

AR4 - 8 Steam Boiler Series



Features

- Miniature boiler max. vessel volume 0.29ft³
- Maximum safety valve setting 100psi
- All boilers are manufactured in accordance with the requirements of the A.S.M.E. Boiler and Pressure Vessel Code and A.S.M.E. CSD-1. Each boiler bears the National Board Stamp "M".
- High quality saturated steam, operating pressure range 0 – 85psig
- Heavy duty carbon steel pressure vessel. Vessel jacket and electrical enclosure 304 stainless steel
- Large selection of optional equipment

Standard Equipment of Each Boiler Includes:

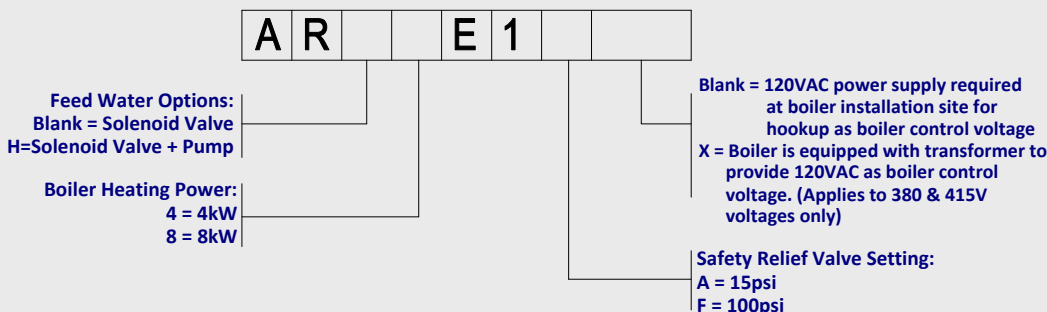
- A.S.M.E. pressure relief valve
- One (1) quick opening bottom blowoff valve as per A.S.M.E. Code B31.1
- Bronze steam outlet ball valve
- High pressure feed pump on ARH-models
- Low water cutoff control with manual reset
- One (1) high pressure cutoff control with manual reset
- One (1) operating pressure control
- Magnetic contactor
- Indicator lights for POWER, REFILLING, HEATING and ALARMS

Applications

- Process Steam
- Dry Cleaning
- Food Service (*)
- Laboratories
- Air Humidification

HEATING POWER kW	STEAM CAPACITY lbs/hr (kg/hr)	BHP	VOLTAGE ⁽¹⁾	PHASE	SHIP WT. Lbs (kg)	OP. PRESS. RANGE psig (bar)	Steam Outlet (NPT)	
							LP	HP
4 KW	13.6	0.4	240	1	90 (41)	0-85 (0 – 5.86)	1/2	1/4
8 KW	27.2	0.8	240	1	90 (41)	0-85 (0 – 5.86)	1/2	1/4

Model Number Key



⁽¹⁾ Each boiler model requires two (2) power supplies: Primary heating power and secondary control voltage. Nominal control voltage is 120V, 50/60Hz. Boiler models with the - X option (this applies to foreign voltages only, see Model Number Key below) require only the heating power supply of 240V 1PH, 50/60Hz.

⁽²⁾ The STEAM CAPACITY listed above is based on the evaporation rate from and at 212°F, at 0 psig. If the boiler feed water temperature is 50°F, then the STEAM CAPACITY for each model listed above is approximately 15% lower.

Example: ARH8E1F = AR-Series boiler with feed water solenoid and pump, 8kW heating power, heating power supply 240V, 1ph, control voltage power supply 120V 1ph, safety valve set to 100psi.

Please note that all information provided within this brochure is approximate and subject to change without notice. Please contact Reimers Electra Steam, Inc. with any questions regarding the specifications or dimensions detailed within.

Electrical Specifications

HEATING POWER	VOLTAGE	PHASE	AMP DRAW	MIN REQUIRED N.E.C. SERVICE	NUMBER & SIZES OF CONTACTORS	NUMBER & SIZE OF ELEMENTS	GAGE OF POWER ENTRY WIRE	POWER ENTRY CONDUIT SIZE
kW	V		A	A			AWG(mm ²)	IN
4	240	1	16.67	20	1 x 35A res.	1 x 4kW, 240V	10 (5.27)	3/4
8	240	1	33.33	40	1 x 35A res.	2 x 4kW, 240V	8 (8.35)	3/4

Construction

ELECTRONIC BOILER CONTROLLER

STEAM OUTLET BALL VALVE

HIGH DENSITY MINERAL WOOL THERMAL INSULATION

PRESSURE CONTROLS

INCOLOY[®] SHEATH HEATING ELEMENTS WITH 2.5 X 2.5" SQUARE FLANGE

SAFETY RELIEF VALVE

SAFETY RELIEF VALVE

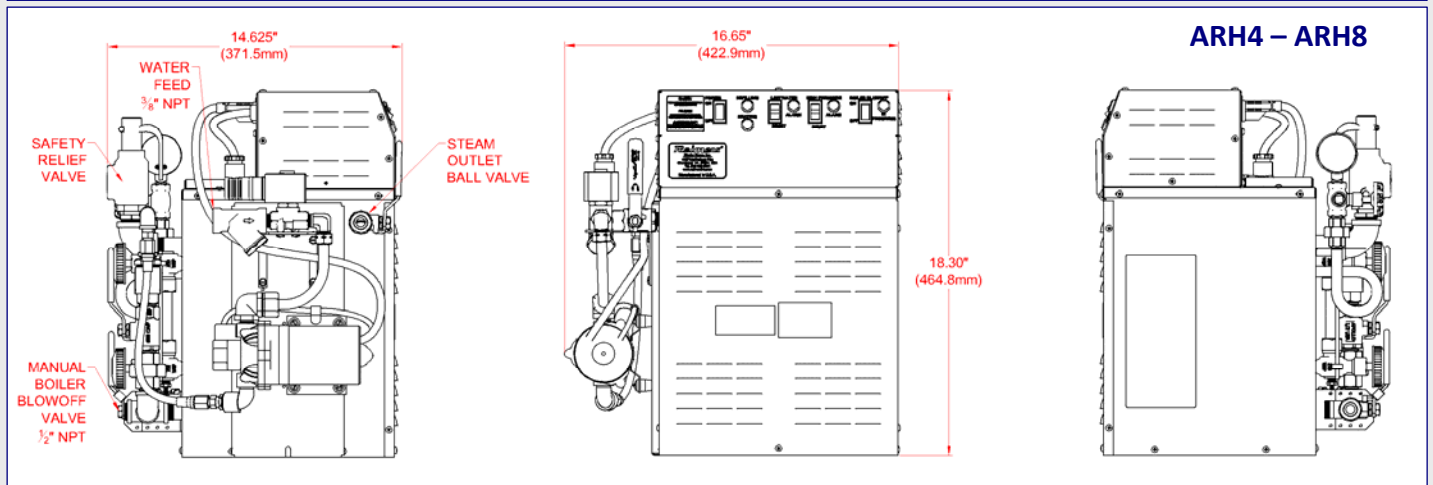
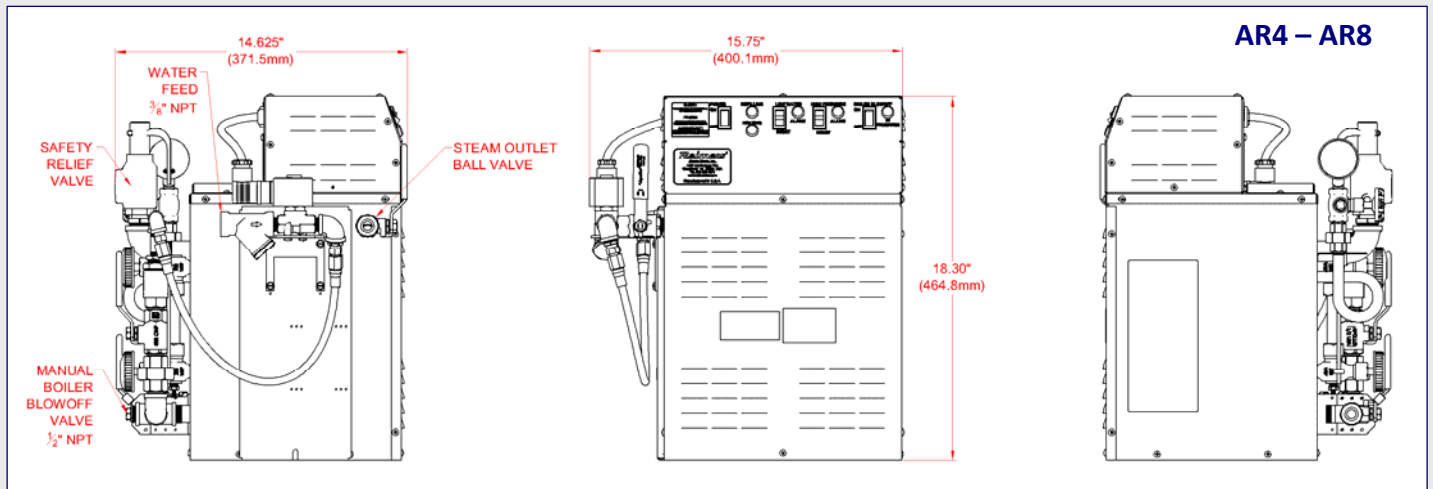
WATER LEVEL PROBES:
- HIGH WATER LEVEL
- AUTOMATIC REFILL
- LOW WATER CUT-OFF

ALL 304 STAINLESS STEEL CABINET WITH WIRE BRUSH FINISH

GAUGE GLASS FIXTURE

BOILER BLOWOFF BALL VALVE

Dimensional Drawings

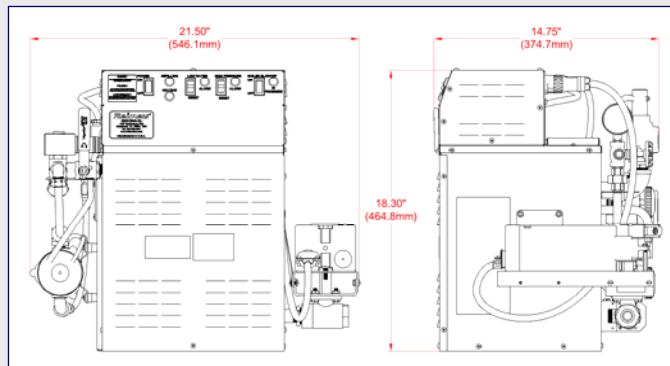


Optional Equipment

1. Pressure Controlled Boiler Blowoff System Automatic Flush & Drain (not suitable for 24/7 applications), #OPT1016



1. Boiler Power OFF
2. Blowoff Enable Switch ON
3. Steam pressure drops below the setting of the blowoff pressure control, set at 15psig or less
4. Motorized ball valve opens for a time preset in the boiler controller
5. At the end of boiler blowoff, motorized ball valve closes automatically



2. Timer Controlled Boiler Blowoff System (suitable for 24/7 applications), #OPT1001



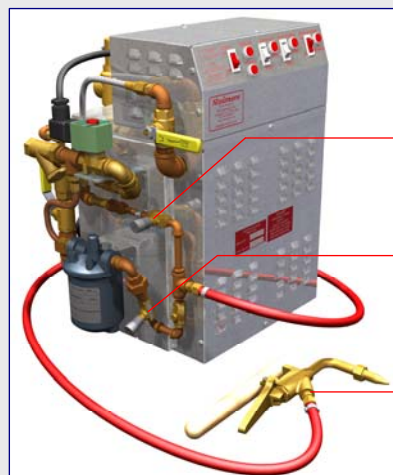
1. When the digital timer reaches its preset blowoff begin time, the boiler controls de-energize and the motorized ball valve opens
2. At the end of the boiler blowoff time, the motorized ball valve closes, the boiler controls energize and restore the water level and resume boiler operation automatically

3. Timer Controlled Boiler ON/OFF, OPT1017



Programmable timer to turn boiler ON/OFF automatically

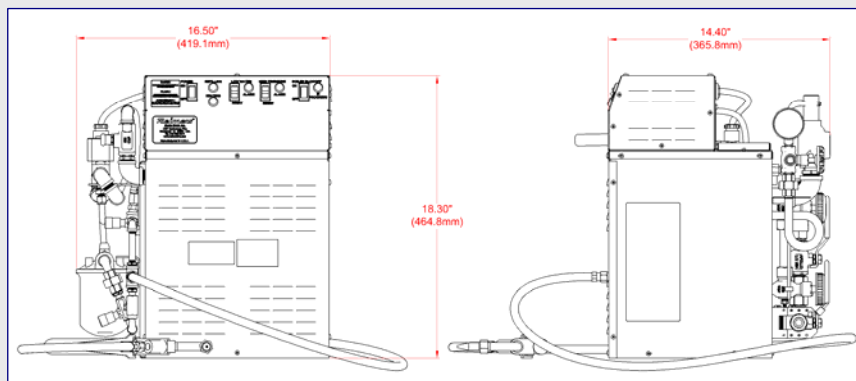
4. AR-Boiler Model ARD8E1F Equipped With Steam Wand and Steam/Water Mixing Module for Cleaning Applications



Steam Flow Adjustment Needle Valve

Cold Water Flow Adjustment Needle Valve for Controlling Steam Wetness

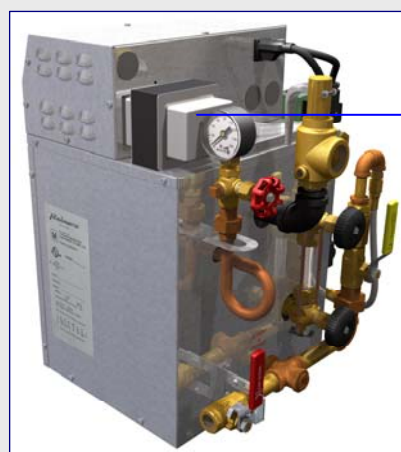
Steam Wand



5. AR-Boiler Model ARJH8E1F Equipped With Steam Nozzle and Foot Pedal for Steam Cleaning Applications



6. Control Voltage Transformer for All AR-Boiler Models for Boiler Operation with 240V 1PH Heating Power Supply Only



Control Voltage Transformer

7. AR-Boiler Model with Brass and Bronze Free Boiler Trim # OPT1030-AR

RB-series boilers in which standard brass/bronze boiler trim is replaced with carbon steel and stainless steel trim. This option reduces the lead concentration in the boiler water and discharged steam to significantly lower levels. Use this option in applications in which steam comes in direct contact with food and all other applications where lead concentrations are a concern.

8. Steam Filter for Culinary Steam Applications, #OPT1032:

Use this filter with FDA listed materials in food processing applications where the steam comes in direct contact with food. The 3 or 5 micron cartridges employed in this steam filter meet or exceed the 3-A guidelines for the production of Culinary Steam under Accepted Practice T609.

NOTE: The installation of this filter alone does not guarantee that the steam produced by your system meets all applicable culinary steam standards.