

ASF_V

AIR-COOLED
MODULAR
TRUE VARIABLE
SPEED™



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_V.

Design for total chilled water system efficiency including:

- Improved part-load efficiency
 - Compressor modulated to maintain setpoint instead of cycling
- Integrated free cooling (water-side economizer)
 - 3 modes of operation - mechanical, partial free cooling, and full free cooling
 - All valving, typing and control is packaged
 - All pre-tested at the factory
- Improved system pumping efficiency
 - Micro water side pressure drop
 - Perfect for variable primary flow systems with
 - motorized valves per module
 - true matches chilled water flow to load - minimum flow in many cases allows for 10% or less of design flow
- True Variable Speed design
 - Factory matched integrated variable speed drive
 - Positive displacement oil pump assures lubrication at low speed settings
 - Embedded compressor map
 - Improved energy efficiency
- Broader envelope
 - 67% better unloading pizzability then scroll compressors with applied drives
- Tangible efficiency gains
 - Reduced energy consumption by eliminating drastic cycling often required of fixed speed scrolls
- Precision temperature control
 - Compressors modulate to precisely control leaving water temperature
- Longer compressor life
 - Compressor envelope constrained by embedded mapping
 - It becomes virtually impossible to drive compressors into dangerous areas of the operation map
- Enhanced electrical design
 - 70% reduction in starting current
 - Improved power factor
 - potential reduced energy bills
 - lower cable and transformer losses
 - improved voltage conditions



The Multistack Group

Customer Driven InnovationSM

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 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