

# MSH\_G

## VARIABLE SPEED SCREW 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.*

- Does your retrofit project have simultaneous heating and cooling loads?
- Are you hoping to reduce or eliminate the need for boilers?
- Does your retrofit project require high temperature hot water to align with coils in existing air handling units previously served solely by condensing boilers?
- Does your project have goals to reduce carbon emissions and reduce water consumption?
- Would your project benefit from a modular platform to provide rigging benefit, low refrigerant charge, and redundancy?
  - Multistack's Dedicated Heat Recovery Chillers (DHRC) is the ideal solution for those needs and many water-heating applications.

### FEATURES

- Available in a nominal 115 tons of capacity with integral variable speed screw compressors.
- Exceptional turndown (33%) while still making 165°F hot water thanks to the use of positive displacement screw compressors and their inherent resistance to surge
- Produce hot water up to 175°F with R-1234ze while simultaneously producing chilled water, R-515B is also available.
- Flexible temperature ranges with approximately 120°F of lift
- Capacity of 80 tons is based on 44°F leaving chilled water and 165°F leaving hot water
- DHRC's are 300-400% more efficient than boilers
- Control up to 15 modules on a single master controller with our Flexsys Control System
- Available in 460 V



# 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