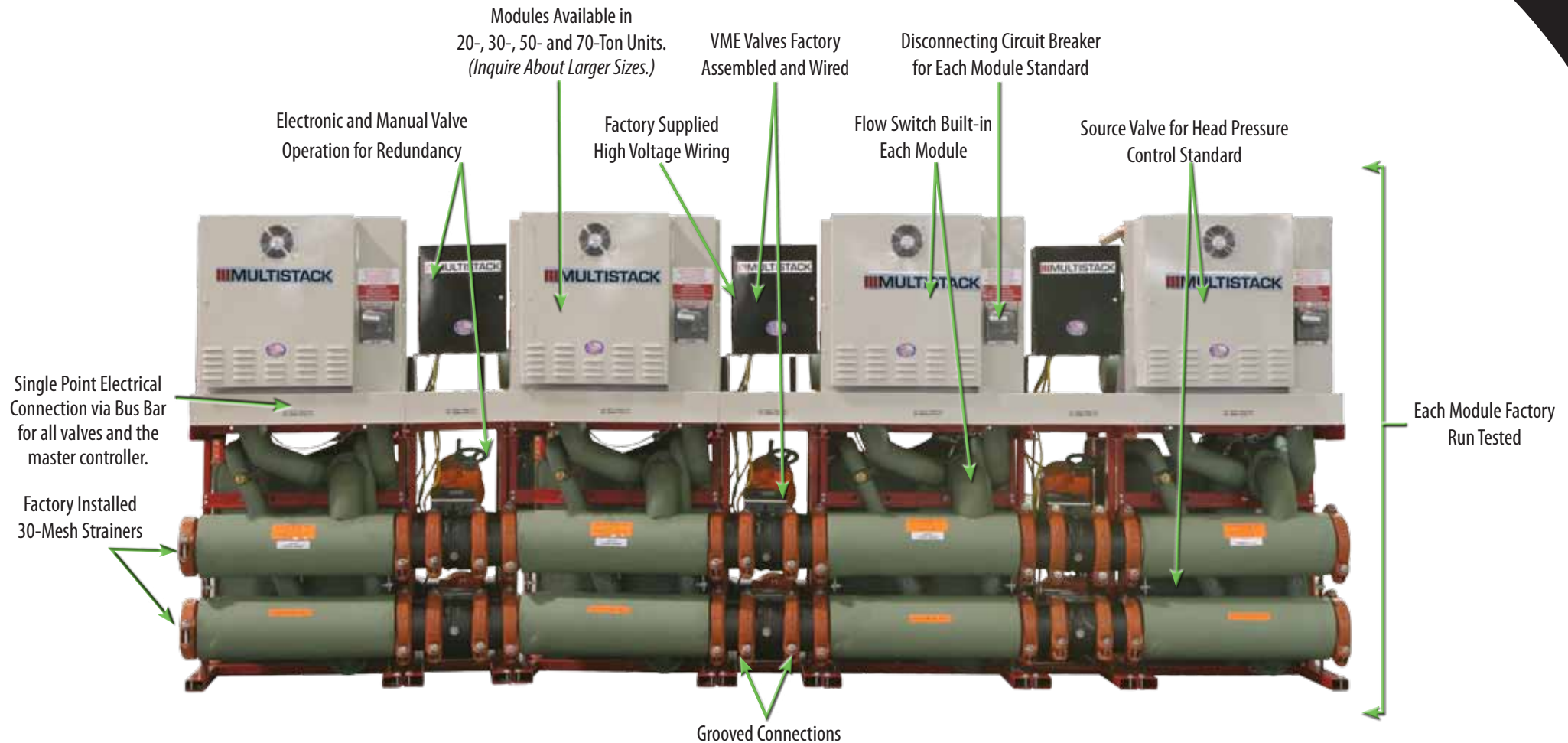


MULTISTACK[®]

VIRTUAL MOVEABLE END CAP™ HEAT PUMP

Patent Pending



1065 Maple Avenue • Sparta, Wisconsin 54656 • P (608)366-2400 • F (608)366-2450

www.multistack.com



Virtual Moveable End Cap™ Heat Pump

Patent Pending

Multistack modular heat pumps offer efficiency in energy use, low costs to achieve redundancy, minimal refrigerant charges and easy installation. By having multiple small compressors, units can be cycled to match the building demand at any level. Since there are two compressors per module, a Multistack heat pump array achieves N+1 redundancy by adding just one module, as opposed to requiring another separate system. When it comes to installation, modular heat pumps allow you to bring them into a building through a door and move them to a mechanical room in an elevator. No cranes, no demolition, no big expenses.

With an array of Multistack heat pumps in place, a huge benefit in both space and installation costs is the ability to utilize single point of water and electrical connections. By having just one connection point for these, it cleans up the design of a mechanical room, allows for easy future expansion of the array and reduces maintenance costs. The fact that Multistack heat pumps are built into arrays brings up another amazing feature of the system, the all-new Virtual Moveable End Cap Heat Pump™. Utilizing this technology a design engineer can specify a system that will provide Variable Simultaneous Heating and Cooling eliminating the need for separate chiller and heating systems or distributed water source heat pump system. This can save installation costs, dramatically reduce a building's carbon footprint (by eliminating gas use), and lower energy bills. The VME operating algorithm automatically matches the heating and cooling load requirements of the building by closing the appropriate VME valves and optimizing operation for maximum efficiency.



Virtual Moveable End Cap Module is factory assembled on a frame



Refrigerant specialties and heat exchangers easily accessible on air- and water-cooled arrays. DDC controller on each module displays refrigerant temperature and pressures.



Each Multistack module is shipped with a 30-mesh strainer



Multistack modules have an integrated digital controller, modulating source valve for head pressure control, thermal dispersion flow switch and over-current protection in each unit.



DDC controller on each module displays refrigerant temperature and pressures.



Single point electrical contact through a bus bar system standard