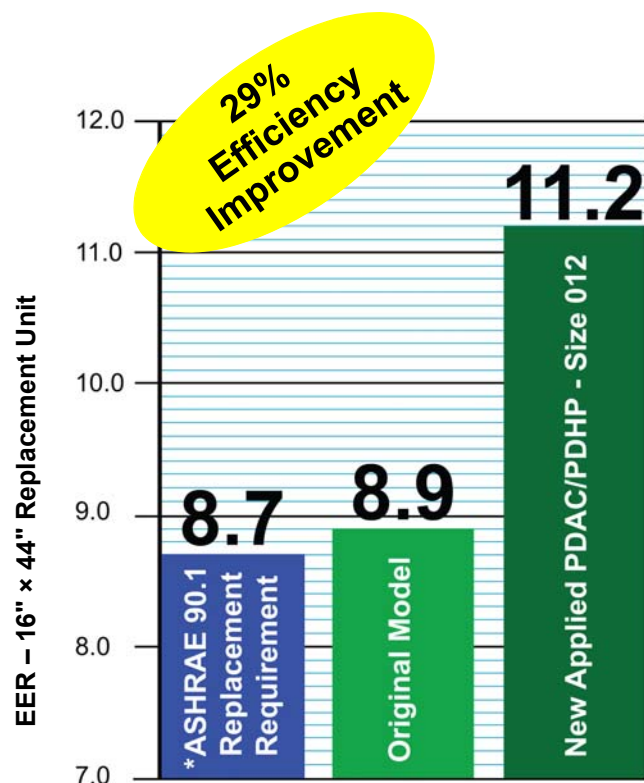
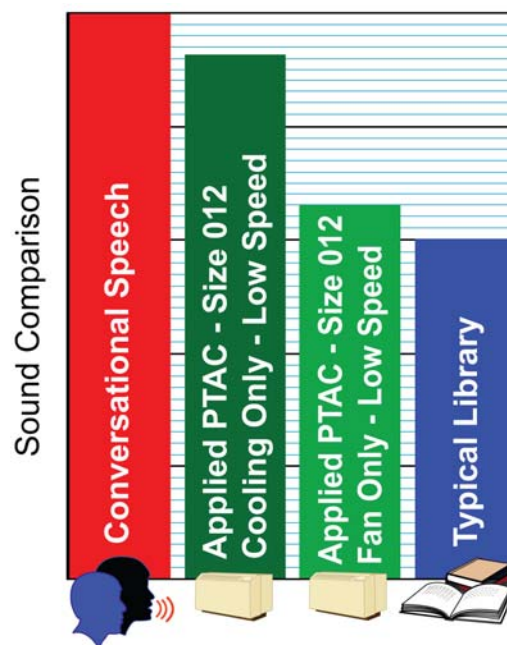
9 Front panel

- Heavy gauge steel construction
- Baked on powder coat paint provides maximum scratch and dent resistance

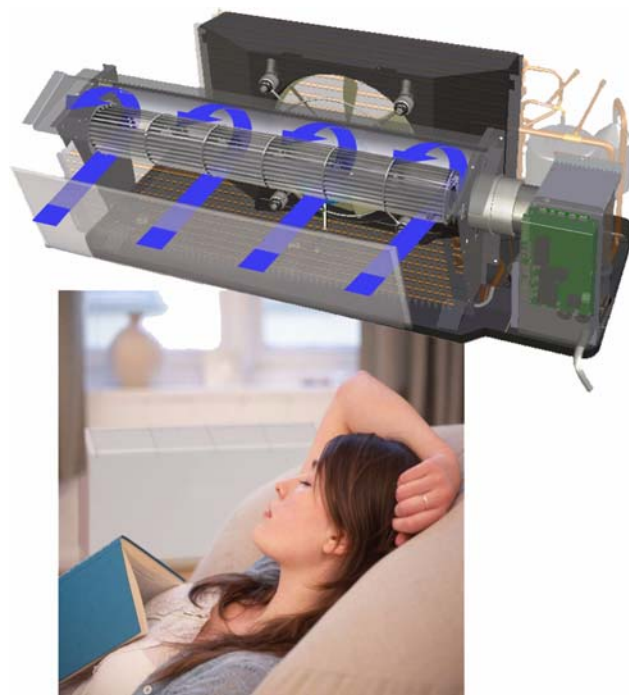
High Efficiency – Low Operating Costs



Exceptionally Quiet Operation



* Based on original model PMES size 012 @ 230 V



Tangential indoor fan

- The GentleFlo™ cross-tangential fan wheel design of Applied PTAC/PTHP units provides whisper quiet operation while delivering maximum airflow required for proper air circulation

Customized Options

Chassis Customization Options

Description		Unit Size			
Unit Type – PDAC/PDHP		007	009	012	015
Cabinet type	16" × 42" top mount hydronic	•	•	•	•
	16" × 42" slope top	•	•	•	•
	16" × 44" flat top replacement	•	•	•	n/a
Voltage	115/60/1	•	•	n/a	n/a
	208/230/60/1	•	•	•	•
	265/277/60/1	•	•	•	•
	208/230/60/1 w/standby 115/50/1	•	•	•	•
Cooling capacity Btuh		7900	10,500	12,800	14,800
Heating options					
Electric heater (kW)	2.5	•	•	•	•
	3.5	•	•	•	•
	5.0	n/a	n/a	•	•
Hydronic – hot water or steam		•	•	•	•
Hydronic with intermediate electric (PDAC units only)		•	•	•	•
Heat pump		•	•	•	•
Air flow cfm – high/low speed in heating	380/340	•	•	•	•
Outside air damper – vent – cfm –high/low speed	50/40	•	•	•	•
Damper					
Auto damper control (standard with hydronic heat)		•	•	•	•
Manual damper control (not available with hydronic heat)		n/a	•	•	•
Unit control	Unit mounted non-programmable	•	•	•	•
	Unit mounted programmable	•	•	•	•
	Remote, hand-held infrared	•	•	•	•
Seacoast coating package		•	•	•	•

Other Customization Options

Custom sleeve

- Extended depths, brick stops, or support legs can be added for panel wall or curtain wall

Custom cabinet

- Extended depths, colors, and kickplates

Valves and hydronic coils

- Factory-installed

Infrared remote

- Premium control board, top mount hydronic heat 16" × 42" only

The Hydronic Experts

McQuay is a leading manufacturer of hydronic heat equipment with a host of configurable options.

Custom sleeve

- Cooling only mode with hydronic heat
- Cooling only mode with hydronic heat and supplemental electric heat
- Top mounted hydronic coil (steam or hot water)
- Subbase hydronic (steam or hot water)



Top mount

Hydronic sub-base

Capacity and Physical Data

007C through 015C

Model			007C			009C			012C			015C	
Cooling	Total Btuh ¹		7900	7900	7900	10,200	10,200	10,200	12,800	12,800	12,800	14,800	14,800
	Sensible Btuh ¹		6800	6800	6800	7900	7900	7900	8900	8900	8900	9600	9600
	EER		12.10	12.10	12.10	11.60	11.60	11.60	11.20	11.20	11.20	10.10	10.10
	Volts		115	208/230	265	115	208/230	265	115	208/230	265	208/230	265
	Full load amps ⁵		7.03	3.39	3.04	8.83	4.49	4.04	11.86	5.83	5.19	7.43	6.49
	Watts ¹		653	653	653	879	879	879	1143	1143	1143	1465	1465
Electric heat ³	Volts		-	208/230	265	-	208/230	265	-	208/230	265	208/230	265
	2.5 kW	kW	-	2.2/2.7			2.2/2.7			2.2/2.7		2.2/2.7	
		Amps	-	10.7/11.9			10.7/11.9			10.7/11.9		10.7/11.9	
	3.5 kW	Watts	-	3.1/3.8	3.5		3.1/3.8	3.5		3.1/3.8	3.5	3.1/3.8	3.5
		Amps	-	15.2/16.8	3.7		15.2/16.8	3.7		15.2/16.8	3.7	15.2/16.8	3.7
	5.0 kW	Watts	-							3.9/4.8	5.0	3.9/4.8	5.0
		Amps	-							19.0/21.0	19.3	19.0/21.0	19.3
	Valve and fan motor amps		0.74	0.41	0.32	0.74	0.41	0.32	0.74	0.41	0.32	0.41	0.32
Hot water (Btuh) hi/lo		18,400/15,600			18,400/15,600			18,400/15,600			18,400/15,600		
Steam (Btuh) hi/lo		22,400/22,300			22,400/22,300			22,400/22,300			22,400/22,300		
Heat Pump Model													
Cooling	Total Btuh ²		7300	7300	7300	9900	9900	9900	11,700	11,700	11,700	14,000	14,000
	Sensible Btuh ²		6800	6800	6800	7900	7900	7900	8900	8900	8900	9600	9600
	EER		12.10	12.10	12.10	11.60	11.60	11.60	11.20	11.20	11.20	10.10	10.10
	Volts		115	208/230	265	115	208/230	265	115	208/230	265	208/230	265
	Full load amps		7.03	3.39	3.04	8.83	4.49	4.04	11.86	5.82	5.04	7.42	6.34
	Watts ¹		652	652	652	884	884	884	1114	1114	1114	1474	1474
Reverse cycle heat	Btuh ²		7000	7000	7000	9100	9100	9100	10,700	10,700	10,700	13,9000	13,000
	COP		3.6	3.6	3.6	3.52	3.52	3.52	2.95	2.95	2.95	2.91	2.91
	Volts		115	208/230	265	115	208/230	265	115	208/230	265	208/230	265
	Full load amps		7.03	3.39	3.04	8.83	4.49	4.04	11.86	5.82	5.04	7.42	6.34
	Watts ²		570	570	570	758	758	758	1063	1063	1063	1400	1400
Electric heater	Voltage		-	240	265	-	240	265	-	240	265	240	265
Minimum circuit ampacity	2.5 kW		-	15.51	-	-	15.51	-	-	15.51	-	15.51	-
	3.5 kW		-	21.92	17.07	-	21.92	17.07	-	21.92	17.07	21.92	17.07
	5.0 kW		-	-	-	-	-	-	-	27.38	24.1	27.38	24.1
	Hydronic heat		8.19	3.92	3.52	10.44	5.29	4.77	13.92	6.82	5.95	8.82	7.57
Time delay fuses or type HACR circuit breaker	2.5 kW		-	15	-	-	15	-	-	15	-	15	-
	3.5 kW		-	20	15	-	20	15	-	20	15	20	15
	5.0 kW		-	-	-	-	-	-	-	25	20	25	20
	Hydronic heat		15	15	15	15	15	15	15	15	15	15	15
NEMA receptacle type required	2.5 kW		-	6-15R	-	-	6-15R	-	-	6-15R	-	6-15R	-
	3.5 kW		-	6-20R	7-20R	-	6-20R	7-20R	-	6-20R	7-20R	6-20R	7-20R
	4.8@ 240V		-	-	-	-	-	-	-	6-30R	7-30R	6-30R	7-30R
	Hydronic heat		5-15R	6-15R	7-20R	5-15R	6-15R	7-20R	5-15R	6-15R	7-20R	6-15R	7-20R
Airflow cfm	Cool		High/low			High/low			High/low			High/low	
			360/330			360/330			360/330			360/330	
	Heat		380/340			380/340			380/340			380/340	
	Vent		50/40			50/40			50/40			50/40	

1. Based on ASHRAE and ARI test conditions of 95°F DB/75°F WB outside, 80°F DB/67°F WB inside.

2. Based on ASHRAE and ARI test conditions of 47°F DB outside, 70°F DB inside.

3. Electric Resistance Heat Watts × 3.41 = Btuh. Electric heating watts and amps includes indoor fan motor.

4. Water—Based on ASHRAE and ARI test conditions of 200°F EWT, 180°F LWT, 70°F EAT with a 1.8 gpm flow rate.

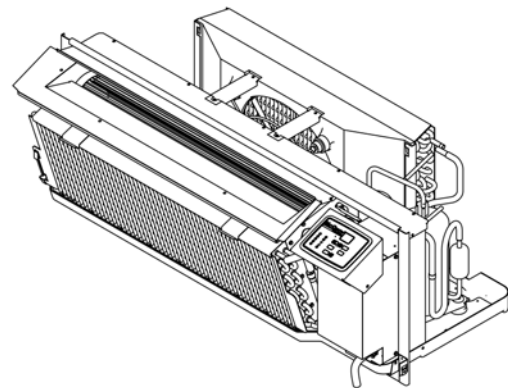
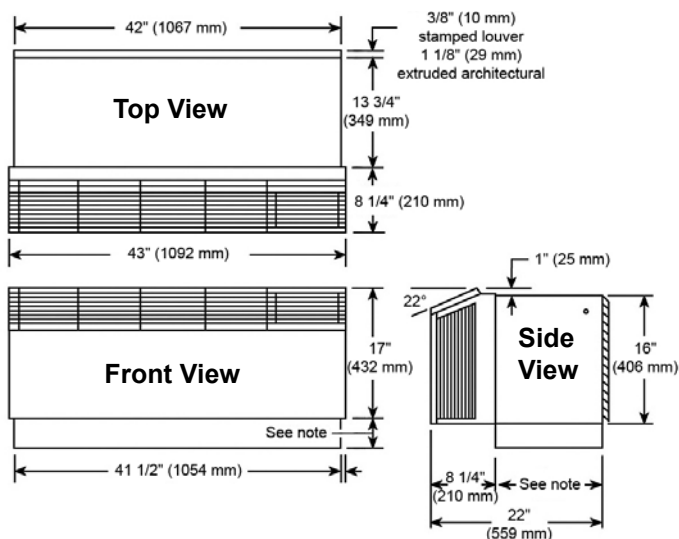
5. Cooling full load amps includes compressor, indoor air fan, and outdoor air fan.

Unit Weights

Model	007C	009C	012C	015C
16" × 42" PDHP (packaged) lb (kg)	146.0 (66.2)	153.5 (69.6)	154.4 (70.0)	162.1 (73.5)
16" × 42" PDAC (packaged) lb (kg)	144.5 (65.5)	152.0 (68.9)	152.9 (69.4)	160.6 (72.8)
16" × 42" PDHP (chassis) lb (kg)	131.0 (59.4)	138.5 (62.8)	139.4 (63.2)	147.1 (66.7)
16" × 42" PDAC (chassis) lb (kg)	129.5 (58.7)	137.0 (62.1)	137.9 (62.6)	145.6 (66.0)
16" × 44" PDHP (packaged) lb (kg)	131.0 (59.4)	138.5 (62.8)	139.4 (63.2)	147.1 (66.7)
16" × 44" PDAC (packaged) lb (kg)	129.5 (58.7)	137.0 (62.1)	137.9 (62.6)	145.6 (66.0)
16" × 44" PDHP (chassis) lb (kg)	116.0 (52.6)	123.5 (56.0)	124.4 (56.4)	132.1 (59.9)
16" × 44" PDAC (chassis) lb (kg)	114.5 (51.9)	122.0 (55.3)	122.9 (55.7)	130.6 (59.2)

Dimensions

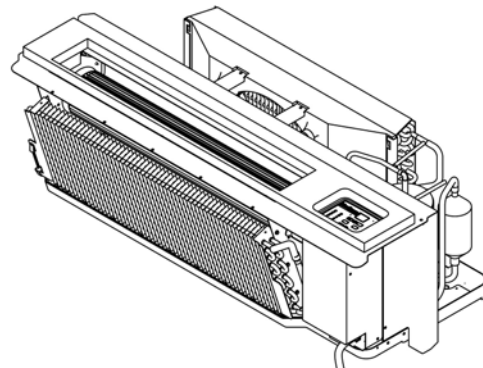
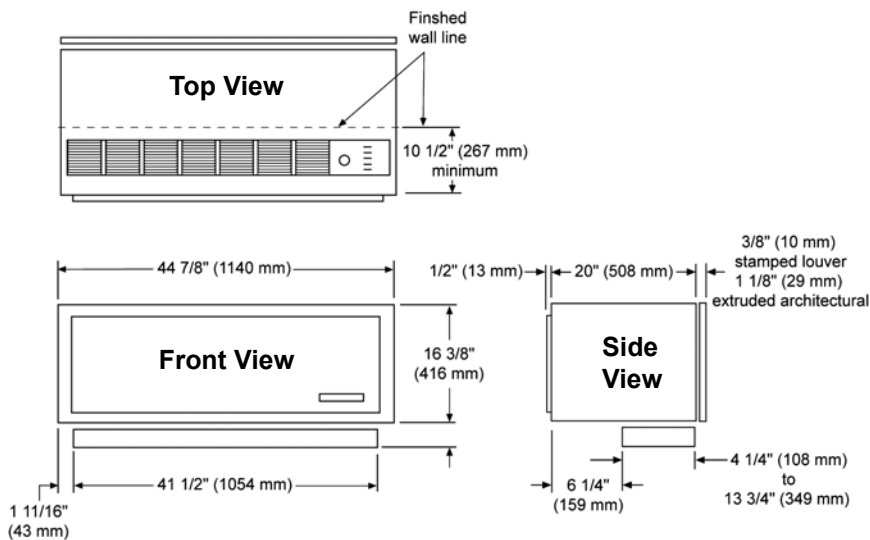
Standard 16" × 42" slope top PTAC/PTHP



Note: Unit pictured with subbase installed. Subbase is optional on 208V/230V units. Subbase is standard on all 265V and units with hydronic heat.

Replacement 16" × 44" flat top PTAC/PTHP

Air conditioner with electric heat or heat pump with electric heat



Legacy Incremental® and Packaged Terminal Conditioners and Heat Pumps

- Proven institutional grade design and heavy duty construction
- Fits exactly into existing wall sleeves to reduce renovation costs
- Updated performance adds comfort and reduces operating costs
- Factory test, check and run program for reliable start-up
- Easy maintenance can be done by your own staff
- UL, CSA, MEA and CE agency listings

For more detail, refer to brochure A/SP 31-158.
For the most current information, refer to www.mcquay.com.

Centrifugal fans

- Quieter and able to overcome more external static pressure than propeller fans
- Allows more flexible options for architectural louvers or special condenser air treatments

Heating section

- Option for electric resistance or hydronic (steam or hot water) heat

Wall sleeve

- Heavy-gauge steel construction
- Minimizes vibration for quieter operation

Heavy-duty grille

- Four-way adjustment allows air to be directed where it is needed

Outside air louver

- Heavy-duty, architectural extruded aluminum to resist weathering

Motorized outside air damper

- Opens when unit is operating to bring in outside air for improved indoor air quality (IAQ)
- Closes when unit is idle to prevent drafts

Room cabinet

- Heavy-gauge steel with powder paint coating provides maximum scratch and dent resistance and minimizes vibration for quieter operation

Adjustable kickplate

- Adjusts up or down to accommodate new floor coverings

Electro-mechanical controls

- Reliable and easy to operate
- Easy to read with color coding and raised lettering for the visually impaired

Cooling chassis

- Energy efficient, reliable rotary compressor
- Compressor is vibration isolated for quieter operation
- Dry-pan operation minimizes condensate



Type K (PKEs, PKHS)

Incremental® Room Conditioner (shown above)

- 13 11/16" × 36 1/4" (Type K) wall sleeve dimensions
- 15 7/8" × 46 1/4" (Type KG) wall sleeve dimensions
- Electric resistance (2.4–6.6 kW) or hydronic (steam or hot water) heat
- Cooling capacities from 6,800 to 20,000 Btuh
- Three voltages—208, 230 and 265V
- EERs up to 9.6
- Designed for long life

Replacement Guide

Old model description	Wall opening dimensions (in)	Current model description
AAF Enersaver A/C—Type ENR	16 x 37 1/2 or 16 x 41 1/2	McQuay Enersaver PTAC—PNES1
AAF Enersaver A/C—Type WY*	16 x 37 1/2 or 16 x 41 1/2	McQuay Enersaver PTAC—PNES1
AAF Enersaver Heat Pump—Type ENH	16 x 37 1/2 or 16 x 41 1/2	McQuay Enersaver PTHP—PNHS1
AAF Enersaver Heat Pump—Type YY*	16 x 37 1/2 or 16 x 41 1/2	McQuay Enersaver PTHP—PNHS1
American Standard Type 45 A/C	16 x 37 or 16 x 42	McQuay Enersaver PTAC—PNES2
American Standard Type 45 HP	16 x 37 or 16 x 42	McQuay Enersaver PTAC—PNHS2
McQuay—Type MEK	13 11/16 x 36 1/4 or 15 7/8 x 46 1/4	McQuay Type K, Cooling Chassis—PKES
McQuay—Type MHK	13 11/16 x 36 1/4 or 15 7/8 x 46 1/4	McQuay Type K, Heating Chassis—PKHS
McQuay—Type MQP	13 11/16 x 36 1/4 or 15 7/8 x 46 1/4	McQuay Type K, Heating Chassis—PKHS—; Cooling Chassis—PKES
McQuay—Type EK	13 11/16 x 36 1/4	McQuay Type K, Heating Chassis—PKHS; Cooling Chassis—PKES
McQuay—Type RK	13 11/16 x 36 1/4	McQuay Type K, Heating Chassis—PKHS; Cooling Chassis—PKES
McQuay—Type K	13 11/16 x 36 1/4	McQuay Type K, Heating Chassis—PKHS; Cooling Chassis—PKES
McQuay—Type EKG	15 7/8 x 46 1/4	McQuay Type K, Heating Chassis—PKHS; Cooling Chassis—PKES
McQuay—Type KG	15 7/8 x 46 1/4	McQuay Type K, Heating Chassis—PKHS; Cooling Chassis—PKES
McQuay—Type MEJ	13 7/8 x 29 1/4	McQuay Type J—PMEJ, Cooling Chassis; PMEJ, Heating Chassis
McQuay—Type MQJ	13 7/8 x 29 1/4	McQuay Type J—PMEJ, Cooling Chassis; PMEJ, Heating Chassis
McQuay—Type EJ	13 7/8 x 29 1/4	McQuay Type J—PMEJ, Cooling Chassis; PMEJ, Heating Chassis
McQuay—Type J	13 7/8 x 29 1/4	McQuay Type J—PMEJ, Cooling Chassis; PMEJ, Heating Chassis

* AAF Series 16

For other AAF, Singer, or Remington models, call your local McQuay Representative or (800) 432-1342.



Type J (PMEJ) Incremental® Room Air Conditioner

- 13 7/8" x 29 3/4" wall sleeve dimensions
- Cooling capacities from 9,400 to 11,300 Btuh
- Three voltages—208, 230 and 265V
- EERs up to 9.6
- Designed for long life



EnerSaver (PNES, PNHS) Packaged Terminal Air Conditioner/Heat Pump

- 16" x 37 1/2" or 16" x 41 1/2" wall sleeve dimensions
- Replaces Series 16 and Type 45 units
- Combined heating and cooling chassis
- Cooling capacities from 9,500 to 13,000 Btuh
- Electric or hydronic heat
- Two voltages—208 and 265V
- EERs up to 10.1 and COP's up to 2.9 on reverse cycle heat pump models
- Designed for long life

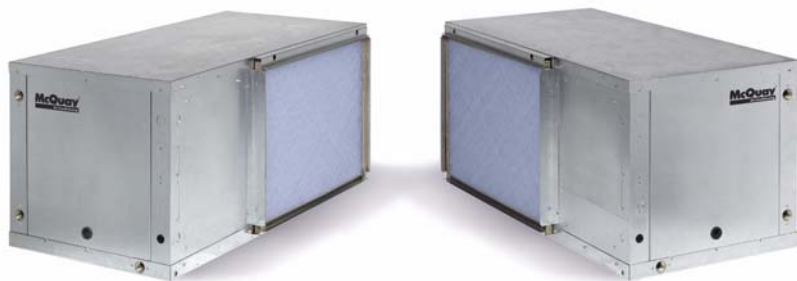
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Enfinity™ and Model CRH/CRW Horizontal Water Source Heat Pumps—1/2 to 6 Tons

- Non-CFC, R-410A refrigerant
- Standard or geothermal application flexibility
- Easy, low cost design and installation
- High EER promotes low operating costs and may qualify for rebates
- Superior indoor air quality and quiet operation
- Easy, low cost maintenance and service
- Flexible control options include standalone or network operation using LONWORKS® or BACnet® communications
- Performance rated with ISO Standard 13256-1

For more detail, refer to Catalogs 1100 and 1102.

For the most current information, refer to www.mcquay.com.



R-22 Models CRH/CRW (1/2 to 6 tons)

Enfinity™ R-410A Models CCH/CCW (1/2 to 5 tons)



Available LONMARK certified

R-410A refrigerant (Models CCH/CCW) with no ozone depletion potential

Water Source Heat Pump Systems

Boiler/tower



A "Boiler/Tower" application uses a simple two-pipe water circulating system that adds heat, removes heat or transfers rejected heat to other units throughout the building. The water temperature for heating is usually provided by a natural gas or electric boiler located in a mechanical room. The condensing water temperature is provided by a cooling tower that dissipates waste heat. This application can be the lowest cost of the loop options available.

Open loop "well water"



"Open Loop" well water systems use ground water to remove or add heat to the interior water loop. The key benefit of an open loop system is the constant water temperature, usually 50°F to 60°F, which provides efficient operation at a low first cost. Open Loop applications are commonly used in coastal areas where soil characteristics allow reinjection wells to return the water back to the aquifer. Reinjection wells must be approved by the U.S. Environmental Protection Agency.

Geothermal closed loop



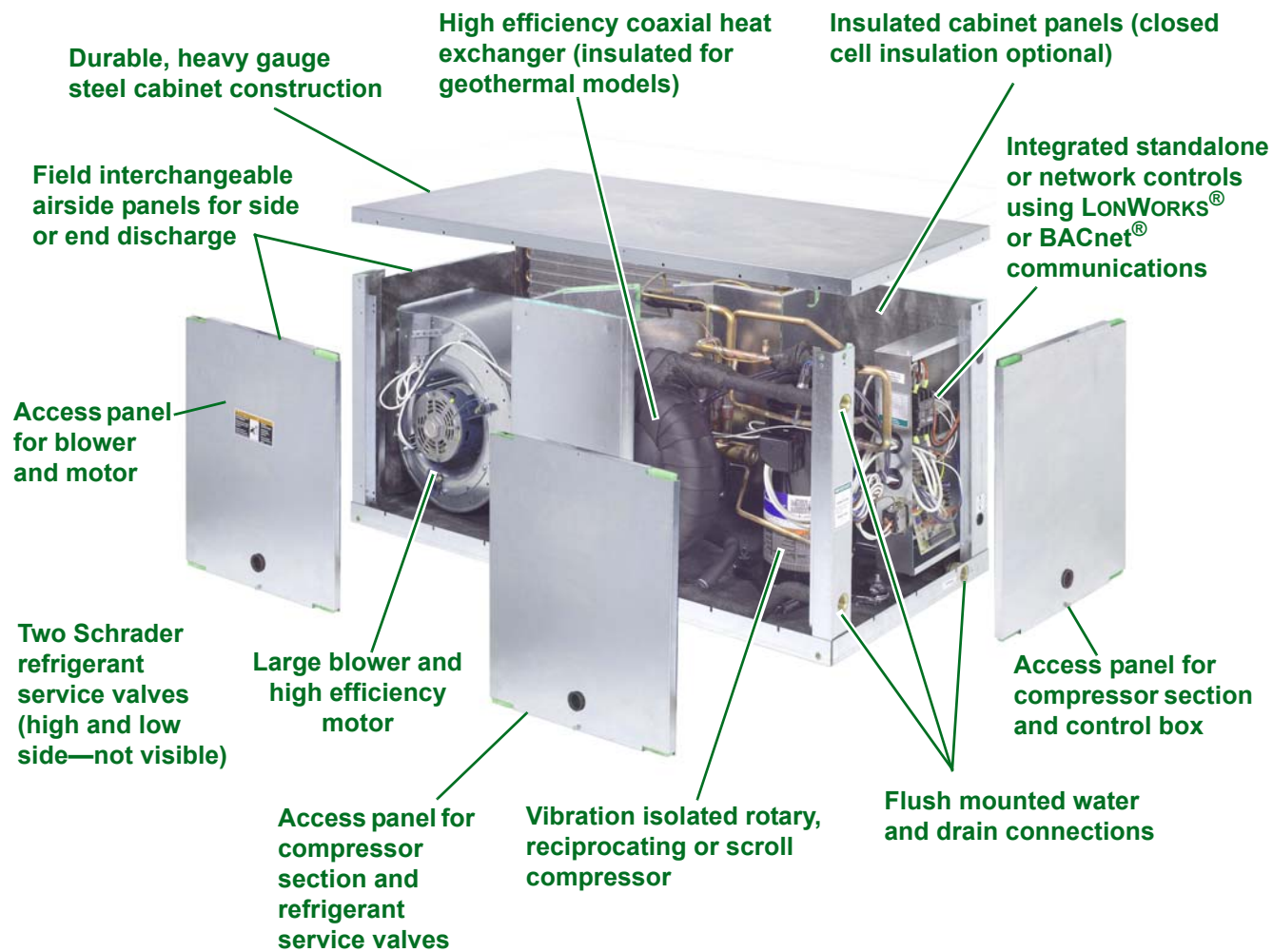
Vertical Loops (shown) are installed by drilling vertical bore holes into the earth and inserting a plastic polyethylene supply/return pipe into the holes. Horizontal loops are installed in trenches approximately 5 feet below the ground surface. Both vertical and horizontal loops extract the Earth's natural heat and reject it back.

Surface water or lake loop

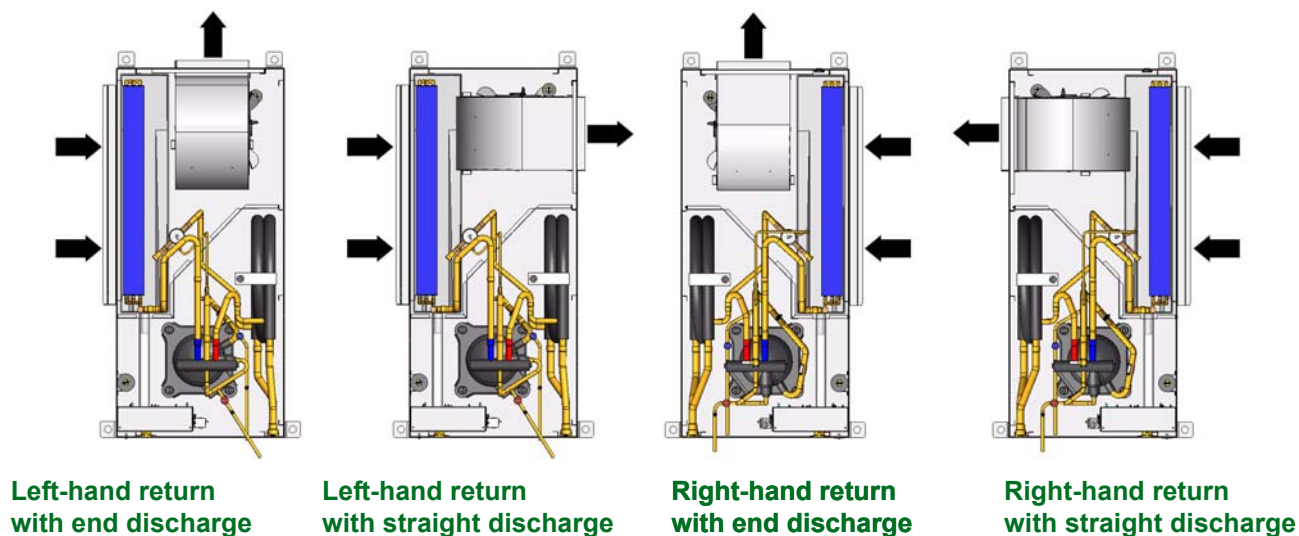


A "Surface Water" or "Lake" closed loop system is a geothermal loop that is directly installed in a lake or body of water that is near the building. In many cases, the body of water is constructed on the building site to meet drainage or aesthetic requirements. The size and the depth of the lake is critical and commercial design services should be used that certify a given body of water is sufficient to withstand the building loads.

Features



Four Different Air Configurations





Plastic, double-sloped
drain pan



Thermal expansion valve
(standard and geothermal models)



Removable
orifice ring

Capacity and Performance Data

Infinity R-410A Models CCH/CCW

Unit size	Airflow		Water flow		Water loop*						Ground loop**						Dimensions L x W x H (inches)		
					Cooling 86°F (30°C)				Heating 68°F (20°C)		Cooling 77°F (25°C)				Heating 32°F (0°C)				
	cfm	L/S	GPM	L/S	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	Btu/hr	Watts	EER	COP	Btu/hr		Watts	COP
007	300	142	2.1	0.14	8028	682	11.8	3.5	10,715	744	4.2	8941	622	14.4	4.2	7140	672	3.1	34 x 20 x 11.5
009	300	142	2.3	0.14	8813	681	12.9	3.8	11,769	745	4.6	9237	624	14.8	4.3	7458	664	3.3	34 x 20 x 11.5
012	400	189	3.0	0.19	12,941	1021	12.7	3.7	15,804	1080	4.3	13,954	929	15.0	4.4	10,402	996	3.1	40 x 20 x 11.5
019	630	297	5.3	0.33	21,000	6149	14.9	4.4	23,600	6910	4.8	22,600	6618	17.3	5.1	14,700	4304	3.6	42 x 20 x 19
024	800	378	6.2	0.39	24,700	7232	14.4	4.2	28,400	8316	4.7	26,300	7701	16.6	4.9	18,000	5271	3.6	42 x 20 x 19
030	1000	472	7.6	0.48	30,400	8901	15.3	4.5	36,200	10,600	5.0	30,200	8843	17.4	5.1	24,000	7027	3.7	46 x 21 x 20
036	1200	566	9.0	0.57	35,800	10,483	15.2	4.5	42,500	12,444	4.9	36,200	10,600	16.0	4.7	29,600	8667	3.4	46 x 21 x 20
042	1400	661	10.7	0.68	43,000	12,591	15.0	4.4	50,700	14,845	5.0	43,700	12,796	17.1	5.0	35,000	10,248	3.7	52 x 28 x 23
048	1600	755	12.3	0.78	48,400	14,172	14.1	4.1	57,100	16,719	4.7	48,800	14,289	16.0	4.7	38,100	11,156	3.5	52 x 28 x 23
060	2000	944	15.2	0.96	59,500	17,422	14.6	4.3	69,400	20,321	4.9	62,400	18,271	16.1	4.7	50,100	14,670	3.5	52 x 28 x 23

* Rated in accordance with ISO Standard 13256-1 Boiler/Tower.

** Rated in accordance with ISO Standard 13256-1 Ground Loop.

R-22 Models CRH/CRW

Unit size	Airflow		Water flow		Water loop*						Ground loop**						Dimensions L x W x H (inches)		
					Cooling 86°F (30°C)				Heating 68°F (20°C)		Cooling 77°F (25°C)				Heating 32°F (0°C)				
	cfm	L/S	GPM	L/S	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	Btu/hr	Watts	EER	COP	Btu/hr		Watts	COP
007	230	109	1.4	0.09	6800	1991	12.7	3.7	9000	2635	4.7	7200	2108	14.3	4.2	5700	1669	3.4	34 x 20 x 11.5
009	300	142	2.2	0.14	8500	2489	12.2	3.6	11,200	3279	4.3	9000	2635	14.2	4.2	7500	2196	3.2	34 x 20 x 11.5
012	400	189	3.1	0.20	11,700	3426	12.3	3.6	15,200	4451	4.2	12,500	3660	14.5	4.2	9800	2870	3.2	34 x 20 x 11.5
015	500	236	4.3	0.27	17,100	5007	14.2	4.2	20,400	5973	4.6	17,600	5153	16.2	4.7	12,600	3689	3.4	42 x 20 x 19
019	630	297	5.1	0.32	19,700	5768	13.4	3.9	24,500	7174	4.6	20,800	6090	15.7	4.6	15,800	4626	3.5	42 x 20 x 19
024	800	378	6.5	0.41	25,500	7467	12.8	3.8	31,300	9165	4.4	26,700	7818	14.4	4.2	19,000	5563	3.4	42 x 20 x 19
030	1000	472	8.5	0.54	33,300	9751	13.5	4.0	39,700	11,625	4.5	33,800	9897	14.8	4.3	23,100	6764	3.4	46 x 21 x 20
036	1200	566	9.8	0.62	37,800	11,068	13.5	4.0	46,100	13,499	4.6	38,800	11,361	14.9	4.4	26,700	7818	3.4	46 x 21 x 20
042	1400	661	11.0	0.69	42,500	12,444	12.2	3.6	51,900	15,197	4.2	44,100	12,913	13.4	3.9	30,800	9019	3.2	46 x 21 x 20
048	1600	755	11.8	0.74	47,000	13,762	13.2	3.9	55,300	16,192	4.5	49,100	14,377	14.9	4.4	32,800	9604	3.4	52 x 28 x 23
060	2000	944	14.7	0.93	58,000	16,983	13.2	3.9	70,200	20,555	4.9	59,200	17,334	14.9	4.4	44,500	13,030	3.6	52 x 28 x 23
070	2400	1133	18	1.14	71,500	20,936	12.5	3.6	83,300	24,391	4.3	72,200	21,141	13.6	4.0	52,900	15,490	3.2	52 x 28 x 23

* Rated in accordance with ISO Standard 13256-1 Boiler/Tower.

** Rated in accordance with ISO Standard 13256-1 Ground Loop.

Large Horizontal Water Source Heat Pumps—6 to 10 Tons

- High efficiency and quiet operation
- Standard or geothermal application flexibility
- Large panels for accessibility to compressor and fan sections
- Belt-driven blower motor
- Flexible control options include standalone or network operation using LONWORKS® or field-installed Alerton BACnet® communications
- Performance rated with ISO Standard 13256-1

For more detail, refer to Catalog 1170. For the most current information, refer to www.mcquay.com.



Models CMS/CMG

Capacity and Performance Data

Unit size	Air flow cfm (L/S)	Water flow gpm (L/S)	Voltage	Water loop				Ground loop				Dimensions L x W x H, in (mm)
				Cooling		Heating		Cooling		Heating		
				Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	
070	2333 (1101)	18.7 (1.18)	208-3-60	70,000 (20,965)	12.0	80,000 (24,215)	4.2	73,600 (21,931)	13.5	50,900 (15,900)	3.2	78 x 44 x 29 (1981 x 1118 x 737)
			230-3-60									
			460-3-60									
			575-3-60									
090	3000 (1416)	24.4 (1.5)	208-3-60	92,000 (27,495)	12.1	112,000 (31,624)	4.3	96,100 (29,164)	13.8	78,700 (21,522)	3.5	
			230-3-60									
			460-3-60									
			575-3-60									
120	4000 (1888)	30.1 (1.9)	208-3-60	12,1000 (35,664)	12.6	135,000 (41,052)	4.3	125,000 (36,221)	14.1	81,500 (24,479)	3.2	
			230-3-60									
			460-3-60									
			575-3-60									

Notes:

EER = Energy Efficiency Ratio COP = Coefficient of Performance.

- Water Loop cooling capacity is based on 80.6°F db, 66.2°F wb entering air temperature and 86°F entering water temperature.
- Water Loop heating capacity is based on 68°F entering air temperature and 68°F entering water temperature.
- Ground Loop cooling capacity is based on 80.6°F db, 66.2°F wb entering air temperature and 77°F entering water temperature.
- Ground Loop heating capacity is based on 68°F entering air temperature and 32°F entering water temperature.

Enfinity™ Vertical Water Source Heat Pumps—1/2 to 5 Tons

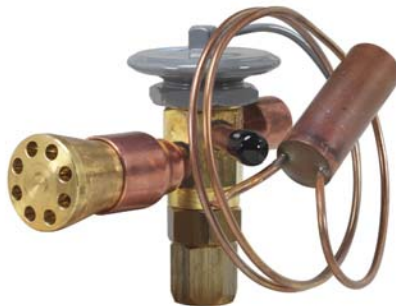
- Broadest selection of non-CFC, R-410A refrigerant
- Standard or geothermal application flexibility
- Easy, low cost design and installation
- High efficiency, low operating costs
- Superior indoor air quality and quiet operation
- Easy, low cost maintenance and service
- Flexible control options include standalone or network operation using LONWORKS® or BACnet® communications
- Performance rated with ISO Standard 13256-1

For more detail, refer to Catalog 1100. For the most current information, refer to www.mcquay.com.

Enfinity Models FCV/FCW



Plastic, double-sloped drain pan

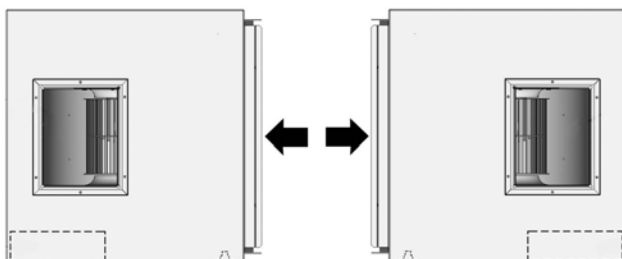


Thermal expansion valve (standard and geothermal models)



Removable orifice ring

Flexible Air Configurations (Top View)



Right hand return top discharge

Left hand return top discharge



Available LONMARK certified

Capacity and Performance Data

Infinity Model FCV/FCW Vertical Units

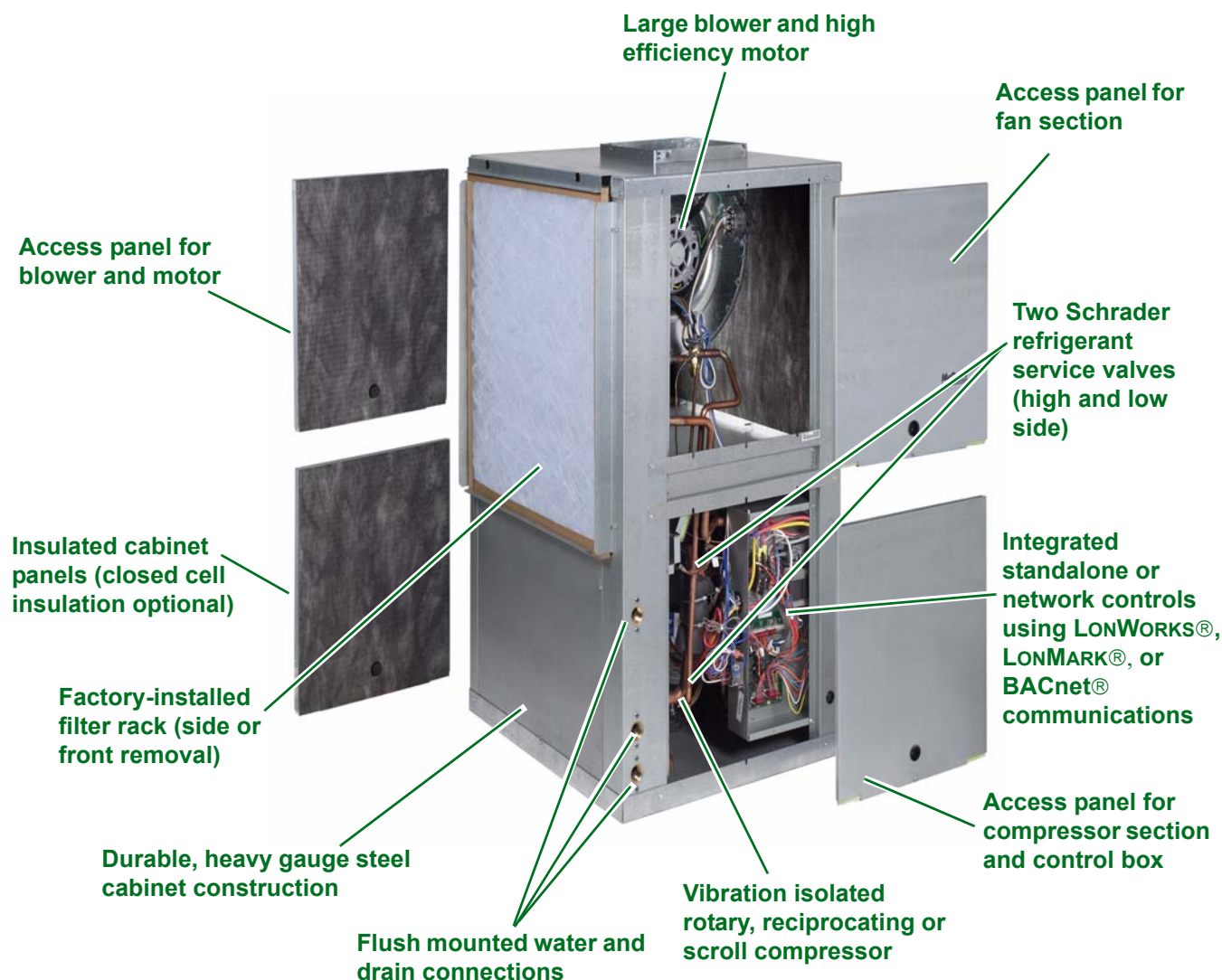
Unit size	Airflow		Water flow		Water loop*						Ground loop**						Dimensions L x W x H, in (mm)
					Cooling 86°F (30°C)			Heating 68°F (20°C)			Cooling 77°F (25°C)			Heating 32°F (0°C)			
	cfm	L/S	gpm	L/S	Btuh	Watts	EER	Btuh	Watts	COP	Btuh	Watts	EER	Btuh	Watts	COP	
007	230	109	1.4	0.09	6200	1815	12.2	8000	2342	4.3	6600	1933	14.2	5000	1464	3.1	22.0 x 22.0 x 31 3/16 (559 x 559 x 792)
009	300	142	2.2	0.14	8500	2489	11.8	11,600	3397	4.3	9100	2665	13.8	7400	2167	3.3	
012	400	189	3.1	0.20	11,200	3279	12.1	15,200	4451	4.3	12,000	3514	14.2	9400	2752	3.2	
019	630	297	5.2	0.33	19,800	5798	13.9	24,900	7291	4.7	21,400	6266	16.2	14,800	4334	3.5	24.0 x 24.0 x 39 3/16 (610 x 610 x 995)
024	800	378	5.9	0.37	22,800	6676	13.0	30,200	8843	4.7	24,500	7174	15.1	18,400	5388	3.6	
030	1000	472	7.2	0.45	30,400	8901	14.6	37,200	10,893	4.8	31,400	9194	16.9	24,500	7174	3.5	27.0 x 23.0 x 41 1/8 (687 x 584 x 1045)
036	1200	566	8.8	0.56	35,700	10,453	15.1	43,800	12,825	4.9	36,900	10,805	17.4	29,200	8550	3.7	
042	1400	661	10.7	0.68	41,000	12,005	15.1	51,900	15,197	4.9	42,700	12,503	17.6	33,900	9926	3.7	32 1/2 x 28.0 x 47 1/8 (826 x 711 x 1197)
048	1600	755	11.6	0.73	45,700	13,381	13.8	56,900	16,661	4.5	47,900	14,026	16.1	36,700	10,746	3.3	
060	2000	944	14.8	0.93	60,100	17,598	13.9	74,300	21,756	4.7	61,300	17,949	16.0	48,200	14,113	3.5	

Notes:

Length is the return air opening (filter) side of the unit. Right or left hand return of unit is determined by facing the piping connection side of the unit.

*Rated in accordance with ISO Standard 13256-1 Boiler/Tower.

**Rated in accordance with ISO Standard 13256-1 Ground Cooled.



Vertical Water Source Heat Pumps—1/2 to 5 Tons

- High efficiency and quiet operation
- Large panels for accessibility to compressor and fan sections
- Removable fan motor/wheel assembly
- Flexible control options include standalone or network operation using LONWORKS® or field-installed Alerton BACnet® communications
- Performance rated with ISO Standard 13256-1

For more detail,
refer to Catalog 1160.
For the most current
information, refer to
www.mcquay.com.



Models FMS/FME

Capacity and Performance Data

Water Loop

Unit size	Air flow		Water flow		Water loop							Dimensions L X W x H, in (mm)
					Cooling				Heating			
	cfm	L/S	gpm	L/S	Btu/hr	Watts	EER	COP	Btu/hr	Watts	COP	
007	230	109	1.86	0.12	6900	2020	11.7	3.4	9400	2752	4.2	21 x 21 x 24 (533 x 533 x 610))
009	300	142	2.33	0.15	8800	2577	11.2	3.3	12,200	3572	4.2	
012	400	189	2.94	0.19	11,200	3279	11.9	3.5	16,200	4744	4.5	
015	480	227	3.42	0.22	13,000	3807	11.6	3.4	17,900	5241	4.2	21 x 21 x 30 (533 x 533 x 762)
019	630	297	4.83	0.30	18,300	5358	12.0	3.5	24,700	7232	4.2	
024	800	378	6.23	0.39	24,000	7027	12.3	3.6	31,600	9253	4.2	
030	1000	472	7.4	0.47	28,600	8374	12.0	3.5	41,200	12,064	4.4	21 x 21 x 37 (533 x 533 x 940)
036	1200	566	9.07	0.57	34,800	10,190	12.6	3.7	43,600	12,767	4.2	
042	1400	661	10.6	0.67	41,300	12,093	12.7	3.7	49,600	14,523	4.2	25 x 25 x 37 (635 x 635 x 940)
048	1600	755	12.1	0.76	46,000	13,469	12.1	3.5	56,000	16,397	4.3	
060	2000	944	15.9	1.00	60,400	17,686	12.0	3.5	75,000	21,966	4.2	28 x 28 x 46 (711 x 711 x 1168)

Notes:

EER = Energy Efficiency Ratio COP = Coefficient of Performance.

- Cooling capacity is based on 80.6°F db. 67°F wb. (27/19°C) entering air temperature and 85°F (29°C) entering, 95°F (35°C) leaving water temperature.
- Heating capacity is based on 70°F (21°C) entering air temperature and 68°F (20°C) entering water temperature.

Large Vertical Water Source Heat Pumps—6 to 25 Tons

- Standard or geothermal application flexibility
- High efficiency and quiet operation
- Dual compressors on unit sizes 180 and higher
- Belt driven multiple fans
- Multiple access panels
- Flexible control options include standalone or network operation using LONWORKS® or field-installed Alerton BACnet® communications
- Performance rated with ISO Standard 13256-1

For more detail, refer to Catalog 1170. For the most current information, refer to www.mcquay.com.



Models LMS/LMG
(6 to 10 tons)



Models LMS/LMG
(15 to 25 tons)

Capacity and Performance Data

Unit size	Airflow cfm (L/S)	Water flow gpm (L/S)	Voltage	Water loop				Ground loop				Dimensions L x W x H, in (mm)
				Cooling		Heating		Cooling		Heating		
				Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	
070	2300 (1085)	18.7 (1.18)	208-3-60	69,600 (20,438)	12.0	84,900 (21,697)	4.2	70,600 (20,965)	13.8	59,000 (13,411)	3.4	54 5/8 x 28 x 55 3/4 (1387 x 711 x 1416)
			230-3-60									
			460-3-60									
			575-3-60									
108	3600 (1699)	27.4 (1.7)	208-3-60	107,000 (31,389)	12.0	129,000 (31,975)	4.2	112,000 (32,619)	13.3	76,100 (20,204)	3.3	
			230-3-60									
			460-3-60									
			575-3-60									
121	4000 (1888)	33.1 (2.1)	208-3-60	111,000 (37,187)	12.7	135,000 (41,608)	4.3	115,000 (38,710)	14.2	83,300 (26,382)	3.1	
			230-3-60									
			460-3-60									
			575-3-60									
180	6000 (2832)	51 (3.2)	208-3-60	197,600 (57,859)	12.5	190,700 (55,839)	3.6	203,600 (59,616)	13.3	105,000 (30,745)	2.9	
			230-3-60									
			460-3-60									
			575-3-60									
215	7167 (3382)	55.4 (3.5)	208-3-60	217,000 (63,540)	11.3	268,100 (78,502)	3.7	220,100 (64,448)	12.0	130,000 (38,605)	2.8	
			230-3-60									
			460-3-60									
			575-3-60									
290	9670 (4564)	70.5 (4.4)	208-3-60	268,900 (78,737)	10.4	310,100 (90,801)	3.3	279,900 (81,958)	10.9	196,000 (57,391)	2.7	
			230-3-60									
			460-3-60									
			575-3-60									

Notes:

EER = Energy Efficiency Ratio COP = Coefficient of Performance.

- Water Loop cooling capacity is based on 80.6°F db, 66.2°F wb entering air temperature and 86°F entering water temperature.
- Water Loop heating capacity is based on 68°F entering air temperature and 68°F entering water temperature.
- Ground Loop cooling capacity is based on 80.6°F db, 66.2°F wb entering air temperature and 77°F entering water temperature.
- Ground Loop heating capacity is based on 68°F entering air temperature and 32°F entering water temperature.
- Vertical unit sizes 180 through 290 are not ARI certified since they exceed 135,000 Btu/hr for standard 320.S.

Console Water Source Heat Pumps—1/2 to 1 1/2 Tons

- Rotary compressor
- Slide-out chassis design
- Modern grille and cabinet shape
- Compact dimension—only 10 3/4" deep
- Touch-tap membrane switches
- Continuous or cycle fan operation
- Flexible control options include standalone or network operation using LONWORKS® or field-installed Alerton BACnet® communications
- Five unit sizes

For more detail, refer to Catalog 1140. For the most current information, refer to www.mcquay.com.



Model WMS—slope top unit



Model WMF—flat top unit

Capacity and Performance Data

Water Loop

Unit size	Airflow cfm (L/S)	Water flow gpm (L/S)	Cooling		Heating		Dimensions, in (mm)			
			Capacity Btuh (Watts)	EER	Capacity Btuh (Watts)	COP	Length of cabinet	Length of subbase	W	H *
007	200 (94.4)	1.74 (0.11)	6800 (1991)	12.5	8700 (2547)	4.2	46 (1168)	45 (1143)	10 3/4 (273)	25 (635)
009	250 (118)	2.29 (0.14)	8900 (2606)	12.2	12,000 (3513)	4.2	46 (1168)	45 (1143)		
012	290 (137)	2.92 (0.18)	11,300 (3309)	12.4	15,000 (4392)	4.2	46 (1168)	45 (1143)		
015	480 (227)	3.84 (0.24)	15,700 (4597)	12.6	17,500 (5124)	4.2	54 (1372)	53 (1346)		
019	520 (245)	4.66 (0.29)	17,900 (5241)	12.2	23,200 (6793)	4.2	54 (1372)	53 (1346)		

Notes:

EER = Energy Efficiency Ratio COP = Coefficient of Performance.

• Cooling capacity is based on 80°F (27°C) db, 67°F (19°C) wb entering air temperature and 85°F (29°C) entering, 95°F (35°C) leaving water temperature.

• Heating capacity is based on 70°F (21°C) db entering air temperature and 70°F (21°C) entering water temperature. 50 cycle units are not ARI rated.

*Dimension for High Sill units. Low Sill dimension is 22.5".

Water to Water Source Heat Pumps—3 to 35 Tons

- Heating only, cooling only or heating and cooling models
- High efficiency and quiet operation
- R-22 or non-CFC, R-407C refrigerant
- Large panels for accessibility to compressor and controls sections
- Flexible configurations with top or side piping (120–420)
- Flexible configurations with front or side control box (120–420)
- Status lights—compressor 1, compressor 2, fault (120–420)
- Domestic hot water coil (036–072)

For more detail, refer to Catalog 1111. For the most current information, refer to www.mcquay.com.

Model GRW—extended range heating and cooling models

Model GHW—extended range heating only models

Model GCW—extended range cooling only models



Capacity and Physical Data

Model sizes	Btuh nominal cooling	Cabinet dimensions, inches			Water connections	
		Width	Depth	Height	Load/source	Domestic hot water
036	36,000	28 1/8	28 1/8	19	3/4" FPT	1/2" FPT
048	48,000	28 1/8	28 1/8	21	1" FPT	1/2" FPT
060	60,000	28 1/8	28 1/8	21	1" FPT	1/2" FPT
072	72,000	35 1/8	28 1/8	21	1" FPT	1/2" FPT
120	120,000	34	42	41	1 1/2	N/A
150	150,000	34	42	41	1 1/2	N/A
180	180,000	34	42	41	2	N/A
240	240,000	34	50	63 1/8	2	N/A
300	300,000	34	50	63 1/8	2	N/A
360	360,000	34	50	63 1/8	2	N/A
420	420,000	34	50	63 1/8	2	N/A

Rooftop Water Source Heat Pumps—3 to 35 Tons

- Flexible downflow and horizontal discharge arrangements
- Standard or geothermal application flexibility
- Heavy duty cabinet construction and full perimeter roof curb for long life
- Multiple access panels for easy maintenance
- Sloped stainless steel drain pan for superior IAQ
- Multiple refrigerant circuits on units 8-ton (28kW) and larger for staged operation
- Economizer, hot gas bypass and reheat, and fan motor size options to meet application requirements
- Performance rated in accordance with ISO 13256-1

For more detail, refer to Catalog 1110.
For the most current information, refer to mcquay.com.



Models RWH/RGH,
horizontal discharge



Models RWD/RGD,
downflow discharge

Capacity and Performance Data

RWD and RGD Downflow Discharge Units

Unit size	Airflow cfm (L/S)	Water flow gpm (L/S)	Voltage	Water loop*				Ground loop**				Dimensions, in (mm)		
				Cooling		Heating		Cooling		Heating		L	W	H
				Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	Btu/hr (Watts)	EER	Btu/hr (Watts)	COP			
036	1200 (566)	8.6 (0.54)	208-230/60/3	34,500 (10,104)	14.1	42,900 (12,565)	4.4	38,500 (11,276)	14.9	24,100 (7,058)	3.5	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
048	1800 (850)	13.0 (0.82)	208-230/60/3	49,600 (14,526)	13.0	59,600 (17,455)	4.5	52,000 (15,230)	14.9	35,000 (10,251)	3.5	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
060	2000 (944)	15.5 (0.98)	208-230/60/3	60,000 (17,748)	12.8	73,000 (21,380)	4.6	60,200 (17,631)	14.1	47,000 (13,756)	3.2	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
072	2300 (1086)	18.0 (1.14)	208-230/60/3	75,200 (22,024)	12.8	83,300 (24,397)	4.6	75,300 (22,346)	15.9	55,400 (16,225)	3.7	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
096	3200 (1510)	24.0 (1.52)	208-230/60/3	95,000 (27,823)	12.5	173,000 (33,095)	4.2	96,000 (28,116)	13.5	71,400 (20,911)	3.2	85.0 (2159)	54.0 (1372)	36.0 (914)
			460/60/3											
			380/415/50/3											
120	4000 (1888)	31.0 (1.96)	208-230/60/3	119,000 (34,852)	12.0	140,000 (41,003)	4.2	120,000 (35,145)	13.4	93,100 (27,267)	3.2	85.0 (2159)	54.0 (1372)	36.0 (914)
			460/60/3											
			380/415/50/3											
150	5000 (2360)	36.0 (2.27)	208-230/60/3	150,700 (44,136)	12.5	185,000 (54,182)	4.3	154,000 (45,103)	13.6	120,500 (35,291)	3.2	101.0 (2565)	79.0 (2007)	40.0 (1016)
			460/60/3											
			380/415/50/3											
180	6000 (2832)	42.0 (2.65)	208-230/60/3	171,900 (50,345)	13.9	208,000 (60,918)	4.6	178,200 (52,190)	15.7	133,600 (39,128)	3.5	101.0 (2565)	79.0 (2007)	40.0 (1016)
			460/60/3											
			380/415/50/3											
240	8000 (3776)	58.0 (3.66)	208-230/60/3	229,800 (67,303)	12.5	287,100 (84,085)	4.3	236,900 (69,382)	14.5	180,600 (52,893)	3.4	101.0 (2565)	79.0 (2007)	40.0 (1016)
			460/60/3											
			380/415/50/3											
300	10,000 (4720)	68.0 (4.29)	208-230/60/3	276,400 (80,951)	13.6	343,100 (100,486)	4.6	285,000 (83,469)	14.8	230,000 (67,361)	3.6	118.0 (2997)	84.0 (2134)	56.0 (1422)
			460/60/3											
			380/415/50/3											
360	12,000 (5663)	93.0 (5.87)	208-230/60/3	376,500 (110,267)	12.4	459,100 (134,459)	4.2	383,100 (112,200)	14.0	304,100 (89,063)	3.2	118.0 (2997)	84.0 (2134)	66.0 (1676)
			460/60/3											
			380/415/50/3											
420	14,000 (6607)	108.0 (6.81)	208-230/60/3	426,700 (124,970)	12.1	550,000 (161,081)	4.2	440,000 (128,865)	13.4	369,000 (108,071)	3.2	118.0 (2997)	84.0 (2134)	82.5 (2096)
			460/60/3											
			380/415/50/3											

Notes:

EER = Energy Efficiency Ratio; COP = Coefficient of Performance.

* Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 86°F (30°C) entering, 95°F (35°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 68°F (20°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

** Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 77°F (25°C) entering, 87°F (31°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 32°F (0°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

Roof Curb Dimensions—RWD and RGD Downflow Discharge Units

Unit size	Length, in (mm)	Width, in (mm)	Height, in (mm)
036	46.5 (1181)	34.5 (876)	14.0 (356)
048	46.5 (1181)	34.5 (876)	14.0 (356)
060	46.5 (1181)	34.5 (876)	14.0 (356)
072	46.5 (1181)	34.5 (876)	14.0 (356)
096	72.5 (1842)	45.5 (1156)	14.0 (356)
120	72.5 (1842)	45.5 (1156)	14.0 (356)
150	89.75 (2280)	61.5 (1562)	14.0 (356)
180	89.75 (2280)	61.5 (1562)	14.0 (356)
240	89.75 (2280)	61.5 (1562)	14.0 (356)
300	105.0 (2667)	75.25 (1911)	16.0 (406)
360	105.0 (2667)	75.25 (1911)	16.0 (406)
420	105.0 (2667)	75.25 (1911)	16.0 (406)

Capacity and Performance Data

RWH and RGH Horizontal Discharge Units

Unit size	Airflow cfm (L/S)	Water flow gpm (L/S)	Voltage	Water loop*				Ground loop**				Dimensions, in (mm)		
				Cooling		Heating		Cooling		Heating		L	W	H
				Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	Btu/hr (Watts)	EER	Btu/hr (Watts)	COP			
036	1200 (566)	8.6 (0.54)	208-230/60/3	34,500 (10,104)	14.1	42,900 (12,565)	4.4	38,500 (11,276)	14.9	24,100 (7,058)	3.5	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
048	1800 (850)	13.0 (0.82)	208-230/60/3	49,600 (14,526)	13.0	59,600 (17,455)	4.5	52,000 (15,230)	14.9	35,000 (10,251)	3.5	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
060	2000 (944)	15.5 (0.98)	208-230/60/3	60,000 (17,748)	12.8	73,000 (21,380)	4.6	60,200 (17,631)	14.1	47,000 (13,756)	3.2	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
072	2300 (1086)	18.0 (1.14)	208-230/60/3	75,200 (22,024)	12.8	83,300 (24,397)	4.6	75,300 (22,346)	15.9	55,400 (16,225)	3.7	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
096	3200 (1510)	24.0 (1.52)	208-230/60/3	95,000 (27,823)	12.5	173,000 (33,095)	4.2	96,000 (28,116)	13.5	71,400 (20,911)	3.2	80.0 (2032)	54.0 (1372)	39.0 (991)
			460/60/3											
			380/415/50/3											
120	4000 (1888)	31.0 (1.96)	208-230/60/3	119,000 (34,852)	12.0	140,000 (41,003)	4.2	120,000 (35,145)	13.4	93,100 (27,267)	3.2	80.0 (2032)	54.0 (1372)	39.0 (991)
			460/60/3											
			380/415/50/3											
150	5000 (2360)	36.0 (2.27)	208-230/60/3	150,700 (44,136)	12.5	185,000 (54,182)	4.3	154,000 (45,103)	13.6	120,500 (35,291)	3.2	82.0 (2083)	79.0 (2007)	43.0 (1092)
			460/60/3											
			380/415/50/3											
180	6000 (2832)	42.0 (2.65)	208-230/60/3	171,900 (50,345)	13.9	208,000 (60,918)	4.6	178,200 (52,190)	15.7	133,600 (39,128)	3.5	82.0 (2083)	79.0 (2007)	43.0 (1092)
			460/60/3											
			380/415/50/3											
240	8000 (3776)	58.0 (3.66)	208-230/60/3	229,800 (67,303)	12.5	287,100 (84,085)	4.3	236,900 (69,382)	14.5	180,600 (52,893)	3.4	82.0 (2083)	79.0 (2007)	43.0 (1092)
			460/60/3											
			380/415/50/3											
300	10,000 (4720)	68.0 (4.29)	208-230/60/3	276,400 (80,951)	13.6	343,100 (100,486)	4.6	285,000 (83,469)	14.8	230,000 (67,361)	3.6	94.0 (2388)	84.0 (2137)	61.0 (1549)
			460/60/3											
			380/415/50/3											
360	12,000 (5663)	93.0 (5.87)	208-230/60/3	376,500 (110,267)	12.4	459,100 (134,459)	4.2	383,100 (112,200)	14.0	304,100 (89,063)	3.2	94.0 (2388)	84.0 (2137)	76.5 (1943)
			460/60/3											
			380/415/50/3											
420	14,000 (6607)	108.0 (6.81)	208-230/60/3	426,700 (124,970)	12.1	550,000 (161,081)	4.2	440,000 (128,865)	13.4	369,000 (108,071)	3.2	94.0 (2388)	84.0 (2137)	87.5 (2222)
			460/60/3											
			380/415/50/3											

Notes:

EER = Energy Efficiency Ratio; COP = Coefficient of Performance.

* Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 86°F (30°C) entering, 95°F (35°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 68°F (20°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

** Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 77°F (25°C) entering, 87°F (31°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 32°F (0°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

Roof Curb Dimensions—RWH and RGH Horizontal Discharge Units

Unit size	Length, in (mm)	Width, in (mm)	Height, in (mm)
036	48.25 (1226)	45.25 (1149)	14.0 (356)
048	48.25 (1226)	45.25 (1149)	14.0 (356)
060	48.25 (1226)	45.25 (1149)	14.0 (356)
072	48.25 (1226)	45.25 (1149)	14.0 (356)
096	80.25 (2038)	45.25 (1149)	14.0 (356)
120	80.25 (2038)	45.25 (1149)	14.0 (356)
150	82.25 (2089)	68.25 (1734)	14.0 (356)
180	82.25 (2089)	68.25 (1734)	14.0 (356)
240	82.25 (2089)	68.25 (1734)	14.0 (356)
300	144.25 (3664)	71.25 (1822)	14.0 (356)
360	144.25 (3664)	71.25 (1822)	14.0 (356)
420	144.25 (3664)	71.25 (1822)	14.0 (356)

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