General Electric Company

AIR CONDITIONING PRODUCTS

Air Conditioning Department, 570 Lexington Ave., New York, N. Y.

For Steam, Hot Water, Vapor, or Warm Air Heating Systems, General Electric Offers a complete line of Air Conditioning Equipment consisting of:

The G-E Oil Furnace (2 sizes) Type LA4 and LA5.

The G-E Winter Air Conditioner for Warm Air Systems (Type AA3)—See Page 630.

The G-E Winter Air Conditioner for Radiator Systems (Type AC1)—See Page 630.

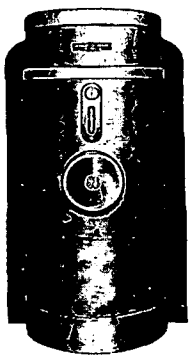
The G-E Room Air Conditioner (Type AD1 and AD2)—See Page 630.

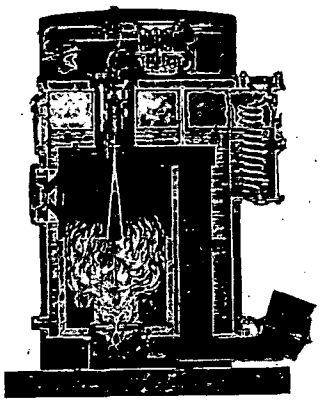
The Furnace is ideally suited for the heating of large quantities of water for commercial purposes. It may be used for special applications requiring up to 14 lb. steam pressure.

The G-E Oil Furnace uses a new principle of atomization and combustion. Oil, and atomizing air, under low pressure, meet in collision within the nozzle tip and emulsify; expansion of the air, as the mixture emerges from the nozzle, shatters the oil into an "oil fog." This atomized oil is blown from the nozzle toward the bottom of the furnace, where it meets the supply of secondary air introduced at the bottom, resulting in progressive, quiet and complete combustion of the oil.

Design Features

1. All rotating parts on one shaft, automatically oiled, no belts, no packing.
2. Heavy welded-steel boiler, with combustion spaces entirely surrounded by water.
3. Down-draft operation, with chimney at the bottom, results in high efficiency.
4. Built-in domestic hot water heating coil.
5. Sub-atmospheric pressure within unit prevents escape of odors.
6. Large oil orifice, non-clogging; non-dripping nozzle tip protected from heat of flame.
7. Oil viscosity compensation.
8. Temperature-resisting metal parts.
9. Electric ignition during starting cycle only.
10. All controls built-in, including four-second detector with self-checking contacts, water temperature or steam pressure limit, low water cut-off (steam), expansion relief door with electric cut-out, domestic hot water temperature switch, synchronous motor-driven primary control, and electric clock thermal control with separate day and night settings.
11. Burner head, motor compressor, and controls separately and quickly removable and replaceable.
12. Designed, manufactured and guaranteed by a single responsible manufacturer—General Electric.

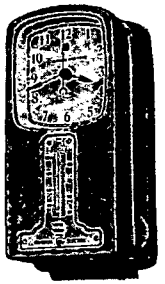




Specifications

TYPE LA4

Output—133,000 B.t.u. per hour (555 sq. ft. equivalent direct steam radiation).
Water Capacity—47.5 gal. (full), 31.6 gal. (to water line).
Heating Surface—30.5 sq. ft.—93.3% water backed.
Piping Connections—3 in. outlet, two 1½ in. returns.
Electrical Input—195 watts at max. oil rate for steam systems, 285 watts with water circulator for water systems.
Dimensions—5 ft, 3 in. high, 35 in. wide, 42 in. deep.
Weight—950 pounds completely assembled, without water.



TYPE LA5

Output—275,000 B. t. u. per hour (1145 sq. ft. equivalent direct steam radiation).
Water Capacity—76.7 gal. (full), 64.3 gal. (to water line).
Heating Surface—53.5 sq. ft.—95% water backed.
Piping Connections—4 in. outlet, two 2½ in. returns.
Electrical Input—200 watts at max. oil rate for steam system, 290 watts with water circulator for hot water systems.
Dimensions—5 ft., 7 in. high; 37 in. wide; 51 in. deep.
Weight—1660 lbs. completely assembled, without water.

Williams Oil-O-Matic Heating Corporation

Manufacturers of Automatic and Manually Controlled Fuel Oil Burners

WILLIAMS OIL-O-MATIC HEATING — BLOOMINGTON, ILL.

Bloomington, Ill.

Service to Architects and Builders

CHICAGO, 185 North Michigan Avenue

WILLIAMS OIL-O-MATIC HEATING — NEW YORK, Graybar Building

Williams Oil-O-Matic offers a complete line of oil heating equipment—covering all heating and hot water needs. Also boiler-burner units, heavy duty range burners and unit heaters. Latter used with water heaters where both hot water and heat are required.

SPECIFICATIONS

Model No.	Length, In.	Width, In.	Height, In.	HP.	R.P.M.	Gals. Fuel Oil per Operating Hr. Min.	Gals. Fuel Oil per Operating Hr. Max.
Model K-1.5	25	15	22	1/8	1750	½	1½
Model KB (1200)	29	18	20	1/6	1150	1½	3
Model KB (1800)	29	18	20	1/4	1750	2½	5
Model J (1200)	45	20	25	1/4	1150	4	10
Model J (1800)	45	23	25	1/2	1750	8	15
Model JJ	50	33	22	1	1750	12	25
Model K (1200)	34	28	21	1/6	1150	1½	3
Model K (1800)	34	28	21	1/4	1750	2½	5
WATER HEATERS							
WHA*	58	23	28	1/10	1750	½	½
WHB†	75	23	28	1/8	1750		1.0
WHC‡	88	29	34	1/8	1750	1	1¾

*Output: 90° rise, 60 gallons per hour. ‡Output: 90° rise, 210 gallons per hour.
†Output: 90° rise, 120 gallons per hour.

In case odd frequency motors are used, the maximum capacity of the burner will be reduced in proportion to the r.p.m. of the motor. The minimum capacity remains the same. Model K must be substituted for KB for odd currents and export

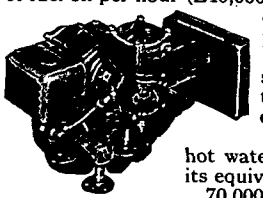
How to Decide Size of Burner

For low pressure domestic boiler, 1 gal. of fuel oil per hour (L40,000 B.t.u.'s) is required for approximately:

300 sq. ft. of steam radiation or its equivalent.

480 sq. ft. of hot water radiation or its equivalent.

70,000 B.t.u.'s when using hot air furnace ratings.



Model K-1.5 Oil-O-Matic

24 sq. ft. steam boiler heating surface (or 2.2 hp.).

1 sq. ft. of grate surface with combustion space 3 ft. high or its equivalent.

For detail data, see Oil-O-Matic Installation and Service Manual.

Domestic Hot Water Supply

Three water heater models cover the domestic and commercial water heating fields. Entire apparatus–including genuine Oil-O-Matic oil burner, combustion chamber, water tank, and all automatic controls—now combined in a single neat and compact unit.

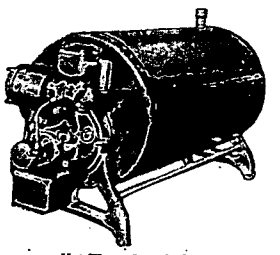
Refer to specifications for dimensions and output capacities of all models—WHA, WHB, and WHC.

Boiler-Burner Units

A complete line of welded steel and also cast-iron sectional Boiler-Burner Units. Wide variety of sizes for steam or hot Water. Write for details.

Underwriters' Listing

Oil-O-Matic burners are listed as standard by National Board of Fire Underwriters to burn oils conforming to A. P. I. standard specifications for Nos. 1, 2, 3, and 4, also Pacific Coast Disel.



Hot Water Supply Unit

Each burner carries Underwriters' label. Also approved by all important codes and governing bodies.

Range Burners

New type Oil-O-Matic range burner, for heavy duty ranges, brings oil heat economy to restaurant, hotel, hospital, steamship, dining car, resort and club.

No priming, no heat generating, no matches, no wicks required; a single lever controls everything.

Engineering Service

Engineering service is available to architects—see A. I. A., File No. 30-GL.