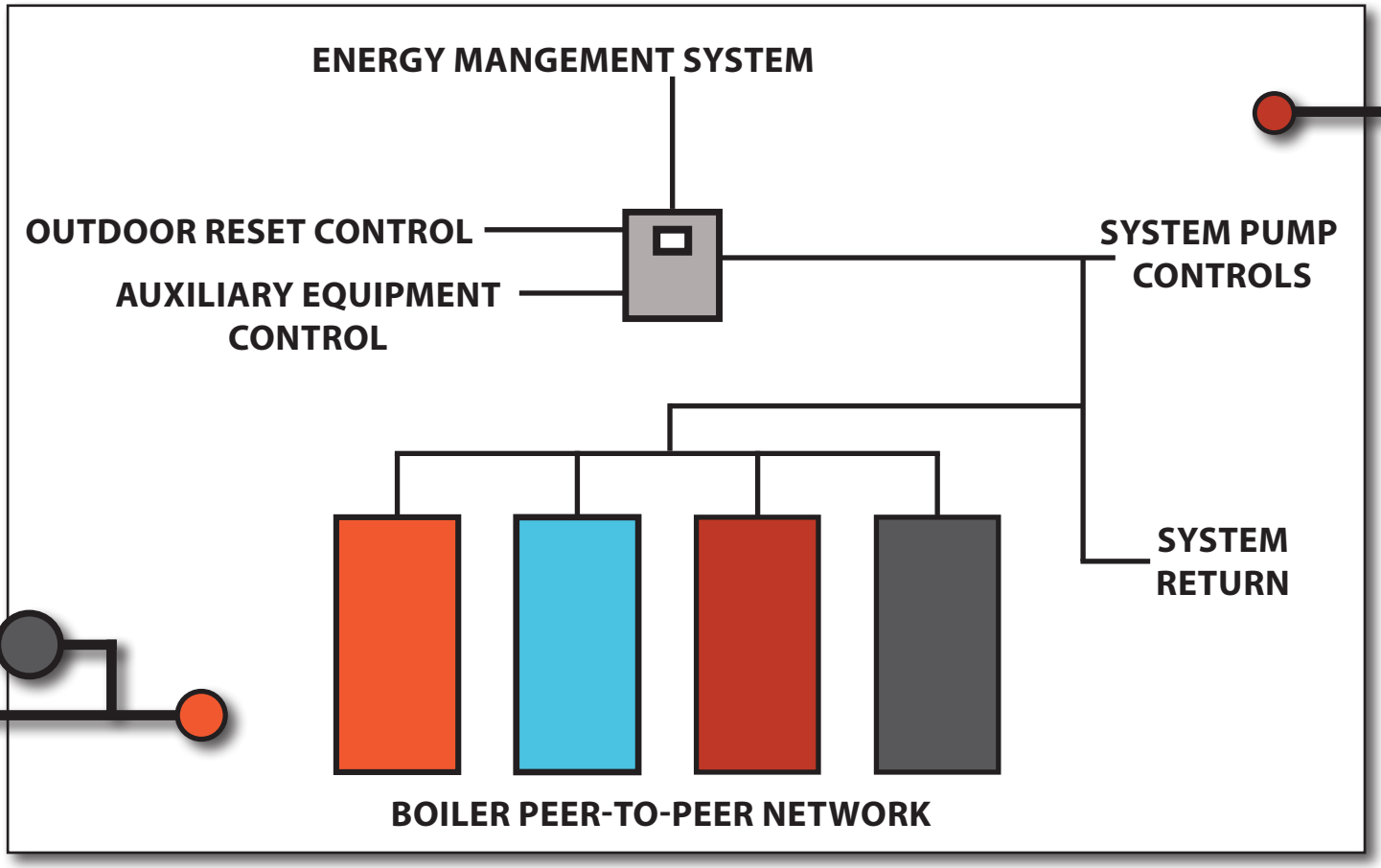
CONDUCTOR
HYDRONIC SEQUENCER

HARMONIZING BOILERS WITH SYSTEMS



The need to integrate boilers and building controls is not new. The Conductor moves beyond mere "connectivity", improving system efficiency while directing condensing, non-condensing, and steam boiler technologies to work together. "Smart" Ops adapt to hydronic systems by matching active boilers to loads and calculating water temperature requirements. Unique in the industry, the Conductor factors input and boiler type into sequencing, priming condensing boilers to operate with lower supply & return temperatures and non-condensing units to service higher temperature demands.

CONNECTIVITY

Don't just *connect* your boilers, *harmonize* your controls and boiler system with the Conductor. Connect up to 8 boilers using RJ45 and/or RJ11 cables in peer-to-peer network with RWF40, RWF55, TSBC and Concert Controls or hardwire up to 4 products using 0-10vdc/4-20mAdc firing rate and enable/disable contacts. Single point connection with EMS via ModBus BACnet/IP & MSTP as well as LonWorks and Johnson Metasys N2 protocols ensures your boilers connectivity no matter what the setup may be.

SMART OPS

While it is ideal to have more condensing boilers running at a low load during operation, it is also beneficial to run fewer non-condensing boilers at a higher firing rate. Unison modulation, preferred to optimize condensing efficiency, fires all boilers at the same rate and limits firing to a "base load common rate" until last unit fires, releasing boilers to modulate as needed. Sequential modulation varies modulation of lead boiler only while maintaining lag boilers at a peak-efficiency " base load" 80% of rate. "Smart" Ops allows for either selectable unison or sequential modulation ensuring peak performance from all boilers no matter what the setup.

HOT WATER OR STEAM

Field selectable as hot water or steam, multiple boiler control system for hot water applications include isolation valve and redundant primary pump control options. Steam applications include shell temperature monitoring and control.

AUTOMATED SETUP

Intuitive and simple Q&A prompts the help guide setup process by selecting boiler models, number of boilers, plant load monitoring, condensing or non-condensing and the size of each boiler.

SMALL LOAD SELECTION

Moving beyond mere connectivity and water temperature to select boilers, the Conductor also factors the input of each boiler. No need to have all units of same size. If you have a small, low-temp load, you can select a boiler sized for this demand. The control also has "use first" features to automatically select smaller boilers to be loaded in light plant loads.

ISOLATION VALVES

Option for four (4) isolation valve outputs for likely variable flow systems. Valves close when boiler is off and not running and opens with call for heat. When all boilers are off, lead boiler valve remains open so by-pass piping is avoided.

SYSTEM PUMP CONTROL WITH AUTO BACKUP

Includes automatic alternating pump outputs. Designed for one pump running at a time with second pump available as backup. Sends alarm signal and starts backup pump. Auto rotation selectable.

LOAD MONITORING

System load is calculated using system supply temperature, system & return temperatures and system pump speed feedback or pump status. Max GPM is entered for constant speed primary pump or GPM can be measured for variable speed pump via 0-10vdc or 4-20mAdc input.

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