

# AFH

## AIR-COOLED MAGLEV® FLOODED INTEGRAL DHRC®

The future is now. Decarbonization has become the single most important new concept in the world of HVAC since the invention of vapor compression refrigeration. This means, quite simply, that everything we once did with natural gas, coal, and other fossil fuels will cease to exist. Legislation requires it, conscience demands it, and as engineering professionals our mission must be to provide decarbonization solutions.

Multistack's focus is on providing optimized solutions that support environmentally conscious design practice; that requires more than just an understanding of how to live and build sustainably. It requires that we develop new and radically different approaches to heating and cooling the built environment. We deploy cutting-edge technologies to provide the most effective, efficient, and sustainable solutions in the modular or packaged HVAC marketplace.

*Join us on the journey as we trailblaze the way to the carbon-free horizon.*

The next evolution of air-cooled flooded MagLev chillers feature available Integral Heat Recovery (iDHRC). These chillers will be able to have one or both circuits capable of operating in heat recovery mode. Two Circuits, each of which can be optimized for cooling only or heat recovery, provide chilled water for the cooling load while one or both circuits can reject heat to a dedicated refrigerant to water heat exchanger, or, if heat is not needed, to the air cooled condenser coils. This means that we sustainably recover heat that you already own to handle heating loads rather than burning fossil fuels.

### Integral heat recovery

- Internally integrated controls for ACF and DHRC mean seamless single-source responsibility
- Integrated heat recovery capability reduces equipment room footprint
- Factory packaged solution reduces job site installation labor
- Provides hot water up to 145°F for heating needs concurrent with cooling load

### Modes of operation

- Cooling only (both circuits)
- Cooling only (1 circuit) & DHRC (1 circuit)
- Heat recovery only (both circuits)

### Low GWP refrigerants

- |            |              |             |
|------------|--------------|-------------|
| ▪ R-513A   | ▪ R-515B     | ▪ R-1234ze  |
| o GWP 573  | o GWP of 292 | o GWP of 7  |
| o Group A1 | o Group A1   | o Group A2L |

### Optimal selection of compressor coil combinations

- Vary coil V-bank count and compressor combination to achieve:
  - o Maximum efficiency
  - o Best value balancing efficiency and cost
  - o First cost reduction

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



# 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**® chiller platforms achieve superb efficiency across their full range of operation. Our unique **MagLev** chiller design and unrivaled Transitional Efficiency chiller control algorithms deliver outstanding part-load performance at all condenser-water or ambient temperature conditions.

**MagLev** chillers offer refrigerant choices recognized worldwide as safer for the environment: R-1234ze, R-513A, and R-515B. **Multistack** scroll chillers offer R-454B as the replacement for the high GWP R-410A. R-454B has a GWP of 466, which is 78 percent lower than R-410A. We encourage you to explore our natural refrigerant offering as well.

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:

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