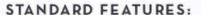
CXV AIR SOURCE HEAT PUMP WATER HEATER



Massachusetts Board of Registration Plumbers & Gas Fitters

Accepted
Plumbing Products
&
Heat Pump
Systems



- Available in 208-230/60 or 220/50/1
- 140°F output down to 10°F (-12°C)
- 120°F output down to -4°F (-20°C)
- · 5 hp vapor injection compressor
- · Swing-away fan panel for ease of servicing
- · Industrial PLC, color touchscreen, EEV controls
- · 304L stainless steel frame and enclosure
- · Double wall 316L stainless steel condenser
- · For potable water heating
- · Integrated stainless steel circulator pump
- · Expandable in arrays of up to eight units.
- · BACnet, Modbus, MSTP or Ethernet built in
- · Intelligent defrost, trace tape, and pan heater included.
- · Machine suitable for outdoor application
- NSF 61 certified potable circuit, UI 508 electrical box



AVAILABLE OPTIONS:

- Header assemblies and single point electrical distribution for multiple unit installations
- · Single wall condensers for hydronic heating
- · Secondary heat exchangers for pool heating







CXA MODULAR SERIES AIR SOURCE HEAT PUMPS



Massachusetts Board of Registration Plumbers & Gas Fitters

Accepted
Plumbing Products
&
Heat Pump
Systems



STANDARD FEATURES:

- · ECM axial fan
- 10 and 15 hp models fit through standard 36" door and elevators
- · Slide-out tray for servicing refrigeration components
- · Industrial PLC, color touchscreen, EEV controls
- · 304L stainless steel frame and enclosure
- · Double wall 316L stainless steel condenser for potable water heating
- · Integrated stainless steel circulator pump
- 140°F 160°F output temperatures
- · Expandable in arrays of up to eight, with zero clearance book end spacing
- · BACnet, Modbus, MSTP or ethernet built in
- NSF 61 potable circuit, UL508A electrical box
- · Machine suitable for outdoor applications





SERIES ADVANTAGES:

- · Improved low ambient performance
- · Intelligent defrost
- · Reduced footprint
- · Unit interconnectivity for staging and lead/lag
- · Slide out tray for easy access to refrigeration components

OPTIONAL FEATURES:

- · ECM plenum fan for high static applications
- · Compressor VFD for improved efficiency and control
- Cold weather package for ambient conditions between 35-50°F (1.6 -10°C)
- Freezing weather package for ambient conditions (between 23- 35°F (-5 0°C))
- · Electrofin evaporator coating









CXW MODULAR SERIES WATER SOURCE HEAT PUMPS



Massachusetts Board of Registration Plumbers & Gas Fitters

Accepted
Plumbing Products
&
Heat Pump
Systems



STANDARD FEATURES:

- Double wall, vented, 316L stainless steel condenser for safe, potable water heating
- 140°F 160°F output temperatures to prevent and eradicate legionella
- · Industrial PLC, color touchscreen, EEV controls
- · Integrated stainless steel circulator pump
- · 304L stainless steel frame and enclosure
- · Stackable for reduced footprint
- · Expandable in arrays of up to eight, with zero clearance book end spacing
- · BACnet, Modbus, MSTP or ethernet built in
- NSF 61 potable circuit, UL508A electrical box
- · Machine suitable for outdoor application
- · Unit interconnectivity for staging and lead lag



OPTIONAL FEATURES:

- · Header assemblies for multiple modules
- · Single point electrical distribution for multiple modules
- High temperature circuit to produce water up to 185°F
- · Compressor VFD for additional operational cost savings and control
- · High source circuit for source water temperatures over 85°F
- Double wall, vented, 316L stainless steel evaporator to protect source water (ground water sources or domestic water cooling)
- Secondary heat exchanger loop for working fluids incompatible with standard heat exchangers
- · Sound blanket









CXA-5 MODULAR SERIES AIR SOURCE HEAT PUMPS



Massachusetts Board of Registration Plumbers & Gas Fitters

Accepted
Plumbing Products
&
Heat Pump
Systems



STANDARD FEATURES:

- Available in 208-230/60/3 or 220/50/3
- · Single Pass 140°F output
- · 5 HP Compressor
- · Swing away fan panel for ease of service
- Small profile 28" L x 26" W x 35" H
- · PLC/ Color Touch Screen/ EEV Controls
- · 304L Stainless Steel frame and enclosure
- · Machine suitable for outdoor applications
- · 316L Stainless Steel Double Wall Brazed Plate Condenser

Scan to view FTP-LLC website!

Scan to view Integrated Stainless Steel Circulator pump

- NSF 61 Certified Potable water circuit, UL 508 Electrical box
- · Expandable in arrays of up to eight machines
- · BACnet, Modbus MSTP or Ethernet built-in



- · Header assemblies and single point electrical distribution for multiple unit installations
- · Single wall condensers for Hydronic Heating
- · Secondary heat exchangers for Pool Heating
- · Cloud based monitoring and reporting



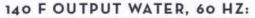


CXA-5 MODULAR SERIES AIR SOURCE HEAT PUMPS



Massachusetts Board of Registration Plumbers & Gas Fitters

Accepted
Plumbing Products
&
Heat Pump
Systems



AMBIENT (F, DRY BULB)	THR	нсор	COOLING	C COP	сомво сор	KW
90 / 75	67983	3.41	53315	2.68	6.09	5833
Bo / 67	59581	3.04	45210	2.31	5.34	5746
70 / 58.5	53072	2.73	38877	2.00	4.73	5695
60 / 50	48873	2.53	34767	1.80	4.32	5669
50 / 42	43582	2.26	29565	1.54	3.80	5642
40 / 33.5	38927	2.03	24980	1.30	3.33	5622



COLOR TOUCH SCREEN

ELECTRICAL SPECIFICATIONS:

Available in single phase only

230V / 60 HZ / 3 PH FLA: 24.83 A MCA: 29.83 A MOP: 20 A

FEEDER WIRE: 10 AWG [5.26 MM^2]

ELECTRICAL SUPPLY: 200V / 50 HZ / 3 PH

FLA: 23.95 A MCA: 28.95 A MOP: 20 A

FEEDER WIRE: 10 AWG [5.26 MM^2]





MODULAR PACKAGED TANK SKID SYSTEMS



WATER IN, WATER OUT, DONE!

Colmac offers complete packaged systems to simplify the design and installation of a building's hot water system. Each piece of the system (the heat pump, storage tanks, etc.) comes on an individual platform designed to bolt together in any configuration needed to fit in the space. Once the pieces are assembled onsite, the hot water system offers single point water connections to the building.



OPTIONAL FEATURES:

- · Modular platform and flexible connections make onsite assembly easy
- · Simple plug-and-play building connections
- · Piping done per the Colmac method maximizing system efficiency
- · Plumbing available in copper, stainless steel, or PPR
- Expansion tanks, electronic or thermostatic mixing valves, temperature and pressure gauges, balancing valves and circuit setters
- · NSF 61 compliant components
- · ANSI rated storage tanks available
- Tank sizes from 80-500 gallons available to match any system capacity required
- · Factory preassembled and fully tested



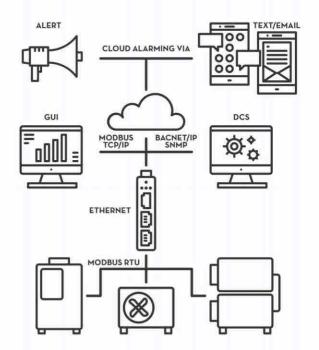




CLOUD MONITORING & REPORTING SYSTEM



Colmac offers a high-performance, fully featured cloud-based monitoring and reporting interface for Colmac WaterHeat Units. Seamlessly connect individual units or entire arrays securely to the cloud, allowing building supervisor and owners the ability to monitor performance and be alerted to abnormalities or even custom-triggered events through any internet connection. Alerts can be sent via email or by SMS text message.* This module also allows for factory access for troubleshooting and tuning performance.



Cloud enabled devices allow registered users to view data via user-configurable dashboard, download historical data and provide remote monitor and remote control for any connected device. There are no recurring fees for this service, and the cloud retains the last year of data on its servers.



*Text Messaging may incur additional fees from the customer service provider depending on plan specifics.



Made in USA







STANDARD FEATURES:

- Colmac offers the Cx-Series lead lag and staging controls as a stand-alone platform
- Up to 12 individual units may be operated using the controller
- · Up to 12 unique stages may be applied
- Up to four separate temperature aquastats may be used for controller set points
- Controller settings allow efficient optimization of multiple units to meet the building characteristics.
- System includes an option for "Compressor On" feedback to provide information to the owner/manager of equipment that fails to start or stops early
- This is an ideal piece of equipment when a BMS system is unavailable
- Controller is capable of BACnet IP/Modbus
- · Can be interfaced with Cloud based monitoring system
- · Only requires a 120V outlet











Colmac Coil



- Dry Cooler & Condensers
- Custom Heating & Cooling Coils
- Heat Pipes for Heat Recovery

HygroMatik - Carel



- Electrode Steam Humidifiers
- Heater Flement Steam Humidifiers
- Direct Steam Humidifiers
- HPS/LPS Duct/AHU Atomizing Humidifiers

Colmac Waterheat



- Commercial / Industrial
- Heat Pump Water Heaters
- Modular Air Source
- Modular Water Source
- Potable (Sanitary) Water Systems

Innovative Air Technologies



- Commercial / Industrial
- Desiccant Dehumidification Systems

Compu-Aire



- Precision Environmental Control Systems
- Ceiling Mount Cooling
- Console Cooling
- Floor Mount Cooling
- In-Row Cooling
- Rooftop Cooling

Nimbus - Advanced Process Cooling



- Hybrid Adiabatic Cooling Systems
- Dry Cooling Systems
- Pumping Systems
- Filter Systems

Desert Aire



- Industrial Commercial Dehumidification Systems
- 100% Outdoor Air Systems
- Natatorium Systems
- Grow Room Air Systems

Polaris



- Plate & Frame Heat Exchangers
- Plate & Coil Heat Exchangers
- Double Wall
- Brazed Plate Heat Exchanger

FlowCon - Griswold Controls



- Self Balancing Hose Kits
- Dynamic Flow Regulation
- Pressure Independent Temperature Control
- Automatic Balancing Valve

Ultra Pure Systems



- Ultra-Sonic Humidification
- RODI Water Treatment Systems

USA Coil & Air



- Custom Coils
- Microchannel Coils
- Fan Coil Units
- Dry Coolers & Condenser
- Modular Air Handlers
- Shell & Tube Heat Exchangers

United Coolair



- Ductless
- Ceiling Systems
- Central VAV
- 100% Outside Air Systems
- Air Cooled Indoor Chillers
- Portable Cooling and Heating Systems