## **III** MULTISTACK



Customer driven innovation is powerful. We considered what we have learned, evaluated new compressor technologies, new manufacturing methods, new ways of thinking about modularity, and imagined our traditional modular air-cooled chillers: presenting the ASF.

### Design for total chilled water system efficiency including:

- Integrated free cooling (water side economizer)
  - 3 modes of operation mechanical, partial free cooling, and full free cooling
  - All valving, piping and control is packaged
  - All pre-tested at the factory
- Integral free cooling coil shown to the left:
- Larger entering header for water/glycol piping on the outside of the coil to take advantage of cold entering air (leaving header on opposite side). Smaller inner headers for refrigerant when doing mechanical cooling.
- No overlaid fins! These continuous fins run through entire coil for the most servicefriendly design.

- Longer compressor life
  - Compressor envelope constrained by embedded mapping
  - It becomes virtually impossible to drive compressors into dangerous areas of the operation map
- Improved system pumping efficiency
  - Micro-waterside pressure drop
  - Perfect for variable primary flow systems with:
    - Motorized valves per module
    - Truly matches chilled water flow to load - minimum flow in many cases allows for 10% or less of design flow





# The Multistack Group

### Customer Driven Innovation<sup>™</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 worlds 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 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