

Innovative Products

»» ENERGY EFFICIENCY »»

»» A. YASKAWA

The Z1000U HVAC Matrix Drive achieves low distortion levels without the need for additional countermeasures such as passive filters or multi-pulse arrangements. Reduced distortion improves displacement power factor to 0.98 through the entire load and speed range, reducing energy costs. Yaskawa's matrix technology employs a system of 9 bi-directional switches that are arranged in a matrix to convert a three-phase AC input voltage directly into a three-phase AC output voltage. Matrix technology reduces total harmonic distortion levels to less than the IEEE compliance standard of 5 percent, without the need for reactors and filters. The result is a smoother current waveform that reduces stress on the system power supply and infrastructure.

AERCO

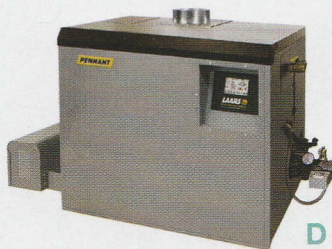
The Benchmark Platinum boiler optimizes hydronic systems by self-correcting problems caused by external variables such as fluctuations in combustion oxygen levels, air temperature, occupancy/loads, and gas pressure. Dual returns keep cold water separate, creating a larger condensing zone in the heat exchanger that improves boiler efficiency up to 7 percent. AERtrim monitors site conditions and self-adjusts its combustion process to ensure the boiler is operating at optimal oxygen levels. onAER Predictive Maintenance continuously monitors the overall health of the system. Each stainless steel unit fits through standard 36-inch doorways and can be transported on elevators.

»» A



B ««

»» C



D ««

»» E



»» B. WEIL-MCLAIN

SlimFit boilers provide thermal efficiencies up to 95.8 percent. SlimFit 1000, 1500, and 2000 MBH commercial condensing boiler line features the Unity Controller, enabling consistent controller logic for Weil-McLain high efficiency boilers 70 kBtu to 2000 kBtu. The design also features zone stacking up to 24 programmable zones without the need for additional external panels and 0-10 VDC analog output signal for easy integration with a lag boiler in a hybrid system. The SlimFit boiler features a narrow "door-fit" profile and base-mounted roller casters for improved installation maneuverability in confined spaces and weight-restricted areas.

»» C. RINNAI

Demand Duo Hybrid Water Heating System combines an 80-gallon storage tank and tankless technologies. As the heat source, the RL94 tankless unit eliminates thermal stress on the tank, lengthening the life and maximizing performance of the system while efficient tank recovery methods save energy and deliver consistent hot water, even during reheat cycles. Can be fueled by either natural gas or propane. Keeps pace with demand from brief, high-spike draws to a supply that's always ready to go the distance. Also available in a 119-gallon version.

»» D. LAARS

The Pennant line of fan-assisted, modular boilers and volume water heaters for hydronic and hot water applications delivers efficiency levels up to 85 percent. Available in seven sizes from 500 to 2000 MBH, Pennants are fueled by natural or LP gas, with stage firing of up to 4:1, and cascade with auto redundancy. Pennant systems also qualify as low-NOx emission-rated, below 10 ppm. The control system includes an auto cascade setup feature that configures lead-lagging of up to eight Pennants and connects to BAS via BACnet. Features a quick start option among many other features.

»» E. ARMSTRONG FLUID TECHNOLOGY

Design Envelope pumping technology provides extended intelligence, wireless connectivity, Parallel Sensorless Pump Control, and on-board web services. All of these capabilities, previously available only in the 1 - 10 hp models, are now available across the entire range from 1 to 1250 hp. Together these capabilities can help facility managers realize energy savings of up to 70 percent. Design Envelope solutions also provide access to Armstrong's connected performance management service, Pump Manager.

Check it out

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