





Ajax E Series Gas Water Heater and Boiler

Water tube heat exchanger combined with an optimized burner and ignition system, available from 1250 to 4000 MBTU input

Up to 98% thermal efficiency (up to 99.9% on 4000 model)

Four models from 1250 to 4000 MBTU input

Up to 9:1 turndown

Four pass stainless steel heat exchanger (ASME H and HLW), National Board & CRN

- Easy use touch screen display
- Cascading option
- Optimized serviceability
- Small footprint
- Certifications (including pending): ANSI Z21.3/CSA4.9 (Boilers); ANSI Z21.103/CSA4.3 (Water Heaters); SCAQMD & TCEQ; ASHRI; ASME CSD-1
- 160 PSIG maximum allowable working pressure
- 210°F design temperature



A space saving water heater that's easy to install

The Ace Ajax E is a state-of-the-art condensing gas fired water heater and boiler developed to deliver high performance efficiencies, quality, and durability. At the center of this new design is the ASME certified stainless steel water tube heat exchanger combined with an optimized burner and ignition system, available from 1250 to 4000 MBTU input. A fully integrated control system with a full color touch screen interface provides access to, and continuous monitoring of, critical operating parameters allowing the system to operate at up to 98% efficiency (the E-4000 operates at 99.9% efficiency). Additionally, this product will be packaged in an outdoor rated enclosure that minimizes required floor space while offering unparalleled access for scheduled services.













Standard Features

- 316L stainless steel, condensing heat exchanger
- · Extremely low NOx emissions
- · Field convertible from NG to LPG
- Maximum setpoint of 194°F (Boiler) and 185°F (Water Heater)
- Integrated relays for main power supply
- · Outdoor model by default
- Easy placement with lifting lugs and side access of a forklift
- · Easy access during commissioning and maintenance
- Direct-spark ignition
- Sealed combustion
- Low gas pressure operation 3.5 in H2O NG;
 8 in H2O CP
- · Vertical and horizontal vent termination
- Category IV venting up to 150 feet for both inlet and exhaust
- On/Off main power switch
- High and low gas pressure switches with manual reset
- Flow switch

Control Module

- Integrated cascade manager up to 16 units
- · Easy to use full text display
- Most important connectivity options for CH systems, like 0-10V, OpenTherm and Modbus
- · Password security
- · Low water flow safety control and indication
- · Freeze protection
- Service reminder
- Time clock
- Hours running
- · Ignition attempts
- Last 10 lockout
- · Night setback (on CH model)
- Boost functionality (on CH model)
- High voltage alarm connection
- 18 languages integrated, including English, French and Spanish
- · Inlet and outlet temperature sensors

User Interface



Easy to use touch screen

All cascaded units visible in one touch screen

Cascade performance graph visible

Single unit performance graph visible

Boiler status screen shows most important values, like temperatures, status of the unit and much more

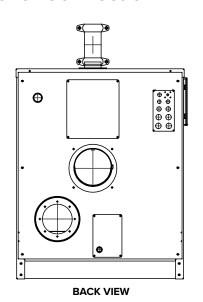
6 languages integrated, including English, French and Spanish

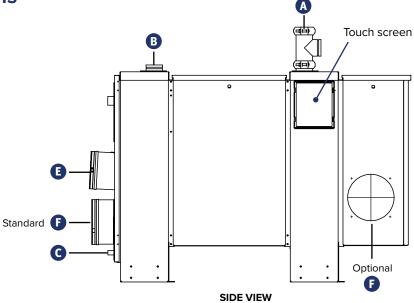
Outdoor reset screen for easy adjustments



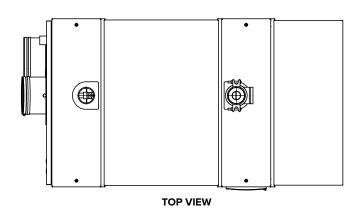


Boiler Connection Dimensions









Prime NX Plus Dimensional Data

Model Number	Input MBH	"A" Supply	"B" Return	"C" Condensate	"D" Gas Inlet	"E" Vent	"F" Air Intake (Standard and Optional)	Size (H" x W" x D")	Weight (lbs) approx*
E-1250	1250	2-1/2" ANSI FLG	2-1/2" ANSI FLG	1-1/4"	2" NPT	8"	8"	47 x 34 x 55	992
E-2000	2000	2-1/2" ANSI FLG	2-1/2" ANSI FLG	1-1⁄4"	2" NPT	8"	8"	47 x 34 x 68	1213
E-3000	3000	4" ANSI FLG	4" ANSI FLG	1-1⁄4"	2" NPT	10"	12"	59 x 46 x 79	1984
E-4000	4000	4" ANSI FLG	4" ANSI FLG	1-1⁄4"	2" NPT	12"	12"	59 x 46 x 95	2314

*Weight empty, without packaging and accessories.





Prime Model Number Designation

MODEL	MODEL NUMBER	OPTIONAL EQUIPMENT
E	1250 2000 3000 4000	Write/type optional equipment code in the gray box below in alphabetical order. For multiple options separate codes with a dash (–)

E -

Example: E1250-C65-G45

An Ace Ajax E1250 MBTU input with optional outdoor sensor and shockmount feet

Available Accessories

(Fill out form below to order accessories.)

Condensate Neutralization Kit: (Contact factory to order)

Software & Interface Cable: Specify Part # S022.500.015

Accessories Name Part #

Accessories Name Part #

Available Voltages and Phases

MODEL	VOLTAGE / PHASE
E1250	120/1
E2000	208/3
E3000	
E4000	480/3

Specify voltage and phase:

Optional Equipment

Optional equipment must be called out in the written specifications, use the codes below.

Controller

C36 BACnet Communications via BMS Gateway

C65 Outdoor Sensor

C66 External Flow Temperature Sensor

General

G43 Vibration Dampers

G44 Leveling Casters

G45 Shockmount Feet

G46 Leveling Feet with Fixing Eye

G47 Relay DHW or System Pump

G48 Flange Adapter

Please note:

Optional equipment may impact overall dimensions and weight. Please request submittal drawing from factory.

Warranty: 5 years on the heat exchanger, covering defects in materials or workmanship. All other components are covered for 1 year.

