



ADAC

**ADVANCED DEAERATOR CONTROL
MAXIMUM SAFETY AND EFFICIENCY
FOR STEAM APPLICATIONS**

One package from a single-source supplier

The ADAC is a PLC-based deaerator and surge tank control system designed to improve boiler water quality for system reliability and higher efficiency. It can monitor and control all points for a single deaerator or surge tank, a duo deaerator/surge tank, or two separate, independent tank systems via an easy-to-navigate, color touch screen.

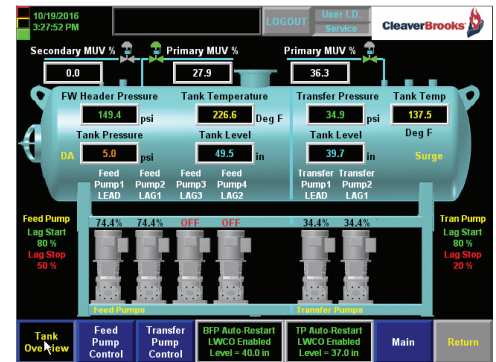
Control System Benefits

- ▶ Correctly maintains feedwater temperature and pressure to maximize boiler efficiency
- ▶ Ensures reliability with ongoing operating and fault indications
- ▶ Enhances safety through an electronic control with monitoring and annunciation
- ▶ Guides decision making via constant system intelligence and information access
- ▶ Effectively manages pump operations to extend system life

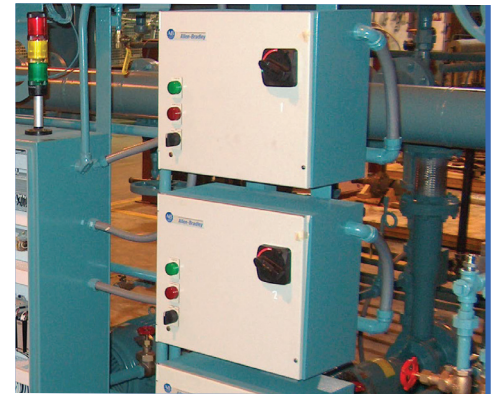
Key System Features

- ▶ Controls condensate return, fresh water make-up, and emergency water make-up
- ▶ Includes options for variable-speed drive, on-off or soft-starter pump control
- ▶ Provides options for one pump per boiler or lead-lag control of pumps
- ▶ Primary and secondary make-up valve control
- ▶ PRV and overflow-valve control option
- ▶ Electronic control of recirculation valve option
- ▶ Local trending of process variable vs. set point, and control outputs
- ▶ Chemical feed pump relay control
- ▶ Interfaces with local or remote monitoring and building automation systems

Custom programming is available on the ADAC 4000.



User-friendly graphical interface



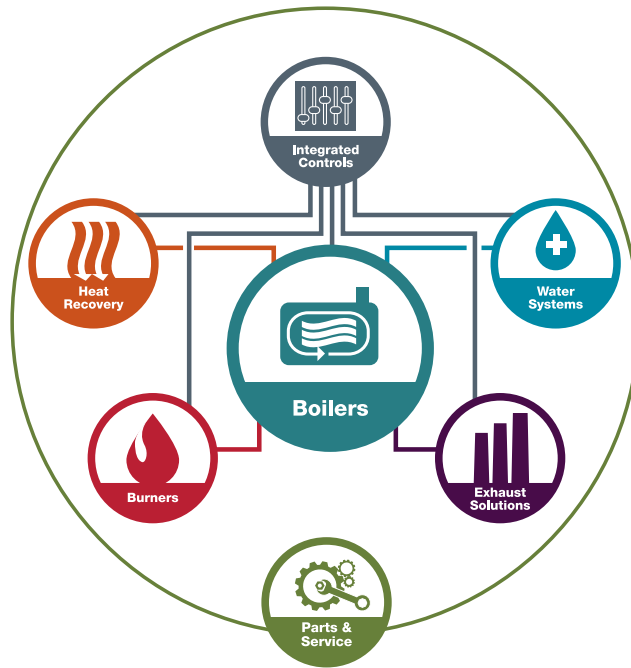
VFD, soft starters, combination starters, and contactors available with automatic sequencing and alternation



Multiple-pump staging

ADAC Comparison Chart

Feature	ADAC 1000	ADAC 4000
PLC Processor	L24ER	L33ER
7 Inch Panel View Plus Color Touchscreen	Standard	Standard
10 Inch Panel View Plus Color Touchscreen	Optional	Optional
12+ Inch Panel View Plus Color Touchscreen	Not Available	Custom
Maximum Number of Feedwater Pumps single tank system	5	5
Maximum Number of Feedwater Pumps Dual Tank System	6 (Total Combination of feedwater and transfer pumps (3 Transfer Pumps Maximum))	5
Maximum Number of Transfer Pumps Dual Tank System	6 (Total Combination of feedwater and transfer pumps (3 Transfer Pumps Maximum))	3
Common Header Pump Control	Standard	Standard
1 Feedwater Pump per Boiler Pump Control	Standard	Standard
Contactor Pump Control	Standard	Standard
VFD Pump Control	Standard	Standard
Feedwater Header Pressure Sensor	Standard	Standard
Transfer Header Pressure Sensor (Dual Tank System Only)	Standard	Standard
Tank Temperature Sensor	Standard	Standard
Tank Level Sensor	Standard	Standard
DA Tank Pressure Sensor	Standard	Standard
Tray Temperature	Standard	Standard
Tray Pressure	Standard	Standard
Pump Auto Rotation	Standard	Standard
Pump Lead Lag	Standard	Standard
Primary Make Up Valve Level Control	Standard	Standard
Secondary Make Up Valve Level Control	One Secondary Valve Maximum	Standard
Steam PRV Control	PRV or Overflow, NOT Both	Standard or 1/3 2/3 PRV control
Overflow valve Control	PRV or Overflow, NOT Both	Standard
Recirculation Valve Control	Standard	Standard
Chemical Feed Relay Control	Standard	Standard
User Defined Analog Inputs Single Tank	4 Maximum	4 Maximum
User Defined Analog Inputs Dual Tanks	4 Maximum	5 Maximum
Text/Email	Standard	Standard
VFD Bypass	Standard	Standard
DA Bypass – Dual Tank Only	Standard	Standard
DA Primary MUV Valve Bias on Surge Level – Dual Tank Only	Standard	Standard
Trending of Process Variable vs. Set Point	Standard	Standard
Trending of Control Output	Standard	Standard
Remote Lead/Lag Rotation Control Via Communication	Standard	Standard
Remote Set Point Via Communication	Standard	Standard
English/Metric Units	Standard	Standard
SD Card Storage for PV+ and PLC Processor	Standard	Standard
Ethernet IP Communications	Standard	Standard
Basic Remote Monitoring via Webserver	Standard	Standard
Alarms and Alarm History	Standard	Standard
PLC Hardware & I/O Overview	Standard	Standard
Contact Information Entry & Viewing Screen	Standard	Standard
Update Date & Time from HMI Screen	Standard	Standard
Customizable	Not Available	Yes
2nd Feedwater pump set control	Not Available	Standard, 4 Pumps Maximum



Providing energy-efficient, environmentally friendly boiler room solutions

Cleaver-Brooks is one of only a few boiler room solutions providers in the world to operate a dedicated research and development facility. Having pioneered several industry-leading technologies, we remain just as committed today to introducing technology and products that enable a more energy-efficient and environmentally friendly generation of steam and hot water.

We distribute our products through the Cleaver-Brooks Representatives Association, or CBRA, an alliance of independently owned and operated companies that provide boiler room products and service. CBRA companies can be counted on to provide Cleaver-Brooks products and parts, engineering support, customer training, technical service and system maintenance. To find a CBRA representative near you, please visit cleaverbrooks.com/ reps.



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