



COMMERCIAL GAS BOILERS

EFFICIENT • AAE SERIES

FOR HYDRONIC HEATING SYSTEMS



Proven Performance, Durable and Fuel Efficient
Commercial, Industrial and Institutional Applications
Natural Gas or Propane
22 Models from 480M to 3,000M BTUs

AAE SERIES BOILERS



**Turn up the heat on the competition
and compare these design advantages
on your next project**

*AAE 3000 Natural Gas
c/w CSD-1 Gas train Assembly
Flame Safeguard and Full Modulation
Gas Valve (Control panel enclosure
removed for Display)*



AAE 1080

- A true Two-Pass Flow Design
- Supply and Return can be connected from either side.
- Heat exchanger is supplied fully welded by certified ASME welders
- No field assembly required
- No gaskets or push nipples

DEPENDABLE AND ENERGY EFFICIENT PERFORMANCE

For more than fifty years, Allied Engineering has been an innovator in designing outstanding heating products, providing unparalleled customer service and excellent sales support. "AAE Series" boilers include all of the innovations, efficiencies and technologies developed over these years making it one of the most dependable, energy efficient and long life boilers on the market today. Our engineering and development guidelines for quality, ease of operation, simple installation and low capital cost have been achieved.

UNIQUE "DOUBLE PASS" STEEL FINNED TUBE HEAT EXCHANGER

Using the strength and durability of steel tube our engineers have greatly increased the heat transfer surface by continuously welding a spiral fin to each heat exchanger tube. These finned tubes are then welded to headers to form a top or bottom section. The two sections are welded using a 180° riser to complete the unique double pass heat exchanger design. This sturdy light weight design resists thermal shock and plugging of the heat exchanger due to large waterways provided by the 2" OD ASME (SA178A) boiler tube. In addition, the large waterways result in minimal pressure drop through the boiler and can reduce circulator cost. No other boiler combines these features to its' advantage for strength, rigidity, low cost and environmentally friendly construction.

RAPID RESPONSE TIME

The rapid response time of the AAE Series boilers ensure that all "calls for heat" are met promptly. This is of particular importance when used as a heat source for an indirectly fired water heater or a tankless coil.

EASE OF INSTALLATION/OPERATION

Fully assembled "AAE" boilers have a reputation for being simple to install and even simpler to operate and maintain. While we pride ourselves with this simplicity we also offer as options the very latest in sophisticated control systems and direct digital control terminal contacts. If necessary the boiler can be easily dismantled and reassembled to allow passage through narrow aisles and doorways.

AAE SERIES BOILERS

VERSATILE BOILER APPLICATIONS

The Super Hot "AAE Series" with its wide range of sizes (480,000 to 3,000,000 Btu/h) has numerous end uses including High Rises, Apartments, Schools, Snow Melt, Hotels and Motels and many other Industrial and Commercial applications. Combine your Super Hot boiler with our "C Series" external indirect copper coils or "EP Series" stainless steel indirect water heaters for years of fast and efficient service of domestic hot water. Ideally suited and easily connected for modular installations.

CSA TESTED FOR MINIMUM EFFICIENCY OF 80%.

STANDARD EQUIPMENT

- Intermittent Electronic Ignition
- Single Stage Gas Valve
- Two Stage Gas Valve
- Redundant Gas Valve
- Temperature/Pressure Gauge
- On/Off Switch with Indicator Light
- Operating Aquastat
- High Limit
- 30 psi A.S.M.E. Pressure Relief Valve
- 24 Volt Transformer and Fuse
- Draft Hood
- Control Panel Enclosure

OPTIONAL EQUIPMENT

- Low Water Cut Off
- Flow Switch
- Flame Supervision
- Indoor/Outdoor Control
- Auto/Manual Switch
- Alarm Feature
- Full Modulation Gas Valve
- Direct Digital Control Terminal Contacts
- Combination Seismic Restraint/Lifting Lugs
- Higher Pressure A.S.M.E Relief Valves
- High/Low Gas Pressure Switches
- Propane

STAINLESS STEEL ATMOSPHERIC BURNERS

Our computer designed burners are manufactured of high grade heat resistant stainless steel to ensure years of trouble free service, excellent performance and fuel efficiency. The tubular design has virtually eliminated combustion noise.

QUALITY CONTROL

"AAE Series" boilers are manufactured to the American Society of Mechanical Engineers standards. Designed to A.S.M.E. Section IV with a maximum working pressure of 160 psi (1100 kpa) and a maximum operating temperature of 250°F (120°C). Each heat exchanger is tested to 240 psi to ensure leak proof integrity of every boiler leaving the plant. Allied Engineering has a certificate of authorization for use of the "U" stamp for pressure vessels and the "H" stamp for heating boilers which is continually audited by A.S.M.E. and their authorized inspectors.

TEN YEAR LIMITED WARRANTY PROTECTION

Super Hot "AAE Series" boilers are manufactured under the highest standard of quality control, material and workmanship. Our proven design features a ten year warranty on the heat exchanger and one year on all parts and controls. See printed warranty for details. Installation, operating and maintenance instructions are supplied with every boiler.



AAE 1080 Natural Gas
c/w High/Low Fire Two Stage Gas Valve
(Control panel enclosure removed
for Display).



AAE 840
Burner Drawer Assembly with High
Grade Stainless Steel Burners

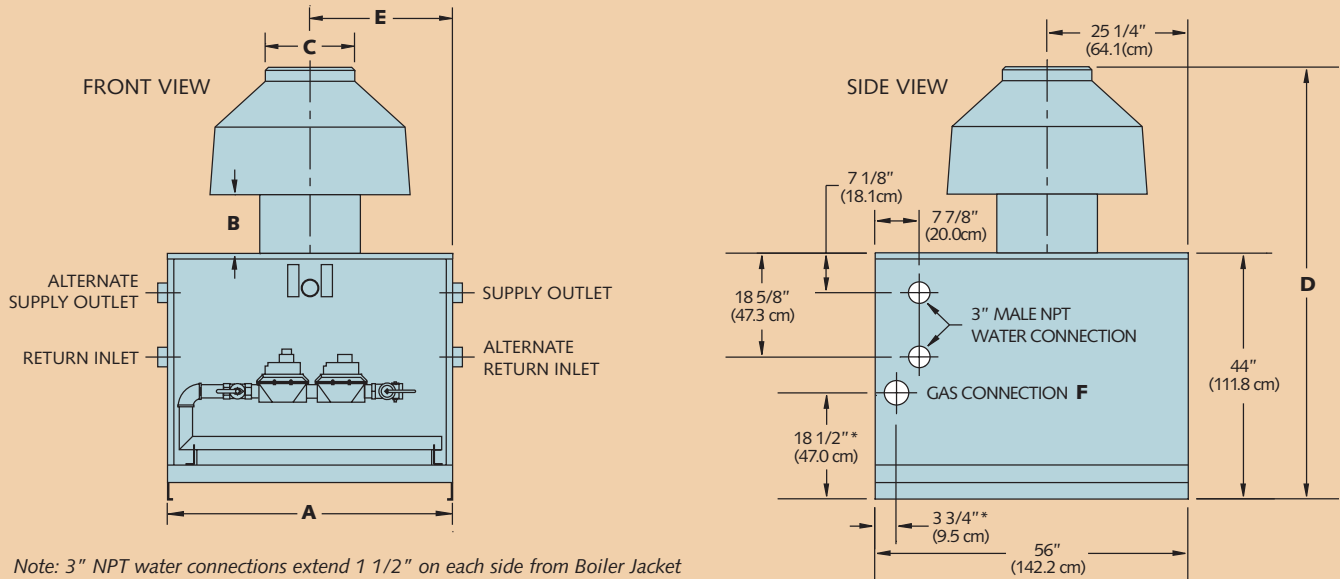
Available in the following codes
for controls, safety devices and
gas fuel trains.

- ASME CSD-1
- California
- Insurance IRI or FM



AAE SERIES BOILERS

DIMENSIONS AND SPECIFICATIONS



MODEL NUMBER	INPUT		OUTPUT			DIM A		DIM B		DIM C		DIM D		**DIM E		*GAS CONN F	WATER CONTENT		SHIPPING WEIGHT	
	MBH	KW	MBH	KW	H.P.	in	cm	in	cm	in	cm	in	cm	in	cm	NPT	U.S. GAL.	L	lb	Kg
AAE480	480	141	384	113	11.5	24	61.0	10.5	26.7	10	25.4	68.9	175.0	12.0	30.5	1"	5.56	21.0	675	307
AAE600	600	176	480	141	14.3	27	68.6	10.5	26.7	10	25.4	68.9	175.0	13.5	34.3	1"	6.75	25.5	725	330
AAE720	720	211	576	169	17.2	30	76.2	10.5	26.7	12	30.5	71.2	181.0	15.0	38.1	1"	7.95	30.1	790	359
AAE840	840	246	672	197	20.1	33	83.8	10.5	26.7	14	35.6	72.9	185.1	16.5	41.9	1"	9.14	34.6	860	391
AAE960	960	281	768	225	22.9	36	91.4	10.5	26.7	14	35.6	72.9	185.1	18.0	45.7	1 1/4"	10.34	39.1	940	427
AAE1080	1080	317	864	253	25.8	39	99.0	10.5	26.7	16	40.6	76.0	193.0	19.5	49.5	1 1/4"	11.53	43.6	990	450
AAE1200	1200	352	960	281	28.7	42	106.7	10.5	26.7	16	40.6	76.0	193.0	21.0	53.3	1 1/4"	12.73	48.2	1050	477
AAE1320	1320	387	1056	310	31.5	45	114.3	10.5	26.7	18	45.7	77.3	196.3	22.5	57.2	1 1/4"	13.92	52.7	1140	518
AAE1440	1440	422	1152	338	34.4	48	121.9	10.5	26.7	18	45.7	77.3	196.3	24.0	61.0	1 1/4"	15.12	57.2	1205	548
AAE1560	1560	457	1248	366	37.3	51	129.5	10.5	26.7	18	45.7	77.3	196.3	25.5	64.8	1 1/4"	16.31	61.7	1270	577
AAE1680	1680	492	1344	394	40.1	54	137.2	10.5	26.7	20	50.8	78.7	199.9	27.0	68.6	1 1/2"	17.51	66.3	1350	614
AAE1800	1800	528	1440	422	43.0	57	144.8	10.5	26.7	22	55.9	80.7	205.0	28.5	72.4	1 1/2"	18.70	70.8	1440	655
AAE1920	1920	563	1536	450	45.9	60	152.4	10.5	26.7	22	55.9	80.7	205.0	30.0	76.2	1 1/2"	19.90	75.3	1520	691
AAE2040	2040	598	1632	478	48.7	63	160.0	10.5	26.7	24	61.0	82.6	209.8	31.5	80.0	1 1/2"	21.09	79.8	1605	730
AAE2160	2160	634	1728	506	51.6	66	167.6	10.5	26.7	24	61.0	82.6	209.8	33.0	83.8	1 1/2"	22.28	84.3	1645	748
AAE2280	2280	669	1824	535	54.5	69	175.2	10.5	26.7	24	61.0	82.6	209.8	34.5	87.6	1 1/2"	23.48	88.9	1690	768
AAE2400	2400	703	1920	563	57.3	72	182.9	10.5	26.7	24	61.0	82.6	209.8	36.0	91.4	1 1/2"	24.67	93.4	1770	805
AAE2495	2495	731	1996	584	59.6	75	190.5	12.0	30.5	2x18	2x45.7	78.8	200.2	2x18.25	2x46.4	2"	25.87	97.9	1850	841
AAE2640	2640	774	2112	619	63.1	78	198.1	12.0	30.5	2x18	2x45.7	78.8	200.2	2x19.75	2x50.2	2"	27.06	102.4	1890	859
AAE2760	2760	809	2208	647	65.9	81	205.7	12.0	30.5	2x18	2x45.7	78.8	200.2	2x20.25	2x51.4	2"	28.26	107.0	1935	880
AAE2880	2880	845	2304	675	68.8	84	213.4	12.0	30.5	2x18	2x45.7	78.8	200.2	2x21.00	2x53.3	2"	29.45	111.5	1975	898
AAE3000	3000	880	2400	703	71.7	87	221.0	12.0	30.5	2x18	2x45.7	78.8	200.2	2x21.75	2x55.3	2"	30.65	116.0	2020	918

** AAE 2495 and larger use two draft hoods. Dimension "E" is measured from both left and right sides.

* Gas Connection "F" shows typical sizes only. Connections may vary depending on the gas valve used. Derate Input/Output by 10% for Propane.



ALLIED ENGINEERING COMPANY

DIVISION OF E-Z-RECT MANUFACTURING LTD.

Manufacturers of Gas and Electric Boilers. Tankless Coils. Electric Boosters

94 Riverside Drive, North Vancouver, B.C. V7H 2M6 • TEL: 604.929.1214 • FAX: 604.929.5184

www.alliedboilers.com