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AUTOMATIC HEATING • COOLING

GENERAL ELECTRIC

AIR CONDITIONING • COMMERCIAL REFRIGERATION

PLAINTIFF'S EXHIBIT
GE-162
tabbies

ENGINEERS, ARCHITECTS AND CONTRACTORS

In the following pages we present G-E *Central Plant Air Conditioning* pertinent facts about G-E heating and *Refrigeration* equipment and cooling equipment.

G-E *Automatic Heating, Commercial Refrigeration, and Self-Contained Air Conditioning Equipment* is sold through distributors. For the one nearest you, see the classified section of your telephone book. You will find him thoroughly experienced and anxious to assist in the preparation of layouts and specifications.

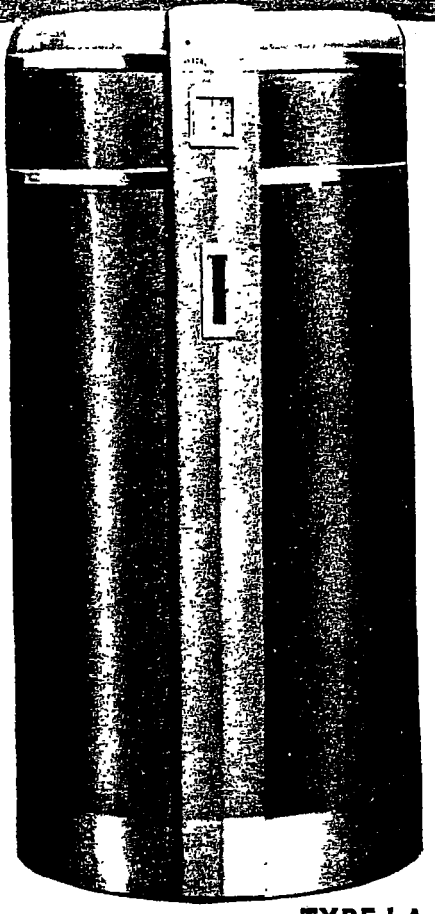
5 hp and above is sold direct to contractors. This new plan extends fullest cooperation to engineers, architects and contractors without competing in any way with their own essential services. For details of this policy and booklets on the equipment—write the Contractors Sales Division, General Electric, Five Lawrence St., Bloomfield, N. J.

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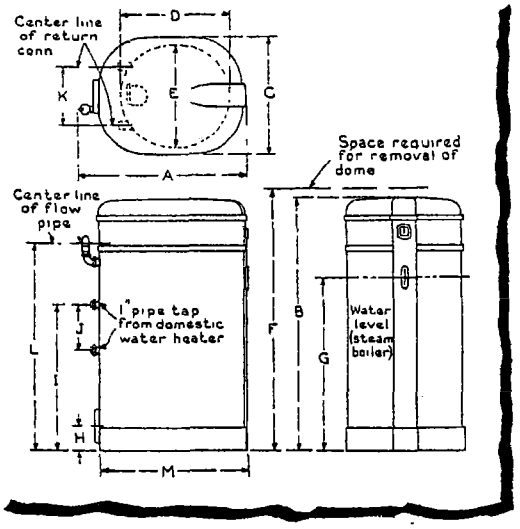
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GENERAL ELECTRIC

Designed for Steam, Vapor or Hot Water Heating Systems, indirect heating with Air Conditioner (see sketch of G-E Split System at bottom of page) or Commercial Hot Water Supply (laundries, schools, etc.)



TYPE LA



Connections and Dimensions

Type No.	A	B	C	D	E	F	G	H	I	J Two Sizes		K	L	M	Flow Pipe	Return Conn.	Stack Conn.
LA-20 & 22	33	52 5/16	23 1/8	18 1/2	18 1/2	55	32 3/8	5 13/32	27 3/8	7 11/16	12 13/16	9 1/2	40 5/16	26 7/8	2 1/2	1 1/2	5
LA-32 & 34	35	57 3/4	25 7/8	22 1/2	22 1/2	60	37 3/8	4 31/32	32 3/8	7 11/16	12 13/16	11 1/4	45 5/8	31 5/8	3	1 1/2	7
LA-42 & 44	39 3/4	62 3/4	31 3/8	27 1/2	27 1/2	65	42 3/8	5 11/32	37 3/8	12 13/16	20 1/2	15	51 1/8	35 5/8	4	2	8
LA-54	13 3/8	66 3/4	31 5/8	30 1/2	27 1/2	69	46 3/8	6 11/32	41 3/8	12 13/16	20 1/2	15	55 1/16	38 5/8	4	2 1/2	9

Principal dimensions in inches

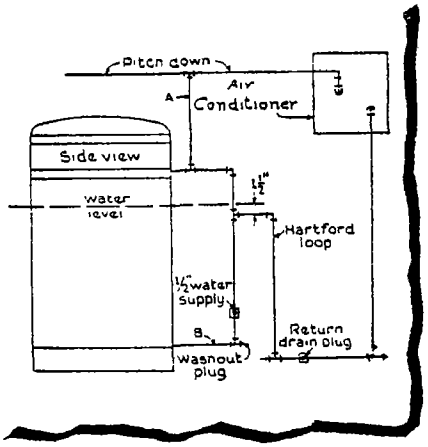
G-E FEATURES:

The new G-E Oil Furnaces are extremely compact units for a given capacity . . . lower in cost . . . easy to install. Quicker steaming because of high heat transfer rate and low water content — (steams within 2 or 3 minutes after thermostat calls for heat). G-E Flame Detector provides complete shut-down within 5 seconds in event of flame failure. G-E Master Control-Telechron motorized for a positive, timed operating sequence. Fine Atomization — 100,000,000 particles from every drop of oil — plus G-E Inverted Flame insures complete combustion. Flame shoots down, then is turned back upon itself. In the G-E Heat Trap, the hot gasses are literally trapped in the furnace until their heat is absorbed, they then pass out through the flue connection at the *bottom* of the furnace. G-E Oil Flow Stabilizer maintains constant oil rate essential to high furnace efficiency. G-E Oil Furnaces have proved extremely economical in operation.

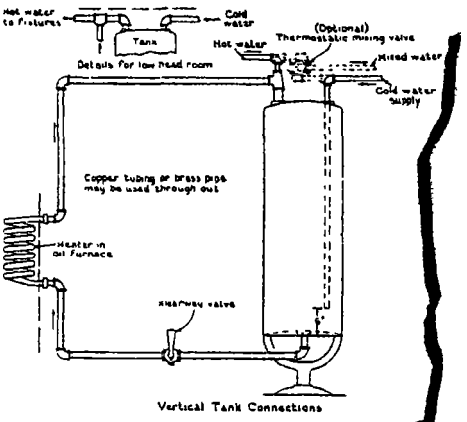
Completely automatic. Self-oiling motor for long-lived, carefree operation. Two-try re-start mechanism attempts to start furnace twice before complete shut-down. (See your A.I.A. File No. 30-C-1.)

INSTALLATION METHODS:

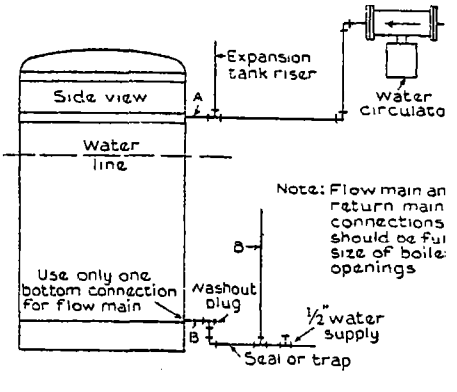
Single Oil Furnace connected to central plant air conditioner (Split System)



Single Oil Furnace connections to vertical domestic hot water tank.



Single Oil Furnace connections to hc water system.



OIL FURNACES (BOILERS)

SPECIFICATIONS

Furnace to be Type_____, manufactured by the General Electric Company, _____ Btu per hr. output, _____sq. ft. Steam E.D.R._____ sq. ft. Hot Water E.D.R. Boiler of welded steel construction in accordance with A.S.M.E. Boiler Code for Low Pressure Heating Boilers. Listed by the Underwriters' Laboratory. Equipped with safety valve, pressure gage and water-level gage (for steam furnace); altitude gage and thermometer (for hot water furnace). Stainless steel refractory. Insulation—asbestos air cell.

Furnace to be equipped with Telechron-motorized master control, flame detector, inverted flame for complete combustion; heat trap for high heating efficiency; thermostat, cabinet of cold rolled sheet steel.

Special accessory equipment. Copper coil indirect water heater, low-water cut-off and pressure limit switch, flue pressure switch.

RATINGS

	TOTAL OUTPUT			FUEL		DOMESTIC HOT WATER OPTIONAL HEATING CAPACITY+				WATER CAPACITY		
						Btu per Hr.		Gal. per Hr.				
Type	Btu per Hr.	Steam Radiation Sq. Ft.*	Hot Water Radiation Sq. Ft.*	Oil Rate Gal per Hr.	Grade of Oil	Large Size Heater +++	Small Size Heater +++	Large Size Heater ++	Small Size Heater ++	Steam Gal.	Hot Water Gal.	Weight of Complete Furnace Lbs.
LA-20	75,000	312	500	0.7	#3	13,000	8,000	270	160	7.5	13.5	500
LA-22	100,000	417	667	0.94	#3	13,000	8,000	270	160	10.1	16.3	520
LA-32	140,000	583	934	1.33	#3	13,000	8,000	270	160	18	20.1	930
LA-34	200,000	833	1,332	1.91	#3	13,000	8,000	270	160	20	27.8	1,060
LA-42	275,000	1,145	1,830	2.65	#3	21,000	13,000	420	270	27.5	42.5	1,300
LA-44	350,000	1,455	2,330	3.37	#3	21,000	13,000	420	270	33	47.5	1,415
LA-54	450,000	1,875	3,000	4.25	#3	21,000	13,000 Medium Size Heater	420	270	51	64.7	1,800

* These figures are total boiler load. In general the permissible standing radiation will be less than this. Steam Radiation is based on 240 Btu per hr. per sq. ft. Hot water radiation is based on 150 Btu per hr. per sq. ft.

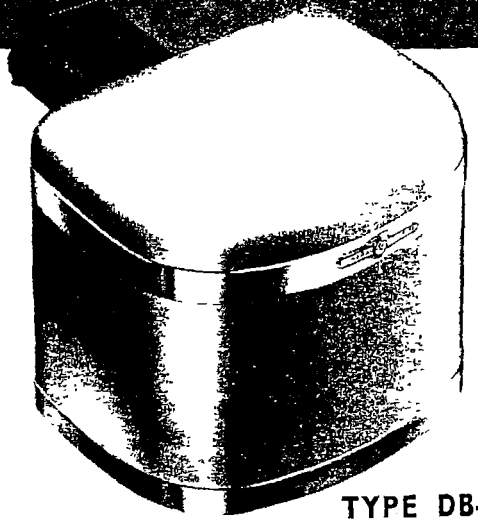
+ Steam and hot water systems.

++ Capacity depends upon size and location of water-storage tank.

+++ Capacity based on heating water from 40°F. to 140° with average boiler-water temperature of 170°F.

GENERAL ELECTRIC OIL BURNER

An attachment type burner for the conversion of new or used heating systems.



TYPE DB-20

G-E FEATURES

Designed to operate with boilers and furnaces of the following types: Pressure Steam, Vapor Steam, Hot Water, Warm Air. The flexibility of the type DB-20 Oil Burner makes it applicable to varying sizes of boilers and furnaces to form a completely automatic heating plant.

Economical in operation, quiet, odorless and safe. Easy to install. (See your A.I.A. File No. 30-G-1.)

SPECIFICATIONS

Burner unit to be Type DB-20, manufactured by the General Electric Company; 110,000 Btu per hr. input to 423,000 Btu per hr. input (.75 to 3 gal. per hr.). Listed by the Underwriters' Laboratory. To have fuel saving double mix nozzle, tailored flame . . . adjustable to size *and shape* of firebox; non-clogging burner tip, quick-acting flame detector; positive master control; self-oiling mechanism; balanced oil-flow stabilizer, automatic safety limit controls; reliable motor-compressor unit, two-try re-start; completely automatic thermostatic controls.

Special accessory equipment: Night and day thermostat.

Let General Electric help you. Find your nearest G-E Distributor or Dealer in the Classified section of your Telephone directory under Automatic Heating, Oil Heating, Gas Heating, Air Conditioning or Commercial Refrigeration. Or write to General Electric, Five Street, Bloomfield, New Jersey.

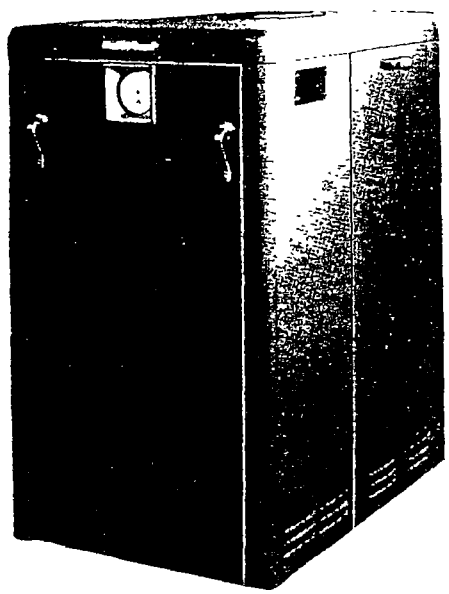
GENERAL ELECTRIC GAS FURNACES (BOILERS)

Designed for Steam, Vapor or Hot Water Heating Systems. Indirect Heating with Air Conditioner or Commercial Hot Water Supply.

G-E FEATURES

G-E Gas Furnaces are noted for offering high capacity plus fast steaming at low cost. Specially designed water-jacket projection studs step up heat transfer rate. Pressure regulator maintains reasonably constant gas pressure at the burner for complete combustion . . . greater economy. Completely insulated with asbestos air cell.

Electric controls for completely automatic operation. All G-E Gas Furnaces bear seal of approval of A. G. A. (See your A. I. A. File No. 30-C-1).



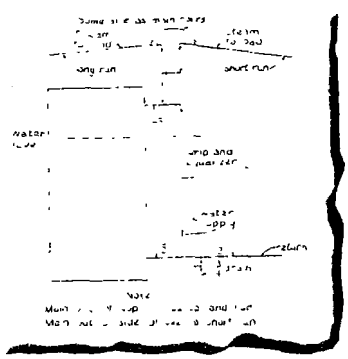
TYPE LM

SPECIFICATIONS

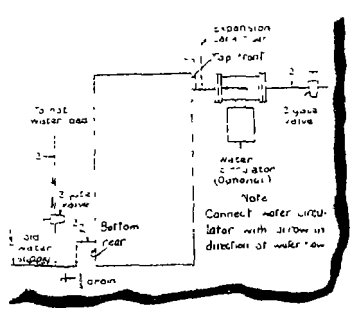
Furnace to be Type____ manufactured by the General Electric Company: _____ Btu per hr. output: _____ sq. ft. Steam E.D.R. _____ sq. ft. Hot Water E.D.R. Boiler of cast iron construction in accordance with A.S.M.E. Boiler Code for Low Pressure Heating Boilers and A.G.A. Requirements. Equipped with safety valve, pressure gage and water-level gage (for steam furnace), altitude gage and thermometer (for hot water furnace). Insulation—asbestos air cell.

Furnace equipped with combination gas heating unit control (gas pressure regulator, gas valve, high pressure or temperature limit, throttling control); low water cut-off for steam furnaces, thermocouple ignition pilot; manual operation in case of power failure.

One or two pipe steam system with drip and equalizer.



Forced hot water system using water circulator.



RATINGS

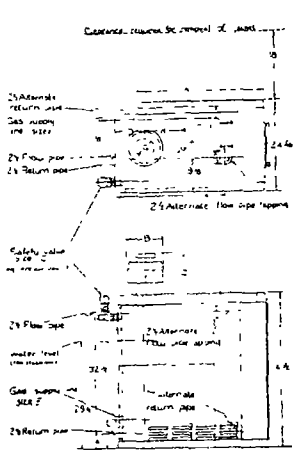
Type	† Output at boiler nozzle Btu per hr.	Boiler Horsepower	A.G.A. RATING* Sq. Ft. total boiler load: Steam*	Hot Water*	Number of Burners	Number of Sections	No. of Pilots: Thermo Ignition	Plain	Number of Flue Openings	Approx. Shipping Weight Lbs.
LM 22	39,000	1.1	—	260	1	2	1	0	1	40
LM 23	76,800	2.3	320	510	2	3	1	0	1	50
LM 24	115,200	3.4	480	770	2	4	1	0	1	65
LM 25	153,600	4.6	640	1020	2	5	1	0	1	—
LM 26	192,000	5.7	800	1280	3	6	1	1	1	91
LM 27	230,400	6.9	960	1540	3	7	1	1	1	105
LM 29	268,800	8.0	1120	1790	4	9	1	1	2	137
LM 210	307,200	9.2	1280	2050	4	10	1	1	2	148
LM 211	345,600	10.3	1440	2300	5	11	1	2	2	161

† Manufactured, mixed or natural gas, 450–1200 Btu cu. ft.
* Ratings on basis of 240 Btu per sq. ft. for steam and 150 Btu per sq. ft. for hot water.

Principal dimensions in inches

Type	A	B	C	D	E	F	G	H*	J	K
LM22	24 3/4	7 1/4	11 1/4	5 3/8		1	1	—	10	13 5/16
LM23	27 5/16	9 3/8	12 1/4	7 3/8	1	1	5	—	13 5/8	16 15/16
LM24	30 3/16	11 1/2	13 1/16	9 1/4	1	1	6	—	17 5/16	20 5/8
LM25	32 5/8	13 1/2	15 1/16	11 1/8	1	1	—	—	21	24 5/16
LM26	38 5/16	15 1/2	17 5/16	13	1	1 1/2	8	—	24 11/16	28
LM27	42 5/16	15 1/2	17 5/16	14 7/8	1 1/4	1 1/2	8	—	28 3/8	31 11/16
LM29	49 7/16	15 1/2	15 5/16	11 1/16	1 1/4	1 1/2	7	15	35 3/4	39 1/16
LM210	53 1/4	15 1/2	17 5/16	11 1/16	1 1/4	1 1/2	7	16 7/8	39 7/16	42 3/4
LM211	56 13/16	15 1/2	17 5/16	12 15/16	1 1/4	1 1/2	8	18 11/16	43 1/8	46 7/16
LM26	38 5/16	15 1/2	17 5/16	13	1	1	8	—	24 11/16	28

Connections and dimensions for Type LM DeLuxe Gas Furnaces



INDUSTRIAL GAS FURNACES (BOILERS)

15 sizes with outputs ranging from 422,400 Btu hr. to 1,372,800 Btu hr. For details, ratings specifications see A.I.A. File No. 30-C-1.

FOR DOMESTIC HOT WATER use separate water heater — electric gas fired.

GENERAL ELECTRIC WARM AIR (OIL FIRED) CONDITIONERS

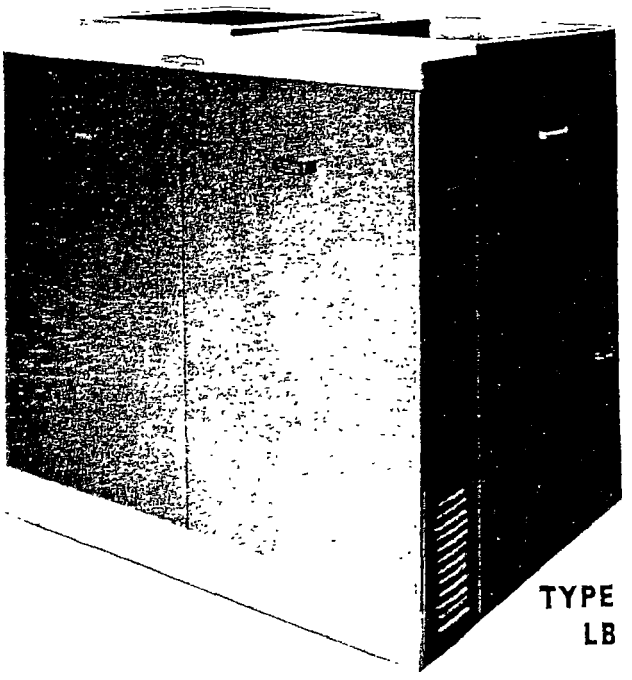
For Residential Winter Air Conditioning

G-E FEATURES

The new G-E (Oil Fired) Winter Air Conditioners provide warm, clean, circulated, moistened air from one compact unit. Complete filtering of the air removes dirt and dust. Automatic fan control prevents circulation of cool air at the start of a heating cycle. Air circulation during the summer is provided by running the fan with the burner off. A cooling system can be added.

G-E Flame Detector provides complete shut-down within 5 seconds in event of flame failure. G-E Master Control — Telechron-motorized for a positive, timed operating sequence. Fine atomization — 100,000,000 particles from every drop of oil — plus G-E Inverted Flame insures complete combustion. In the G-E Heat Trap, the hot gases are literally trapped in the furnace until their heat is absorbed, they then pass out through the flue connection at the *bottom* of the furnace. G-E Oil Flow Stabilizer maintains constant oil rate essential to high furnace efficiency.

Self-oiling motor compressor uses fuel oil as a lubricant. Two-try restart mechanism provides for two attempts at starting before complete shut-down. Electrical controls provide completely automatic operation. (See your A.I.A. File No. 30-B-1.)



TYPE LB

SPECIFICATIONS

Winter Air Conditioner to be Type _____, manufactured by the General Electric Company, _____ Btu per hr. total output. (_____ Btu per hr. output — with pan humidifier.) Evaporating capacity _____ lbs. per hr. Listed by Underwriters' Laboratory. Copper bearing steel combustion heat transfer unit, oil furnace unit, multi-blade centrifugal fan, replaceable viscous-coated glass wool filters, master control, flame detector; inverted flame, heat trap, oil flow stabilizer; combined fan and limit control. Cabinet of cold rolled sheet steel, asbestos air cell insulation.

Special accessory equipment: Humidifying equipment, flue pressure switch; two speed fan motor.

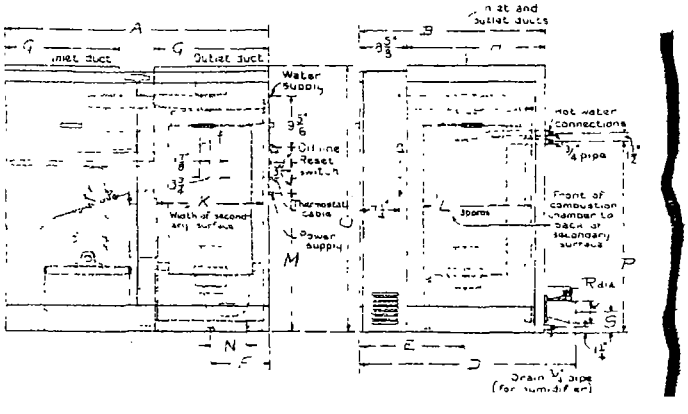
RATINGS

Type	Air Heating Capacity* Without Humidifier Btu per Hr.	Air Heating Capacity* With Pan Humidifier only Btu per Hr.	Humidification Capacity† Pan Type Humidifier Lbs. per Hr.	Oil Rate Gal. per Hr.	Air Flow Cfm	Maximum Duct Resistance Allowable ins. of Water	Fan Motor H.P.	Replaceable Filters Number	Replaceable Filters Size	Weight of Complete Unit
LB-22	100,000	97,000	3	0.95	1400	0.3	1/4	2	16x25x2	400
LB-32	140,000	135,000	5	1.25	1800	0.25	1/3	2	20x25x2	525
LB-34	200,000	194,000	5	1.90	2500	0.25	1/2	2	16x25x2	840

* Rating Conditions.
Entering air, dry-bulb temp. Deg. F 70
Entering air relative humidity, per cent. 30
Barometer, inches mercury 29.9

† Humidifiers with increased evaporative rates are available for all units.

Connections and dimensions for Type LB



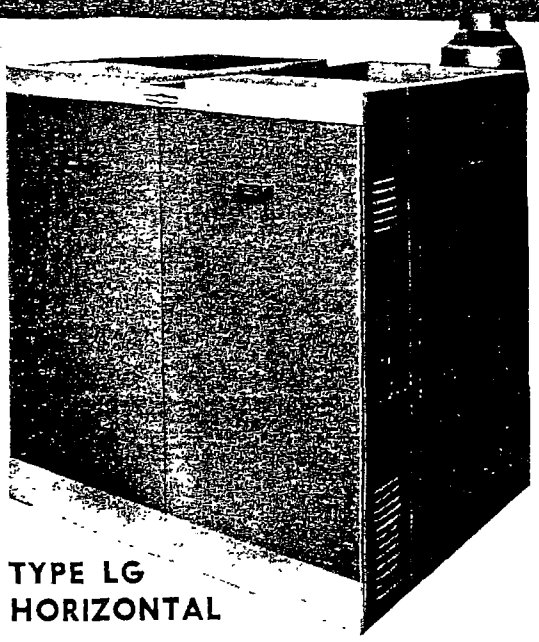
FOR DOMESTIC HOT WATER or for adding summer cooling see note page 6.

Principal Dimensions in Inches

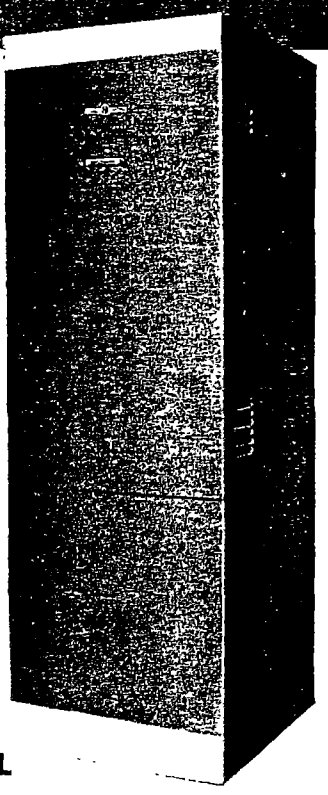
Type	A	B	C	D	E	F	G
LB-22	48	34 13/32	51	40 9/32	19 3/8	10 27/32	20 3/8
LB-32	51 1/8	42	58	48 7/8	20 7/8	12 1/4	23 13/16
LB-34	51 1/8	50 5/32	58	57 1/32	20 7/8	12 1/4	23 13/16

Type	H	K	L	M	N	P	R	S
LB-22	25 25/32	19 1/2	20 1/2	27	11 15/16	34 3/4	5	45
LB-32	33 3/8	27 1/2	28 3/8	34	0	42 3/4	7	16

GENERAL ELECTRIC WARM AIR



TYPE LG
HORIZONTAL



TYPE LG
VERTICAL

For Residential Winter Air Conditioning

G-E FEATURES

The new G-E Winter Air Conditioners (Gas Fired) provide warm, clean, circulated, moistened air from one compact unit. Complete filtering of the air removes dirt and dust. Automatic fan control prevents circulation of cool air at the start of heating cycle. Air circulation during the summer is provided by running the fan with the burner off. A cooling system can be added.

Cast iron heating unit with gasketed joints eliminates possibility of flue gas leaks . . . assures safe operation. Electrical controls provide safe, automatic operation. Limit switch stops main gas supply should unit overheat. Combination gas heating unit control maintains relatively constant gas pressure to pilots and main burners . . . increasing efficiency. (See your A.I.A. File No. 30-B-1).

FOR DOMESTIC HOT WATER,

with either the oil or gas fired warm air conditioner, use separate hot water heater — electric, oil or gas fired.

FOR SUMMER COOLING

To complete the G-E Warm Air Conditioning System (oil or gas fired) for year 'round air conditioning—G-E Cooling Unit and G-E Condensing Unit can be added.

Principal dimensions in inches

Type	A	B	C	D	E	F
LG-15	22 19/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-16	26 17/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-20	26 17/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-23	34 13/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-30	34 13/32	5 15/16	6 1/16	11 1/2	4 1/2	13 3
LG-34	42 9/32	5 15/16	6 1/16	11 1/2	4 1/2	13 3
LG-40	42 9/32	6 15/16	7 1/16	13 1/2	5 5/16	15 3/4
LG-45	50 5/32	6 15/16	7 1/16	13 1/2	5 5/16	15 3/4
LG-50	50 5/32	7 15/16	8 1/16	15 1/2	6	17 1/2
LG-56	58 1/32	7 15/16	8 1/16	15 1/2	6	17 1/2
LG-60	58 1/32	8 13/16	9 1/16	17 1/2	6 3/4	19 1/4

SPECIFICATIONS

G-E Gas-Fired Winter Air Conditioners are listed by Underwriters' Laboratory and A.G.A. Cast iron combustion heat transfer unit; gas furnace unit; multiblade, centrifugal fan; replaceable, viscous-coated glass wool filters; furnace equipped with combination gas heating unit control (including gas pressure regulator, main electric gas, high temperature limit control); thermo-ignition pilot; fan and limit control: manual operation in case of power failure. Cabinet of cold rolled sheet steel; asbestos air cell insulation.
Special accessories: Humidifying equipment, two speed fan motor.

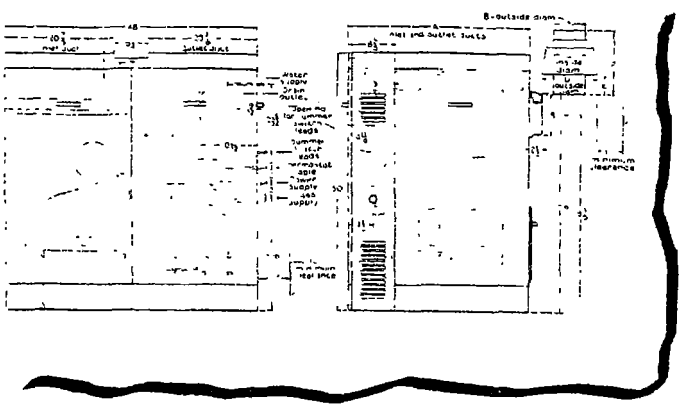
Principal dimensions in inches

Type	A	B	C	D	E	F
LG-15	22 19/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-16	26 17/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-20	26 17/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-21	30 15/32	4 15/16	5 1/16	9 3/8	4	12 9
LG-25	30 15/32	5 15/16	6 1/16	11 1/2	4 1/2	13 3
LG-26	34 13/32	5 15/16	6 1/16	11 1/2	4 1/2	13 3
LG-30	34 13/32	5 15/16	6 1/16	11 1/2	4 1/2	13 3

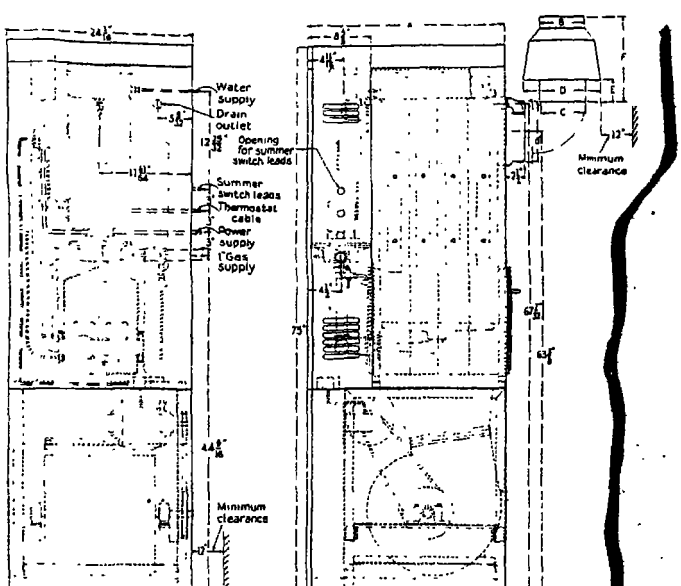
Type	AIR HEATING† CAPACITY Btu Output		HUMIDIFYING CAPACITY			Air Flow† Horizontal Vertical Units cfm ‡	Blower Motor H. P.	Weight of Complete Unit Net Lbs.
	Form A Horizontal Type	Form B Vertical Type	Horizontal Type		Vertical Type			
			Pan Type	Disk Type	Disk Type			
LG 15*	60,000	60,000	0.50	3.0	3.0	675	1/6	600
LG 16*	60,000	60,000	0.60	3.5	3.5	900	1/6	650
LG 20*	78,400	78,400	0.70	4.0	4.0	900	1/6	675
LG 21**	——	78,400	——	——	4.5	1125	1/6	950
LG 23	78,400	——	0.85	5.0	——	1350	1/4	775
LG 25**	——	96,000	——	——	5.0	1125	1/6	1025
LG 26**	——	96,000	——	——	5.5	1350	1/4	1075
LG 30*	112,800	112,800	1.00	6.0	6.0	1350	1/4	875
LG 34	112,800	——	1.15	7.0	——	1800	1/3	975
LG 40	150,400	——	1.35	8.0	——	1800	1/3	1075
LG 45	150,400	——	1.50	9.0	——	2250	1/2	1200
LG 50	180,000	——	1.65	10.0	——	2250	1/2	1300
LG 56	180,000	——	1.85	11.0	——	2700	1/2	1400
LG 60	216,000	——	2.00	12.0	——	2700	1/2	1500

*Horizontal or vertical. **Vertical types only.
†Rating Conditions in accordance with A.G.A. ratings: Entering air dry bulb, 70°F. Entering

CONDITIONERS (GAS FIRED)



Connections and dimensions of horizontal type furnaces.



Connections and dimensions of vertical type furnaces.

DUCT SPECIFICATIONS

EQUIPMENT: The erection, assembly and putting into operation of all equipment and control devices shall be performed by the authorized General Electric Distributor, or under his direct supervision.

SHEET METAL INSTALLATION SPECIFICATIONS: The sheet metal installation shall be performed by a heating contractor who will be governed by this specification, the Detail Sheet (DS-324) and the plans accompanying this specification.

WORKMANSHIP: All workmanship shall be neat and first class in every respect. All ducts, branches and risers are to be free flowing and tight, and to this end, shall be constructed according to the drawings with full free area being maintained throughout, without obstructions or abrupt angles unless otherwise specifically indicated by the drawings.

MAIN WARM AIR DISTRIBUTING DUCTS: The main distributing ducts shall be constructed entirely of 26 gage galvanized iron where not wider than 18 inches. Ducts 18 to 36 inches in width shall be constructed entirely of 24 gage galvanized iron. Ducts wider than 30 inches shall be stiffened by standing seams or with ½ inch galvanized angles.

At the point of connection of each main supply and return duct to the Air Conditioner, there shall be provided a 3 inch gap in the duct which shall be covered with canvas not lighter than 10 ounces, firmly and neatly attached but not stretched tightly.

WARM AIR BRANCHES: Warm air pipes or branches may be made of 28 gage galvanized iron. Pipes shall be with locked seams on sides and end joints shall be lapped not less than 1¼ inches. All lapped joints shall be securely fastened with sheet metal screws. Where warm air pipes pass through masonry walls or through partitions, the opening shall clear the metal of the pipe by one inch.

DAMPERS: Tight-fitting dampers shall be provided in all branches and where indicated on drawings. All dampers shall be of locking type with indicator dial attached.

BOOTS AND FITTINGS: Connection between branch leaders in the basement and the risers shall be made with the best type transition fittings which the building construction clearances will permit.

STACKS OR RISERS: Risers may be of either bright tin or 26 gage galvanized iron, rigidly supported by metal straps to adjoining building members, shall be air tight and braced to prevent any reduction of full free area.

RETURN DUCTS: Return ducts shall be constructed entirely of galvanized iron and no wood or other material shall enter into their construction, unless otherwise specified or shown on drawings. Return ducts should follow same specifications as supply ducts.

SUPPORTS: Supports for all ducts and pipes shall consist of 1 inch straps of heavy gage iron securely bolted to ducts and neatly attached to joists at intervals of not more than 8 feet.

REGISTERS AND GRILLES: Warm air and return air registers shall be of sizes shown on plans with prime coat finish with single valves, unless other designs or finishes of registers are specified in the contract.

Where wall registers or grilles are used they shall be set in metal plaster frames, so the register face can be removed without disturbing plaster.

All warm air registers and grilles shall be sealed tightly to the surface against which they are installed to prevent air leakage between the frame of the register and the wall surface.

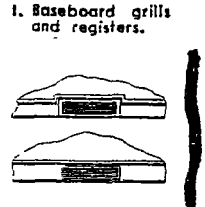
The interior of all warm air and return air register boxes are to be painted black.

CLOSING OF OPENINGS: All warm air and return openings are to be sealed during construction to prevent plaster, wood trimmings, etc. from entering the ducts.

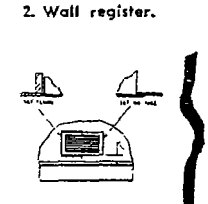
INSULATION: Where warm air ducts or branches pass through walls or partitions, ½ inch insulation shall be used.

All single stacks and other warm air ducts in outside walls or portions of building exposed to the weather — garages — unexcavated spaces — shall be covered throughout their length with ½ inch insulation. All supply ducts used for cooling shall be insulated with minimum of ½ inch insulation.

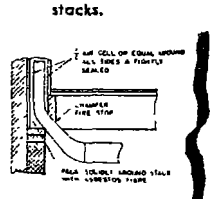
1. Baseboard grills and registers.



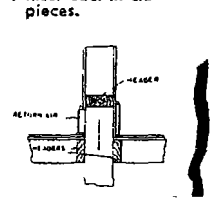
2. Wall register.



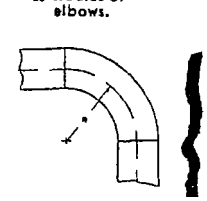
3. Outside wall stacks.



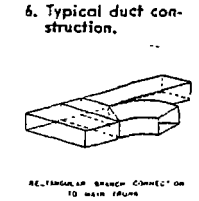
4. Riser duct in stud pieces.



5. Radius of elbows.



6. Typical duct construction.



SELF CONTAINED

GENERAL ELECTRIC

G-E UNIT AIR CONDITIONERS

LARGE ROOM OR STORE SIZE

For cool summer comfort in shops, stores, restaurants, offices, hospitals, homes

IS A CENTRAL PLANT SYSTEM NECESSARY?

Before saying yes, see what General Electric Packaged Weather offers you...and your clients.

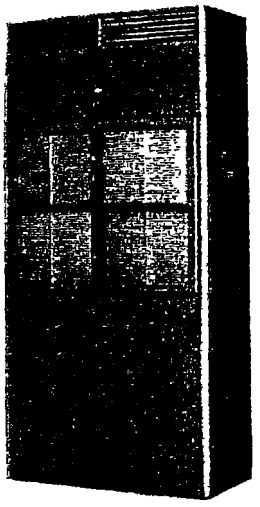
You can supply air conditioning without duct work . . . in a single, handsome unit . . . at an amazing low cost. It's real air conditioning, too. Air is filtered free of dust and dirt, cooled, dehumidified and circulated correctly.

G-E FEATURES

ATTRACTIVE APPEARANCE: Golden brown color — pleasing proportions — rounded corners — made to harmonize with most interiors.

SIMPLICITY OF INSTALLATION: Separable construction on larger sizes permits ease of handling — installed without supply or return ducts if desired — no refrigerant piping.

EASE OF RELOCATION: Unit is self-contained and can be easily moved to new location.



TYPE FD

SMALL FLOOR SPACE: The proportions of the unit are designed to require minimum floor space.

Optional features include:

DIRECTIONAL AIR FLOW: Air distributor designed to distribute air, tailored to fit the conditioned space.

WINTER AIR CONDITIONING: Heating and humidifying equipment is available for winter operation to provide heat and humidification in addition to circulation, ventilation and filtering.

AUTOMATIC CONTROL: Automatic cooling control is provided by either a built-in or wall mounted G-E cooling thermostat—time switch available to provide night and weekend shutdown of equipment. (See your A.I.A. File No. 30-F-2.)

RATINGS

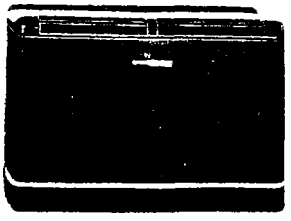
Compressor Hp. Sizes — 1½, 2, 3, 5, 7½, 10.
Nominal Cooling Capacity — 1 ton per hp.
Nominal Latent Heat Removal — 30 to 35%.
Nominal Air Flow — 400 cfm. per ton.

G-E ROOM COOLERS

INDIVIDUAL ROOM SIZE

For cool summer comfort in homes, offices, apartments, hotels, hospitals

Type FA-50 is a ½ hp. window mounted unit which provides cooling, dehumidifying, circulation, ventilation and cleaning.



TYPE FA

G-E FEATURES

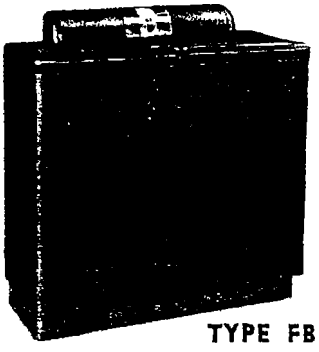
PLEASING APPEARANCE: Obtained by an attractive cabinet consisting of a walnut top with leather grained sides and front.

EASE OF INSTALLATION: Made possible by the use of a quickly installed window clamp requiring no screws to damage the woodwork. No piping or special wiring is needed — electrical connections being made by plugging into a convenient outlet.

COMPACTNESS: Attained by a unique arrangement of parts. The unit extends only 9 ins. into the room from window sill and is 19 ins. high by 28 ins. wide. (Also see your A.I.A. File No. 30-F-2.)

A.S.R.E. STANDARD RATING

Gross cooling capacity, Btu. per hr.	5450
Net cooling capacity, Btu. per hr.	5000
Latent heat removal, per cent	20
Power input, watts	730
Room Air Circulation, cfm.	200



TYPE FB

Types FB-50 and FB-70. ½ and ¾ hp. respectively, are floor mounted units for providing cooling, dehumidifying, circulation, ventilation and cleaning.

Overall Dimensions	FB-50	FB-70
Height, in.	39½	39½
Width, in.	28½	36½
Depth, in.	18	19

G-E FEATURES

ATTRACTIVE CABINET: Walnut top and discharge grille with antique leather sides and front — top of unit unobstructed permitting use of vase or other decoration.

MODERN CONTROL PANEL: Dash board style with indicating pilot lights — contains switches for controlling cooling, recirculation and ventilation — all conveniently mounted on top of cabinet.

100% VENTILATION: Made possible by ingenious damper arrangement which switches air circuits permitting one fan to pull fresh air into room (200 cfm. for FB-50 and 280 cfm. for FB-70), and a second fan to exhaust an equal amount of room air outdoors through its half of the condenser.

(Also see your A.I.A. File No. 30-F-2.)

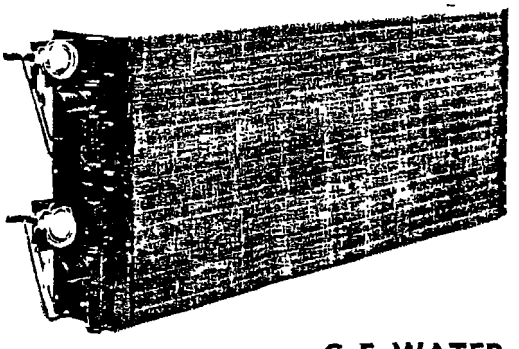
A.S.R.E. STANDARD RATING

	FB-50	FB-70
Gross cooling capacity, Btu. per hr.	6600	8700
Net cooling capacity, Btu. per hr.	6000	8000
Latent heat removal, per cent	25	25
Power Input, kw.	1.00	1.32
Room air circulation, cfm.	200	280

AIR CONDITIONING FOR REMOTE INSTALLATION

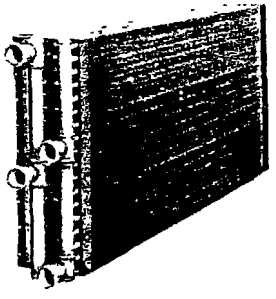
G-E AIR CONDITIONING COILS FOR HEATING AND COOLING

A complete line of heating and cooling coils for the full range of air conditioning applications. Coils have copper fins, Electro-Thermally bonded to copper tubing to maintain high heat transfer efficiency. Copper return bends are silver brazed to tubing. Sturdy steel tube sheet serves as compact end casing and mounting flange. Coils are especially designed for mounting in housing or ducts, and can be bolted together to form a continuous, unbroken surface. From top to bottom and from end to end, the face area of G-E coils is 100% effective, with no waste space taken up by supports, braces or casings. A condensed table of sizes is given below; they are also available in 2 in. steps of coil length so that it is seldom necessary to alter plenum chambers or housings to accommodate G-E coil surface. All coils built by special machinery in General Electric factories. Descriptive bulletins and full application data now available on each line of coils.



DIRECT EXPANSION COILS
For Cooling and Dehumidification with Freon-12 Refrigerant

Built for direct expansion of refrigerant, these coils represent the ultimate in flexibility and adaptability to summer air conditioning systems. Freon is fed to coils through a *multiple outlet expansion valve and distributing header* which assures uniform liquid distribution even under widely varying loads. Expansion valves are mounted at the factory. All connections are silver brazed. To deoxidize inside surfaces, coils are filled with nitrogen during brazing, leaving them clean and bright. For full description and detailed instructions for coil selection, see your A.I.A. File No. 30-F, or write for booklet 450-3.



G-E WATER COILS
For Air Conditioning Systems Using Well, Chilled or Hot Water

G-E water coils have been carefully designed for air conditioning service where the medium of heating or cooling is well water, refrigerated water, or hot water. They are available in two types: sealed circuit coils for recirculation of refrigerated water or hot water, and cleanable coils for well water, city water, or cooling tower systems where the inside of the tubes must be cleaned occasionally. Sealed circuit coils are of the same general construction as direct expansion coils, plus generous manifolds of wrought copper, silver brazed to the tubing. They are available in both counter-flow and mixed-flow types. Cleanable coils have easily removed welded headers of copper bearing steel, and are available for single pass, multiple pass, or special flow arrangements. Write for booklet 450-6.

Steam Coils

For use in air conditioning systems using steam as the heating medium. G-E steam coils are available with the same superior features as G-E direct expansion and water coils.

FACE AREA OF G-E DIRECT EXPANSION AND WATER COILS

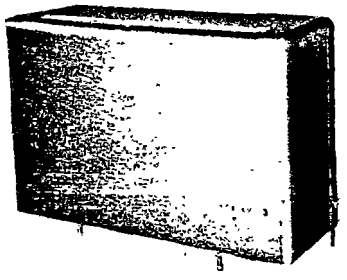
Face Height Inches	Number Tubes High	ACTIVE TUBE LENGTH—INCHES										
		24	30	36	42	48	54	60	66	72	78	84
		SQUARE FEET FACE AREA										
13	8	2.17	2.71	3.25	3.79	4.33	4.87	5.41	5.95	6.50	7.03	7.58
19½	12	3.25	4.06	4.87	5.68	6.50	7.30	8.12	8.94	9.74	10.57	11.38
29¼	18	4.87	6.08	7.31	8.53	9.74	10.97	12.20	13.10	14.63	15.84	17.06
42½*§	26				12.32	14.07	15.84	17.61	19.35	21.13	22.87	24.64
48¾†	30					16.24	18.27	20.32	22.34	24.37	26.41	28.44
58½‡	36							24.40	26.80	29.26	31.68	34.12

Tube rows available in direction of air flow, 2, 3, 4 and 6 for sealed circuit water coils and direct expansion coils; 4 and 6 rows only for cleanable water coils. For greater depths use combinations of these single coils. Face areas are the same for all coils.

* Combination of 29¼" and 13" height.
† Combination of 29¼" and 19½" height.
‡ Combination of two 29¼" height.
§ These sizes not available in cleanable type coils.

G-E ROOM AIR CONDITIONERS FOR REMOTE INSTALLATION

Units for Operation From a Central Source of Heating and Cooling

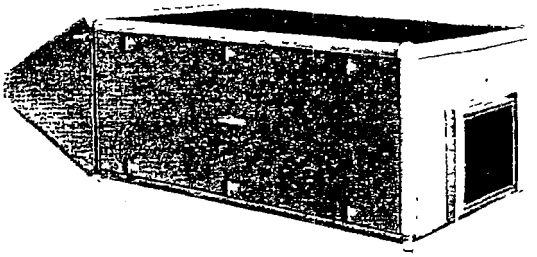


G-E Room Air Conditioners provide individual control of room conditions in large, multi-tenant buildings. Built to operate from a central refrigeration or heating plant, they furnish complete air conditioning from an attractive cabinet of well coordinated design. The basic unit is housed in a one-piece steel cabinet 40 in. wide, 15 in. deep, and 27½ in. high (including ½ in. adjustable legs). Two 6 in. SISW multivane fans, driven by a single motor, provide thorough air circulation. One of these fans is arranged to provide positive ventilation at all times. Cooling coils are available for direct expansion or chilled water, and heating coils for steam or hot water. Capacities up to 20,000 Btu. per hr. cooling, and up to 35,000 Btu. per hr. heating. Separate filters for ventilation air and recirculated air. Adjustable air discharge grille. Exceptionally quiet in operation. G-E room air conditioners can be varied in design detail to meet special requirements. For further data see your A.I.A. File No. 30-F, or write for booklet 446-2.

Important Notice to Engineers, Architects and Contractors. Refrigeration and central plant air conditioning equipment of 5 hp. and above is sold only direct to contractors. For details of this new, cooperative plan, write the Contractor Sales Division, General Electric, Five Lawrence St., Bloomfield, N. J.

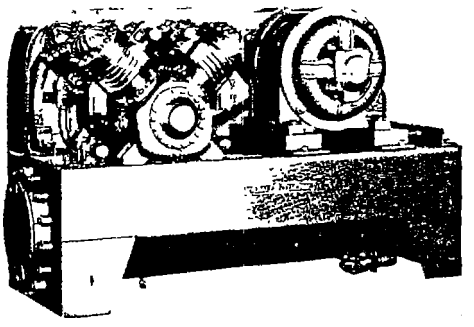
GENERAL ELECTRIC CENTRAL PLANT EQUIPMENT

CENTRAL PLANT AIR CONDITIONERS For Summer, Winter or Year Around Air Conditioning



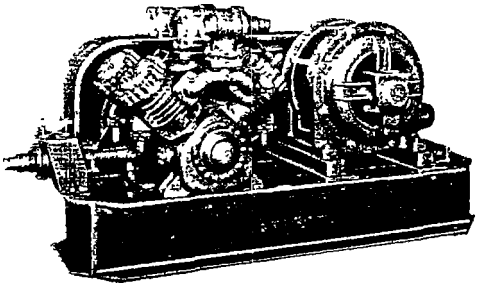
General Electric central plant air conditioners are designed for engineered, custom-built air conditioning systems for the popular types of air conditioning applications — stores, offices, restaurants, etc., and for groups of rooms such as offices or hotel rooms. They are available in a complete range of sizes from 5 to 30 tons of refrigeration in cooling, with comparable capacities for heating service. Cooling coils are of the same advanced design and construction described on the previous page. They will be furnished for direct expansion of Freon-12 refrigerant, or for chilled water or well water cooling. Heating coils use steam or hot water. Mechanical features include complete insulation; copper bearing steel, corrosion-resistant drain pans; screen drip humidifiers; impregnated spun glass filters, and quiet centrifugal fans. To minimize ductwork and provide flexibility of control, multiple units are recommended for larger-tonnage installations.

CONDENSING UNITS FROM 5 TO 60 HP. Complete, Self-Contained Condensing Units



Now built in a full range of 16 sizes from 5 to 60 hp., General Electric Freon-12 condensing units have an established reputation for smooth, dependable operation, and exceptionally high refrigerating output per unit of electrical input. Outstanding features are close-grain, semi-steel compressor bodies; heavy, drop-forged crankshafts; cylinder and piston surfaces finished to 0.0003" tolerance; low clearance suction and discharge valves; lead-plated, copper compressor gaskets; and a balanced stationary type shaft seal. Both shell-and-coil and shell-and-tube condensers are available. G-E condensing units are particularly well suited to multiple installation in large-tonnage cooling systems. For complete details, see your A.I.A. File No. 30-F, or write for booklet 450-2.

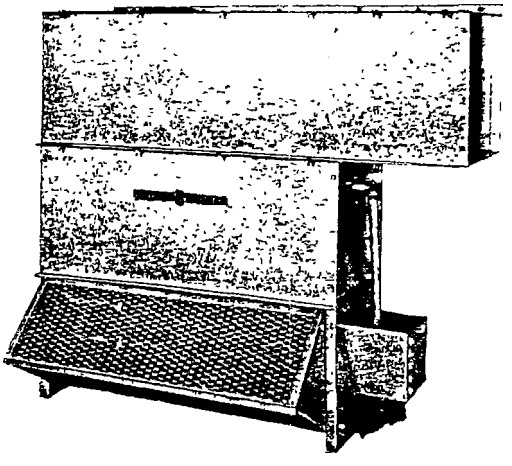
MOTOR-COMPRESSOR UNITS (Less Condenser) From 5 to 60 HP. For use with Evaporative Condensers or Cooling Towers



General Electric compressors (mounted on base with motor, but without condenser) are used wherever local conditions dictate the use of evaporative condensers. These compressors are of the same advanced design and construction as G-E condensing units described above. For details, see your A.I.A. File No. 30-F or write for booklet 450-4.

GENERAL ELECTRIC EVAPORATIVE CONDENSERS

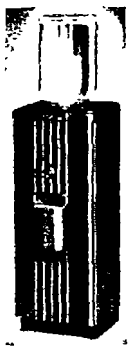
Provide a 90% Reduction in Water Consumption, Capacities up to 50 Tons in a Single Unit



By using and re-using water ordinarily wasted from water-cooled condensers, General Electric evaporative condensers save 90% and more in water consumption. Hence they are a decidedly profitable investment wherever water costs are high. G-E evaporative condensers are built up to 50 tons capacity in a single unit, and can be operated in multiple for larger installations. They are of sturdy, weather-proof construction, and can be installed either indoors or outdoors. For complete description and instructions for selecting G-E evaporative condensers and G-E compressors, their companion equipment, to meet air conditioning requirements, see your A.I.A. File No. 30-F or write for booklet 450-4.

GENERAL ELECTRIC COMMERCIAL REFRIGERATION

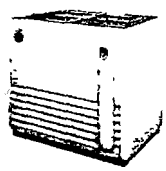
PACKAGED EQUIPMENT



WATER COOLERS

General Electric manufactures a complete line of self-contained drinking water coolers for cup and bubbler service, pressure or bottled water systems. Capacities range from 3½ to 26 gallons per hour cooling water from 80°F to 50°F in an 80°F room. Heavy duty, double bubbler cooler available for use in industrial plants with freeze proof accessories for sub-zero applications.

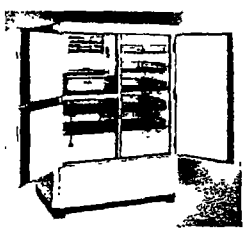
Self-contained, surface type water coolers are available to cool up to 200 gallons per hour from 70°F to 35°F. Designed especially for Bottling Plants.



BEVERAGE COOLERS

G-E Wet Storage, Bottle Beverage Coolers — small model will store 150 and cool up to 56 6 oz. bottles per hour from 80°F to 40°F; is available with dry storage compartment and water cooling coil for glass or bubbler service — large models will store 324 and cool up to 185 6 oz. bottles per hour from 80°F to 40°F; circulating water bath gives high speed cooling.

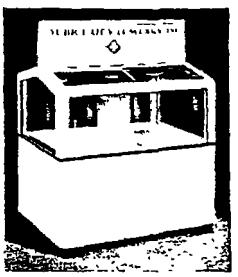
G-E refrigerated dry storage beverage coolers with forced air cooling. Two self-contained models hold 15 and 23 cases of 12 oz. bottles.



FOOD STORAGE CABINETS

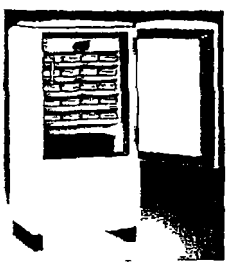
General Electric Storage Cabinets are made in sizes from 20 to 67 cubic feet net volume. Various models feature Conditioned Air Cooling Units for faster Cooling and better food preservation; also ice making cooling units with compartment for frozen foods and high humidity storage for fresh meats. Meat hooks and rails, glass doors, bakery pan racks, biological drawers, diet drawers, vegetable drawers and door locking devices are available for special applications.

Special G-E Refrigerated cabinets are available for use in bakeries, florist shops, hospitals, hotels, milk farms, ranches etc., to suit every need.



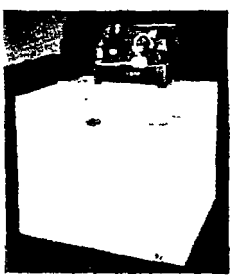
DISPLAY CASES

General Electric Dairy Merchandizers for Island and Semi-island, full vision displays are available in 5 and 10 cubic foot sizes, self-contained. Other food display cases, G-E refrigerated, single or double duty, six to twelve feet long are for self-contained or remote installation.



CUBE ICE MAKER

The General Electric Cube Ice Maker is designed to supply a large quantity of cubes in a little time. Progressive freezing method supplies 14 lbs. of cubes in 3 hours or 35 lbs. (280 ice cubes) in 5½ hours in 80°F room temperature.



MILK COOLERS

Self Contained Milk Coolers refrigerated by General Electric in 2, 3, 4, 6, 8 and 10 can sizes for wet storage and 72 or 96 quart bottle sizes for dry storage. Wet storage type features Cold Spray equipment which cools 10 gallon cans from 90°F to below 50°F in 40 minutes. Dry storage types are available with ice making compartment.

FROZEN FOOD CABINETS

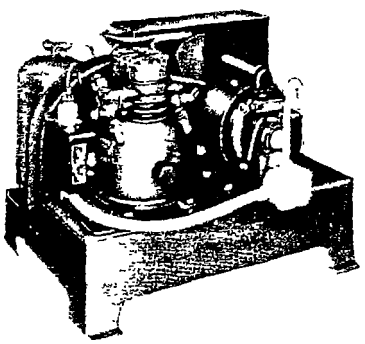
Freezers and Frozen Food refrigators for farm and home use, completely self-contained with General Electric refrigerating equipment. Replaces old canning methods; reduces labor and costs. Frosted Food Cabinets for retail use have storage capacities from 135 to 585 lbs.

ICE CREAM CABINETS

General Electric Refrigeration is available in a complete line of Ice Cream Cabinets, 5 to 170 gallons storage capacity.

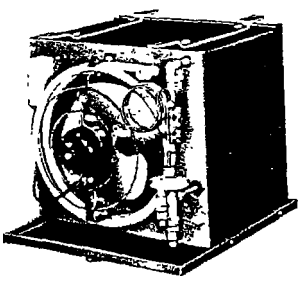
REMOTE EQUIPMENT

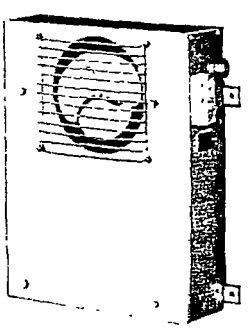
CONDENSING UNITS



For Commercial Refrigeration applications, either self-contained or remote, the General Electric Co. manufactures a complete line of air and water cooled condensing units from ¼ to 60 horsepower. These "Scotch Giants" are renowned for their economy and dependability. Their thrifty performance and high quality result from the coordinated design of all parts by General Electric—the world's largest manufacturer of electrical equipment. For complete information on condensing units, up to and including 3 horsepower sizes, write for booklet 460-4.

COOLING UNITS





General Electric pioneered in designing forced air cooling units with the resulting "Conditioned Air Cooling Units" for Commercial Refrigeration. In use they have proved ideal in maintaining weight, freshness and appearance of perishable foods by providing correct conditions of tempeature and humidity.

General Electric equipment for Commercial Refrigeration is designed to meet the ever increasing needs of the industry and is built under rigid manufacturing specifications to give economical, trouble-free service.

Whether you are interested in Fruit Storage, Locker Plants, Fur Preservation, Large Circulating Water systems or any other special application be sure to contact G-E for helpful suggestions and recommendations.

WHAT G-E MEANS TO YOU

Distributor Organization:

A nationwide network of General Electric Distributors is at *your service*. See the Classified Section of your telephone directory.

Contractor Cooperation:

Under its new contractor sales plan, General Electric extends full cooperation to engineers, architects and contractors. A good business policy for all engaged in the design and installation of equipment 5 hp. and above in size.

Acceptance:

In homes, in business and in industry the name, General Electric, has an immediate acceptance.

Price:

Now General Electric equipment is competitively priced.

Dependability:

General Electric equipment is known everywhere for its dependability and long life. *Specify it and forget it!*

Research:

The huge General Electric Research and Engineering Laboratories are continuously developing tomorrow's equipment . . . *today*.

Skill in Manufacture:

The development of modern machinery *plus skillful training* is General Electric's manufacturing formula.

Installation:

General Electric equipment is shipped with full diagrams and assembly instructions . . . easily, quickly installed.

Undivided Responsibility:

The G-E Monogram is your assurance that the General Electric Company stands firmly behind each and every product.

Warranty:

Every product is warranted by one reliable, qualified manufacturer . . . the General Electric Company.

All data on these pages subject to change without notice.

FIVE LAWRENCE ST., BLOOMFIELD, NEW JERSEY

GENERAL ELECTRIC

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