### MULTISTACK SOLUTIONS

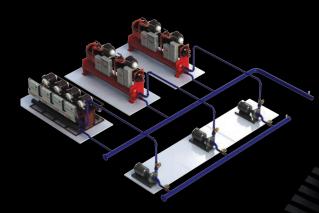
# MULTIPRO CENTRAL PLANT CONTROLLERS

### **MultiPRO**

**MultiPRO** is a state-of-the-art solution to your BAS needs. This central plant controller is optimized to make every part of your facility's mechanical room run most efficiently. Using intelligence sequencing and AHRI certified algorithms, **MultiPRO** is capable of learning and choosing from a set of predetermined paths to run your machines most efficiently and safely, all while maintaining comfort levels.

### Features of MultiPRO include:

- Intelligence sequencing.
- Optimized for better internet security.
- Remote monitoring so you can check the status of your building from anywhere.
- Makes use of built-in Multistack logic to keep your building efficient.
- Can be coded for any building system, set-up or structure.
- Gives maintenance warnings so that you can keep your building running smoothly.
- Built-in diagnostics allows for analysis of your building's data in real time.
- Easy to use dashboard for monitoring performance.



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### **MultiPRO CORE**

Building on the success of **MultiPRO**, Multistack is announcing **MultiPRO CORE** – a low cost, high feature chiller plant control system. Incorporating the trusted and proven control algorithms of **MultiPRO** with a light weight yet informative HTML5 user experience, **MultiPRO CORE** is the ideal control system for chiller plant control projects that are particularly cost sensitive.

As with **MultiPRO**, **MultiPRO CORE** will include the ability to control chillers, pumps and cooling towers in a very wide array of plant configurations.

Users will be able to monitor current plant operating conditions in **MultiPRO CORE** via a succinct HTML5 user interface on either desktop, mobile or tablet without the need for JAVA or similar supporting software. **MultiPRO**'s reliable charting and alarming features will be present in **MultiPRO CORE** to allow end users to chart historical data effortlessly.

Multistack is releasing **MultiPRO CORE** on the highly reliable EdgeXI controller 534 series hardware.





**MULTISTACK** 

CUSTOMER DRIVEN INNOVATION

### ACF\_M

### CONFIGURABLE PACKAGED AIR-COOLED MAGLEV® FLOODED

- Available in capacities starting at 60 tons.
- Select the optimal combination of compressors and coil/fan count to deliver your choice of highest efficiency, lowest cost, or best value.
- Available MagLift™ hi-performance refrigerant pump expands the operational envelope by enabling lower pressure ratios and unheard of efficiencies. Eliminates need for water-side economizer
- Near water-cooled efficiencies at air-cooled conditions with unprecedented part-load performance.
- Optional integrated water-side economizer free cooling or refrigerant free cooling



### MSA\_X,V,W

### AIR-COOLED SPLIT SCROLL MODULAR (REMOTE CONDENSER)

- Modular indoor air-cooled split system modules with remote air-cooled condensers
- Available with fixed speed (10 to 85 tons) and True-Variable™ speed scroll compressors (10 to 50 tons).
  - air-cooled condenser or adiabatic condenser MagLev chillers deliver peak energy
    - efficiency at all load conditions. • Remote air-cooled condensers provide design flexibility in placement and configuration.

MSA\_M, Adiabatic AIR-COOLED MAGLEV FLOODED

CHILLERS W/REMOTE SENSIBLE

Available in capacities starting

• All the advantages of the remote

Split-system air-cooled MagLev

with oil-free, remote, sensible

ONLY CONDENSERS

condenser MSA plus.

at 80 tons.



### **ASM**

### AIR-COOLED SCROLLCHILLER (MEDICAL/PROCESSING CHILLER)

- ASM packaged chillers available in 8 to 30 ton capacities with integral pump(s) and buffer
- tank options. • Dual refrigeration circuits and electronic expansion valves for precise control
- and reliable operation. • EC fan motors with the latest fan blade technology.
- Available in stainless steel construction, stainless steel components, or with epoxy paints and coil coatings.



### **ADX**

#### AIR-COOLED SCROLL MODULAR CONDENSING UNIT

- Air-cooled condensing units available in 10 to 60 ton units.
- Units are designed to be connected
- to a field-supplied evaporator. Refrigerant specialties are factory installed within the module.
- Accepts customer provided demand signal.



ASC

# AIR-COOLED SCROLL

- Efficient, reliable, and compact ASC package chillers with tandem and trio scroll compressors
- R-410A refrigerant with dual refrigerant circuits per chiller for excellent load flexibility, reliability, redundancy, and serviceability.
- Fixed-speed, low-sound condenser fans standard; ECM fans optional. Fan sizes tailored to specific circuit requirements.



### AIR-COOLED SCROLL MODULAR

**ASP** 

- Airstack® air-cooled modules are available in a wide range of capacities and with tandem scroll compressor sets to create chillers with a 10 to 600 ton capacity.
- Modular design makes adding capacity as easy as purchasing and installing more modules.
- Can be factory packaged and shipped on skids with the following accessory modules as an option to include: pumps, strainers, air separators, glycol feeders, storage tanks, expansion tanks and chemical pot feeders.



# **ASF**

### AIR-COOLED SCROLL MODULAR W/ INTEGRAL FREE COOLING

- Electrically Communicated Motor (ECM) fans standard, providing super-quiet operations with multiple options for sound-sensitive applications.
- Integral free cooling for economizing without increasing footprint is optional.
- Packaged controls provide chiller and free cooling control.



# MSS\_M

### MODULAR MAGLEV CHILLER (FLOODED S&T)

- Modular design available in 90, 120, and 140 ton modules.
- Modular water-cooled MagLev chiller with oil-free, magnetic levitation bearings in a centrifugal compressor.
- Flooded evaporator and condenser for maximum full-load and low-load efficiency.
- · Ideal for limited-space installations and fits through a standard doorway



### **MS080T**

### WATER-COOLED MAGLEV MODULAR W/BRAZED PLATE

- Available in 80 ton modules. Up to 8 modules per chiller (640 tons).
- Modular water-cooled MagLev chiller with oil-free, magnetic levitation bearings in a centrifugal compressor
- Multiple independent systems for redundancy.
- Ideal for limited space installations and fits through a standard



### MSF\_M

#### WATER-COOLED MAGLEV FLOODED CHILLERS (GEN II & GEN III)

- Available in capacities starting at 80 tons.
- Water-cooled MagLev chiller with oil-free, magnetic levitation bearings in a centrifugal compressor is a leader in efficiency, reliability, redundancy, sustainability and serviceability.
- Unrivaled efficiency—MagLev chillers deliver peak energy efficiency at all load and condenser water conditions



### **MSD**

### WATER-COOLED SCROLL MODUL AR CONDENSING UNIT

- Available in 10, 15, 20, 30, 40, 50, 70, and 85 ton sizes.
- Units are designed to connect with field-supplied evaporators.
- Refrigerant components are factory installed within the modules.



### MSD\_M

#### WATER-COOLED MAGLEV MODUL AR CONDENSING UNIT

- Available in 90, 120, and 140 ton sizes. Units are designed to connect with
- field-supplied evaporators. • Each module has one independent refrigerant circuit.
- Refrigerant components are factory installed within the modules (EEV is installed at evaporator).
- Also available as a split system with remote air-cooled condenser.



# MSS\_X

### WATER-COOLED FIXED-SPEED SCROLL MODULAR

- Available in 10, 20, 30, 40, 50, 70, and 85 ton sizes with fixed speed scrolls.
- Mix-match and combine modules to create up to 15 module arrays delivering overall capacity to 1,275 tons of cooling.
- Total Access™ Design heat exchangers are on outer edges of the frame for easy serviceability and a small, compact footprint.
- Optional shell and tube heat exchangers brazed plate standard.



# MSS\_V,W

#### WATER-COOLED VARIABLE-SPEED SCROLL MODULAR

- Available in 10, 20, 30, 40, and 50 ton sizes
- True-Variable<sup>™</sup> speed scroll compressors delivering up to a 20% improvement in IPLV.
- Mix-match and combine modules to create up to 15 module arrays.
- Total Access™ Design heat exchangers are on outer edges of the frame for easy serviceability and a small. compact footprint.
- Optional shell and tube heat exchangers; brazed plate standard.



# **MSS QUAD**

### WATER-COOLED QUAD SCROLL MODULAR CHILLER

- Available in 105, 135, 145, and 165 ton modules.
- Mix-match and combine modules to create multi-module arrays up to 1,320 tons of cooling capacity.
- Available Total Access™ Design heat exchangers are on outer edges of frame for easy serviceability and compact footprint.



## **ARP**

### AIR-TO-WATER SCROLL MODULAR HEAT PUMP

- Airstack® air-source heat pumps are among the most efficient in the HVAC industry.
- Heat pump controls precisely match real-time operating loads for best efficiency and reduced energy use and cost.
- Available in modules that easily connect to provide systems of 10 to 600 tons of capacity.
- 30 ton modules available with envelope expanding injection scrolls enabling hot water production to OF ambients.



### **ARA**

### AIR-TO-WATER SCROLL MODULAR HEAT RECOVERY

- Modular heat pumps with aircooled condensers are available in 20 to 60 ton capacities.
- 30 ton modules available with envelope expanding injection scrolls enabling hot water production to OF ambients.
- Operates in dedicated heat recovery, cooling or heating modes. Units feature full four-pipe
- operation with a brazed plate condenser sized for full heat rejection - providing 4-6 times more heat than a desuper



## **VME II**

#### SCROLL MODULAR CHILLER OR HEATER

- Dual scroll compressor modules of 10 to 85 tons
- Quad scroll compressor modules of 105, 135, 145, and 165 tons of capacity are also available and may be mix-matched to create chillers of up to 1,320 ton capacity.
- · With cooling, heating, and simultaneous, modes available, Multistack VME II® chillers offer numerous advantages in efficiency, simplicity, ease of installation, reliability, redundancy, and cost.

## **HSS**

#### HEATSTACK® SCROLL HEATER

- 3 to 30 tons of capacity for cooling or heat recovery.
- Ideal for smaller commercial buildings or zones within a large building.
- · Simple, easy to install, highly efficient stand-alone units require minimal floor space.
- Provides water temps up to 175F.



# **MSR**

### WATER-TO-WATER SCROLL MODULAR HEAT PUMP

- Modular heat pump with reversing valves.
- Available in 10 to 85 tons of nominal capacity packages.
- Ideal for closed-loop and groundloop water-source heat-pump applications.



# MSH\_X,V,W

#### DHRC® SCROLL MODUL AR

- Dedicated Heat Recovery Chillers (DHRC) are ideal for many waterheating applications.
- Available in 10 to 1,320 tons of capacity with fixed speed and True-Variable<sup>™</sup> speed scroll compressors.
- Produce hot water up to 140F with R-410A and 175F with R-134a, while simultaneously producing chilled water.
- of more than 3.0 and combined COPs of more than 7.0.



# MSH\_M

### WATER-COOLED MAGLEV MODULAR HEAT RECOVERY CHILLER W/ SHELL & TUBE

- Heat recovery chillers are ideal for many water-heating applications. Water temps up to 145F.
- Modular design available in 90, 110, and 120 ton modules.
- Modular water-cooled MagLev chiller with oil-free, magnetic levitation bearings in a high-lift centrifugal compressor
- Flooded evaporator and condenser for maximum full-load and low-load



# WATER-COOLED MAGLEV FLOODED

- Heat recovery chillers are ideal for many water-heating applications.
- Available in capacities starting at 80 tons.
- and serviceability.
- Helps qualify for USGBC LEED credits and other utility rebates.





# MSF\_H

# HEAT RECOVERY CHILLERS

- Water temps up to 145F.
- Water-cooled MagLev chiller with oil-free, magnetic levitation bearings in a high-lift centrifugal compressor is a leader in efficiency, reliability, redundancy, sustainability,

