

# ARA

**AIR-SOURCE  
DHRC®  
HEAT PUMP**



MULTISTACK.COM

**Customer driven innovation is powerful.** We built the most successful modular chiller company in the world based on the single premise that customers' needs come before our own. It's simple; there are many new technologies and products that appear in the marketplace over the course of a companies existence. Our powerful secret is to engage our customers, understand their needs, and select only the most disruptive technologies to develop into the next **Multistack** solution. Today, electrification is at the center of our development focus as we strive to meet the environmental sustainability challenge head on!

**Multistack** is far more than just chiller manufacturers... our portfolio covers a broad range of HVAC products both modular and conventional... all focused on *customer driven innovation!*

**ARA: an air-cooled heat pump with integrated DHRC (Dedicated Heat Recovery Chiller)**

- 4-pipe system satisfies heating and cooling requirement
- Simultaneous load handled by integrated heat recovery heat exchanger
- Unneeded heat (not handled by DHRC) can be rejected to atmospheres
- Needed heat (not handled by DHRC) can be acquired from atmosphere.

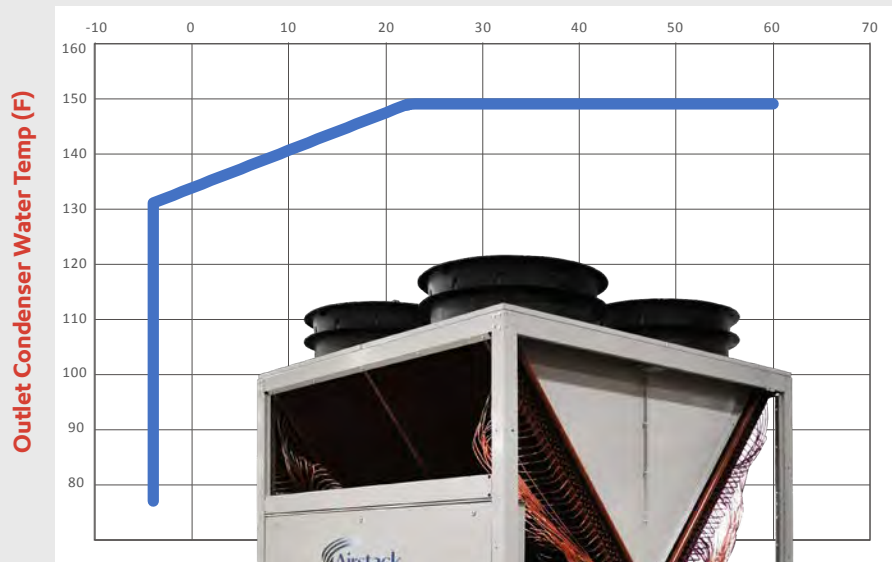
**Cutting edge refrigerant injection scrolls expand operating envelope**

- Refrigerant injection provides 2 main benefits
  - Increases system capacity through additional sub-cooling
  - Ensures adequate compressor motor cooling at higher pressure ratios
- Delivers 130F+ hot water at 0F outdoor ambient
- Expanded envelope operation available in heating mode only

**MultiPRO CORE Central Plant Controller is available with ARA**

- CORE can control:
  - ARA operation
  - HW pumps(s)
  - CHW pump(s)
  - System bypass valve(s)
- CORE Central Plant Controller can be:
  - Factory mounted, wired, and tested
  - Or shipped loose for field installation

**Dry Bulb Ambient Air Temp (F)**



# The Multistack Group

## Customer Driven Innovation<sup>SM</sup>

The right choice for the future... today.

### OUR MISSION

To design and build reliable, energy-efficient equipment that fully supports the transition from fossil fuels to renewables through electrification.

### OUR VISION

To create a world where environmentally sensitive design practice, reliability, and redundancy coexist and are embodied in the world's most advanced HVAC equipment.

### SUSTAINABLE CHOICES

At **Multistack**, we recognize and respect the importance of providing HVAC solutions that promote energy and water efficiency, utilize the best refrigerant choices available, and embrace the transition from fossil fuels to electrification.

Water and air-cooled **MagLev**<sup>®</sup> chiller platforms achieve superb efficiency across their full range of operation. Our unique **MagLev** chiller design and unrivalled Transitional Efficiency chiller control algorithms deliver outstanding part-load performance at all condenser-water or ambient temperature conditions. **MagLev** also offers refrigerant choices recognized worldwide as safer for the environment: R-1234ze, R-513A, and R-515B.

Our modular product's design allows you the freedom to use just enough energy to meet your current needs, while offering you the flexibility of incorporating additional modules as your operations grow. Minimizing embodied energy is an important design focus and we pride ourselves that our modular chillers deliver the industry's highest cooling and heating output per pound. If you're looking to cool and heat your building with as little environmental impact as possible, look no further than **Multistack!**

Reach out to your local Multistack design professional to discuss how we can help you realize your design goals for:

- Electrification
- Energy efficiency
- Water usage efficiency
- Energy & heat recovery
- Choosing sustainable refrigerants
- Minimizing refrigerant charge
- Minimizing embodied energy
- Minimizing environmental and physical footprint