

Ajax Series

WCP Series - High Efficiency Near Condensing Water Boiler

Great Performance

- Up to 86% Thermal Efficiency
- Up to 6:1 Turndown
- Consistent Emissions with NO, NOx, CO < 9 ppm
- Clean and Smooth Light Off
- Six Models from 0.5 to 3.0 MBTU input

Superior Design

- Full Modulation
- Air Cooled Interrupted Pilot with UV Scanner
- Carbon Steel Water Tube Boiler Construction
- Center Fired Design
- High Efficiency Tube Pitch
- 8 ft² of Heat Surface per Boiler Horsepower
- No Refractory
- Lightweight and Compact Design to fit through a standard door
- Dual-fuel (Natural Gas & Propane)

Advanced Controls

- Advanced Boiler Protection
- Anti-Condensation Control
- Touch Screen System Operator Interface
- Supports BMS Protocol: Modbus, BACnet and LonWorks

Serviceability

- Removable Single Blower, Burner, Pilot, and Gas Train Assembly
- Lightweight Insulation and Jacketing
- Low Jacket Temperature during Operation
- Replaceable Air Intake Filter



The Ajax Series high-efficiency near-condensing water boilers, the WCP, performs dependably and quietly, offering the highest efficiency solutions for space heating, and process hot water. Modular design, low emissions, advanced controls, and easy start-up make the Ajax Series the clear choice for all of your high efficiency, near condensing needs.

For additional information, please contact your authorized Ajax Series representative or visit the Ajax Boiler website at www.ajaxboiler.com.





Heat Exchanger & Combustion Design

- All Carbon Steel Construction
- ASME Section IV H Rated to 125 psig MAWP and 250°F MAWT
- Sealed Combustion Chamber for Increased Efficiency, Reduced Emissions
- Low NO_x, High Efficiency Knitted Metal Fiber Burner
- Variable Speed Combustion Blower Control and Speed Feedback Signal for Assured Low Fire Light Off and High Fire Pre/Post Purge
- Honeywell Air-Fuel Ratio Valve and Venturi System

Control Specification

- Flame Safe Guard Controller with Integrated Operating, Modulating & High Limit Safety Controls
- Interrupted Pilot with Spark Ignition & Air Cooled UV Scanner for Monitoring Pilot & Main Flame
- Two Single Element Temperature Sensors for: Inlet & Outdoor Temperature
- Two Dual Element Safety Limit (UL 353) Temp. Sensors for: Outlet and Stack Temp.
- User Interface LCD Panel with 4 buttons Display Boiler Status Information Including Sequence, Lockouts, Alerts, Set Points, Controlled Temperatures and Flame Signal
- Dual PID Load Combination Control System for Central Heat and DHW Heating Fluid Loop
- Outdoor Reset Control with Programmable Heating Curve
- Algorithm Prioritization for Burner Demand (Central Heating, DHW Heating Fluid and Condensation Protection) and Firing Rate Limit (Stack and Boiler Delta-T)
- Programmable Safety and Boiler Protection Features for: Anti-Condensation, Slow Start, Delta-T Limit, Stack T Limit, Boiler T Limit, and DHW Heating Fluid T Limit
- Pump Control Contacts for Central Heat, DHW Heating Fluid & System Pumps with Purge Time Control & Condensation Protection
- 4 to 20mA Signal Input for Remote Modulation
- Digital Input for Remote Reset and Time of Day Setback
- Modbus RS485 Communication Allows Access to Operating, Safety and Burner Data
- Lockout and Safety Alerts History Record Contains Up to 15 Detailed Snapshots of the System when Lockout Occurred
- Three Levels of Password Protection for End User, Installer/Service Engineer and Manufacturer
- Additional interlock terminals for Pre-Ignition, Recycle and Lockout Interlocks

Operator Interface (Optional)

- Local Operator Interface Color Touch Screen Display Allows Advanced Configuration Settings, Remote Monitoring, Fault history, Diagnostics and Trend Analysis of Each Boiler
- System Operator Interface Color Touch Screen Display Allows Advanced Configuration Settings, Remote Monitoring, Fault History, Diagnostics, Trend Analysis and Lead Lag Sequencing Control of Each Boiler on Multiple Boiler Configuration System

Control Options (Optional)

- Communication Gateway Package
- Remote Enable Relay
- Annunciation Lamp Package
- Boiler Status Relay
- SPDT Fault Relay
- Sensor Package
- Alarm Bell with Silencing Circuit



ASME



E.T.L. Listed



E.T.L.
Canadian Listed
(Gas & LPG Only)

CSA 3.1
Compliant

UL 795
Compliant



AJAX
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AJAX Series • ACE Series • ATLAS Series

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