

AMERICAN-Standard

4.E.M. 1/3/64

20.5% (except separate controls 1.30 at 25%.)

*Hydronic Heating Equipment trade price book

HH-4

JANUARY 2, 1964

*Hydronics . . . the science of heating and cooling with water.

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notice:

The Trade Prices shown herein do not include freight or cartage, installation or any local taxes.



AMERICAN-Standard

PLUMBING AND HEATING DIVISION

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION
40 WEST 40TH STREET • NEW YORK, N.Y. 100

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GENERAL INFORMATION

AMERICAN-Standard HYDRONIC HEATING

BOILER RATINGS

Boiler ratings ("net I=B=R ratings of Mbh and sq ft of steam", "net rating sq ft water" and "installed radiation", where shown) represent the maximum net loads that may be connected to the boilers. Steam sq ft ratings are based on 240 Btu per sq ft and water sq ft ratings on 150 Btu (170° water) per sq ft. Allowances have been made in these ratings for normal piping (covered) and pick-up loads and for heating domestic hot water under the following conditions:

It is not necessary to increase the boiler size for domestic hot water supply when not more than two bathrooms are to be served or if the use of domestic hot water does not exceed seventy-five gallons in twenty-four hours.

Sufficient radiation must be installed for the requirements of the building.

In order to select the proper size boiler calculate the heat loss of the building, then divide this figure by 1,000 to get the heat loss expressed in Mbh. Select a steam or water boiler which has a net Mbh rating equal to or greater than this figure using the appropriate steam or water column.

See current literature for determining the size of radiators and convectors for hot water systems.

For an installation where unusual conditions such as large pipe losses, intermittent heating, unbalanced systems, etc., are encountered, it is suggested to calculate the actual piping loss and estimate the pick-up factor to adjust the load and then select the boiler from the published gross output in Mbh (1,000 Btu per hour).

GAS FIRED BOILERS

The input and output ratings are approved by the American Gas Association.

Ratings shown are for installations at sea level and at elevations up to 2,000 feet. For altitudes above 2,000 feet, ratings should be reduced at the rate of 4% for each 1,000 feet above sea level.

OIL FIRED BOILERS

The firing rates or I=B=R burner capacities—gallons per hour—are based on the use of oil having 140,000 Btu per gallon heat value, and with 10% CO₂ in the flue gas.

When more than two bathrooms are to be supplied with domestic hot water or when the demand for domestic hot water exceeds seventy-five gallons in twenty-four hours increase the boiler size 120 Btu per hour for each gallon of storage tank capacity.

When Built-in Tankless Heater is used increase the boiler size 12 Mbh for each bathroom in excess of two.

STOKER FIRED BOILERS

The firing rates or I=B=R burner capacities—pounds per hour—are based on the use of coal having 13,000 Btu per pound heat value.

When more than two bathrooms are to be supplied with domestic hot water or when the demand for domestic hot water exceeds seventy-five gallons in twenty-four hours increase the boiler size 120 Btu per hour for each gallon of storage tank capacity.

HAND FIRED BOILERS

The ratings (installed radiation sq ft) are based on the use of stove or nut size bituminous coal, anthracite coal or coke with 13,000 Btu per pound heat value. See table below for selecting proper size boiler when using coal with less than 13,000 Btu per pound.

When more than two bathrooms are to be supplied with domestic hot water or when the demand for domestic hot water exceeds seventy-five gallons in twenty-four hours increase the boiler size 120 Btu per hour for each gallon of storage tank capacity.

BUILT-IN WATER HEATERS for A-3, A-5, A-7, Severn and Exbrook Boilers

All tank type built-in water heaters are rated on the basis of raising the temperature of the domestic hot water 100°F. in three hours with a minimum boiler water temperature of 180°F. on automatically fired boilers and 212°F. on hand fired boilers.

All tankless type built-in water heaters are rated in gallons per minute on the basis of a minimum boiler water temperature of 180°F. on oil fired boilers. The maintaining of 180°F.

boiler water temperature with rated flow through a tankless type built-in water heater is dependent on the oil firing rate for the boiler.

In those areas where excessive lime exists in the water, use of built-in tankless type water heater is not recommended except when provision is made for regularly cleaning the heater. Use of tank type heater is recommended in hard water areas.

WHEN PIPING LOSS IS NEGLIGIBLE

The load connected to automatically fired water boilers may be increased by 12% when the piping loss of the installation is negligible. The load connected to steam boilers (all fuels) and coal (hand fired) water boilers may be increased by the percentages shown below when the piping loss of the installation is negligible.

load installed radiation sq ft		increase load by
Steam (all fuels)	Water coal (hand fired)	
up to 250	up to 400	30%
251—500	401—800	28%
501—1000	801—1600	24%
1001—1500	1601—2400	21%
1501—2000	2401—3200	18%
2001—3000	3201—4800	15%
3001—4000	4801—6400	13%
over 4000	over 6400	12%

WHERE COAL HAS LESS THAN 13,000 BTU CONTENT

When selecting hand fired boilers for burning coal of lower heating value than 13,000 Btu per pound the following correction factors should be used. Multiply the net load by the proper factor and select the boiler with the corresponding rating (installed radiation sq ft).

heating value of coal	correction factor	heating value of coal	correction factor
13,000	1.00	10,500	1.24
12,500	1.04	10,000	1.30
12,000	1.08	9,500	1.37
11,500	1.13	9,000	1.44
11,000	1.18		

INSTRUCTIONS FOR ORDERING GAS BOILERS:

- Specify complete boiler number.
- Specify type of gas (if LP gas, whether butane or propane), Btu (heat value of gas), specific gravity.
- Specify elevation at point of installation if in excess of 2,000 feet and indicate barometric pressure.
- Specify optional equipment in detail.

REPAIR PARTS—TRADE PRICES

Boilers (all fuels)	.....	List Price, less 25%
Gas Conversion Burners	.....	List Price, less 25%
For List Prices see "American-Standard Radiator Heating Repair Parts Catalog" 1956 Edition.		
Oil Burners	.....	List Price, less 25%
For List Prices see "American-Standard Arcoflame Oil Burner Repair Parts Catalog" 1956 Edition.		

MM-4

AMERICAN-Standard HYDRONIC HEATING

**PACKAGED BOILERS
GAS FIRED
WATER**

GPR PACKAGED AMERICAN-Standard GAS BOILERS

Designed and equipped with controls for forced circulation.

Factory assembled and crated.

Built-in air-separator in top section.

A.G.A. approved for combustible floor and closet installations.

Controls regularly furnished for 115 volt, 60 cycle current.

Ratings shown are for installations at sea level and up to 2,000 feet.



WATER

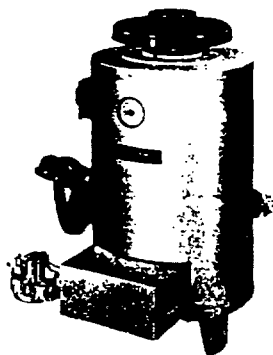
for Natural, Manufactured, Mixed, Gas
controls arranged for non-100% shut-off

packaged boiler number	A.G.A. input Mbh	A.G.A. output Mbh	net I=B=R rating Mbh	net rating sq. ft. water	Trade Price with standard equipment	chimney size		approx. shipping weight
						diameter inches	height feet	
GPR-60	75	60	45	300	\$225.00	5	20	205
GPR-80	100	80	60	400	245.00	5	20	235

WATER

for Propane and Butane Gas
controls arranged for 100% shut-off

GPR-60	70	56	42	280	\$225.00	5	20	205
GPR-80	95	76	57	380	245.00	5	20	235



Standard equipment all boilers:

V-600 combination diaphragm gas valve furnished for all gases. V-600 features built-in gas pressure regulator (except for LP gas) and thermocouple type safety pilot switch. Manual shut-off valve; pilot cock; pilot filter (for manufactured gas and S.U.R.); drain valve; draft hood; insulated round jacket; transformer; ASME relief valve (30 lbs.); pressure and temperature gauge (30 lbs.); wiring harness; 1" circulator; CB-58009 thermostat; AY-553 and AY-686 limit controls with HI-LO limit selector switch.

Note: Packaged boilers are shipped with jacket, all controls (except thermostat), circulator, main burners and manifold controls and piping factory installed and wired. CB-58009 thermostat, manual shut-off valve, relief valve and draft hood shipped inside boiler crate.

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Optional equipment:

Pilot filter for natural or mixed gas furnished at no charge when specified on order to meet local utility codes.

Self-energizing controls (consist of special gas valve, thermostat, pilot burner, limit control) for all gases listed above, available when specified on order at no additional charge.

Note: In areas where manual opening feature is normally desired, GPR boilers are furnished with self-energizing controls as shown above. V-600 gas valves with manual opening for GPR not available.

Zone valve packages are available for water boilers. For details and prices, see page 30

Ordering Examples:

1. Packaged boiler with standard equipment:
1 GPR-60 boiler
Nat. gas, 1000 Btu, .6 sg.
2. Packaged boiler with optional equipment:
1 GPR-80 boiler with pilot filter with self-energizing controls
Mfd. gas, 550 Btu, .65 sg.

Notes:

- For ordering instructions, see page 2.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.

**PACKAGED BOILERS
GAS FIRED
WATER**

**AMERICAN-Standard
HYDRONIC HEATING**

GPH PACKAGED AMERICAN-Standard GAS BOILERS

Designed and equipped with controls for forced circulation.
Factory assembled and crated.
Square jacket.
Built-in air-separator in top section.
A.G.A. approved for combustible floor and closet installations.
Controls regularly furnished for 115 volt, 60 cycle current.
Ratings shown are for installation at sea level and up to 2,000 feet.

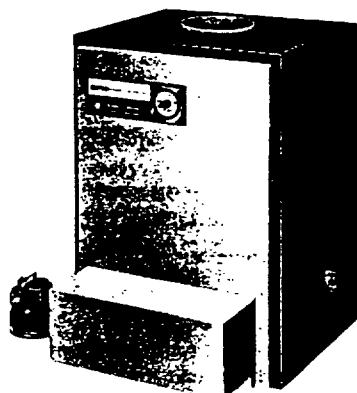


WATER for Natural, Manufactured, Mixed, Gas

packaged boiler number	A.G.A. input Mch	A.G.A. output Mch	net I=B=R rating Mch	net rating sq ft water	Trade Price with standard equipment	chimney size		approx. shipping weight
						diameter inches	height feet	
GPH-100	125	100	75	500	\$280.00	6	20	315
GPH-135	169	135	101	673	340.00	7	20	360
GPH-170	213	170	128	853	400.00	7	20	400

WATER for Propane and Butane Gas

packaged boiler number	A.G.A. input Mch	A.G.A. output Mch	net I=B=R rating Mch	net rating sq ft water	Trade Price with standard equipment	diameter inches	height feet	approx. shipping weight
GPH-100	120	96	72	480	\$280.00	6	20	315
GPH-135	160	128	96	640	340.00	7	20	360
GPH-170	200	160	120	800	400.00	7	20	400



Standard equipment all boilers:

V-600 combination diaphragm gas valve, arranged for 100% shut-off, furnished for natural, mixed and LP gases. V-600 features built-in gas pressure regulator (except for LP gas) and thermocouple type safety pilot. Manual shut-off valve; pilot cock; pilot filter (for manufactured gas and S.U.R.); drain valve; draft hood; insulated square jacket; transformer; ASME relief valve (30 lbs.); pressure and temperature gauge (30 lbs.); wiring harness; 1 1/4" circulator; CB-52502 thermostat; AY-553 and AY-686 limit controls with HI-LO limit selector switch.

Non-100% shut-off with self-energizing controls furnished for manufactured gas. Self-energizing controls consist of special gas valve, thermostat, pilot burner and limit controls.

Note: Packaged boilers are shipped with jacket, all controls (except thermostat), circulator, main burners and manifold controls and piping factory installed and wired. CB-52502 thermostat; manual shut-off valve and relief valve shipped inside boiler crate. Draft hood shipped separately.

Optional equipment:

Pilot Filter for natural or mixed gas furnished at no charge when specified on order to meet local utility codes.

Self-energizing controls (consist of special gas valve, thermostat, pilot burner, limit control) for all gases listed above, available when specified on order at no additional charge.

Note: In areas where manual opening feature is normally desired, GPH boilers are furnished with self-energizing controls as shown above. V-600 gas valves with manual opening for GPH not available.

Zone valve packages are available for water boilers. For details and prices, see page 30.

Ordering Examples:

1. Packaged boiler with standard equipment:
1 GPH-135 boiler
Mfd. gas, 550 Btu, .65 sg.
2. Packaged boiler with optional equipment:
1 GPH-100 boiler
with self-energizing controls
Propane Gas

Notes:

- For ordering instructions, see page 2.
- For complete information on boiler ratings, see page 2.
- For discount on repairs, see page 2.

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AMERICAN-Standard HYDRONIC HEATING

PACKAGED BOILERS
GAS FIRED
WATER

G-2 PACKAGED AMERICAN-Standard GAS BOILERS

Designed and equipped with controls for forced circulation.
Factory assembled and crated.
Deluxe jacket.

Sections tested for 30 lbs. water working pressure.

"Eliminaire" (cast-in air separator in left end section).

Controls regularly furnished for 115 volt, 60 cycle current.

Ratings shown are for installation at sea level and up to 2,000 feet.



WATER

packaged boiler number	A.G.A. input Mbh	A.G.A. output Mbh	tankless heater number	Δ I=W=H rating	net I=B=R rating Mbh	net rating sq ft water	Trade Price with standard equipment	chimney size		approx. shipping weight
	Nat., Mfd., Mixed and LP Gas; LP-Air Gas 525-1400 Btu					diameter inches		height feet		

Packaged boilers with factory installed tankless heater

G-24-DPT	90	72	218	2½	54	360	\$375.00	5	20	390
G-25-DPT	120	96	222	3	72	480	421.00	6	20	470
G-26-DPT	150	120	222	3¼	90	600	464.00	6	20	550
G-27-DPT	180	144	222	3½	108	720	500.00	6	20	642

Packaged boilers without tankless heater

G-23-DP	60	48	...	...	36	240	\$285.00	4	20	315
G-24-DP	90	72	...	...	54	360	342.00	5	20	375
G-25-DP	120	96	...	...	72	480	386.00	6	20	455
G-26-DP	150	120	...	...	90	600	429.00	6	20	540
G-27-DP	180	144	...	...	108	720	465.00	6	20	630

▲ Gallons of water per minute heated from 40F to 140F with 200F boiler water temperature.

Standard equipment all boilers:

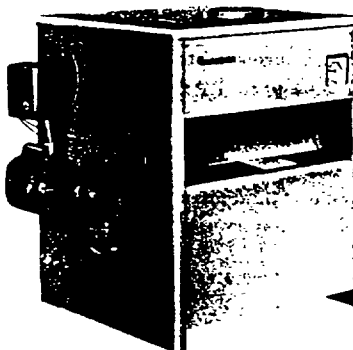
V-600 combination diaphragm gas valve furnished for Natural, Manufactured, Mixed, LP-Air, and LP gas boilers. V-600 features built-in gas pressure regulator (except for LP Gas) and thermocouple type safety pilot switch. Manual shut-off valve; Pilot cock; Pilot filter (for manufactured gas and S.U.R.); Drain valve; Draft hood; Insulated jacket; Transformer; ASME relief valve (30 lbs.); Pressure and temperature gauge (30 lbs.); Wiring Harness; 1¼" circulator with piping.

Additional standard equipment for boilers with heater:

Tankless heater as listed above.
combination immersion control (high and low limits, circulator operation, transformer and built-in relay), CB-52502 thermostat.

Additional standard equipment for boilers less heater:

CB-52502 thermostat, combination immersion high limit and reverse acting control.
Left hand end section without tankless heater opening.



Note: Packaged boilers are shipped with jacket, all controls (except thermostat), circulator and piping, main burners and manifold controls and piping factory installed and wired. CB-52502 thermostat, manual shut-off valve and relief valve shipped fastened inside boiler crate. Draft hood shipped in separate carton for G-23-DP.

Ordering Examples:

- Packaged boiler without tankless with standard equipment:
1 G-24-DP boiler
Nat. gas, 1000 Btu, .6 sg.
- Packaged boiler with factory installed heater with optional equipment:
1 G-26-DPT boiler with push button electric ignition
Mfd. gas, 550 Btu, .65 sg.

Notes:

- For ordering instructions, see page 2.
For optional equipment, see page 9.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.

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**PACKAGED BOILERS
GAS FIRED
WATER**

AMERICAN-Standard HYDRONIC HEATING

G-2 PACKAGED ALL-PURPOSE AMERICAN-Standard GAS BOILERS

Designed for forced or gravity circulation.
Factory assembled and crated.
Deluxe Jacket.

Sections tested for 30 lbs. water working pressure.

"Eliminaire" (cast-in air separator in left end section).

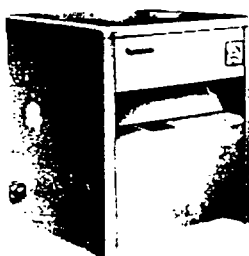
Controls regularly furnished for 115 volt, 60 cycle current.

Ratings shown are for installation at sea level and up to 2,000 feet.



WATER

packaged boiler number	A.G.A. input Mbh	A.G.A. output Mbh	net I= B = R rating Mbh	net rating sq ft water	Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Nat., Mfd., Mixed and LP Gas; LP-Air Gas 525-1400 Btu					diameter inches	height feet	
G-23-DPG	60	48	36	240	\$208.50	4	20	317
G-24-DPG	90	72	54	360	265.50	5	20	377
G-25-DPG	120	96	72	480	309.50	6	20	457
G-26-DPG	150	120	90	600	350.50	6	20	542
G-27-DPG	180	144	108	720	386.50	6	20	632



Standard equipment:

V-600 combination diaphragm gas valve furnished for all gases. V-600 features built-in gas pressure regulator (except for LP Gas) and thermocouple type safety pilot switch.

Manual shut-off valve; pilot cock; pilot filter (for manufactured gas and S.U.R.); drain valve; draft hood, insulated jacket; transformer.

G-23-DPG furnished without heater opening in left end section.

ASME relief valve; pressure and temperature gauge; CB-65653 immersion limit control.

Draft hood shipped in separate carton for G-23-DPG.

Ordering Examples:

1. Packaged all-purpose boiler with standard equipment:
1 G-25-DPG boiler
Nat. gas, 1000 Btu, .6 sg.
2. Packaged all-purpose boiler with optional equipment:
1 G-26-DPG boiler
with self-energizing controls
1 222 tankless heater
Mfd. gas, 550 Btu, .65 sg.

Notes:

- For ordering instructions, see page 2.
For optional equipment, see page 9.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.

AMERICAN-Standard HYDRONIC HEATING

**BOILERS—GAS FIRED
STEAM and WATER**

G-2 NON-PACKAGED ALL-PURPOSE AMERICAN-Standard GAS BOILERS

Designed for water (forced or gravity) or steam.
Flush or Deluxe jacket.
Factory Assembled Sections.
Sections tested for 30 lbs. water working pressure.
"Eliminaire" (cast-in air separator in left end section).
Controls regularly furnished for 115 volt, 60 cycle current.
Ratings shown are for installation at sea level and up to 2,000 feet.



WATER (Available with factory installed Tankless heater, see options, page 9.)

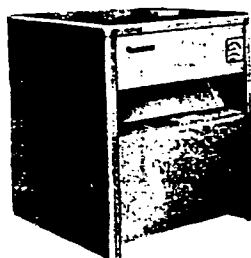
boiler number	A.G.A. input Mbh	A.G.A. output Mbh	net I = B = R rating Mbh	net rating sq ft water	Trade Price with standard equipment less thermostat		chimney size		approx. shipping weight
	Net, Mfd., Mixed and LP Gas; LP-Air Gas 525-1400 Btu				flush jacket	deluxe jacket	diameter inches	height feet	
G-23- [*] W	60	48	36	240	\$187.00	\$201.00	4	20	277
G-24- [*] W(T)	90	72	54	360	244.00	258.00	5	20	353
G-25- [*] W(T)	120	96	72	480	288.00	302.00	6	20	428
G-26- [*] W(T)	150	120	90	600	329.00	343.00	6	20	490
G-27- [*] W(T)	180	144	108	720	365.00	379.00	6	20	553
G-28- [*] W(T)	210	168	126	840	409.00	423.00	7	20	629
G-29- [*] W(T)	240	192	144	960	451.00	465.00	7	20	697
G-210- [*] W(T)	270	216	162	1080	482.00	496.00	7	20	761
G-211- [*] W(T)	300	240	180	1200	528.00	542.00	7	20	841

*Substitute letter "F" for flush or "D" for deluxe jacket. Suffix "T" denotes forced circulation boiler equipped with factory installed tankless heater (see page 9 for added charge).

STEAM

boiler number	A.G.A. input Mbh	A.G.A. output Mbh	net l=B=R rating		Trade Price with standard equipment less thermostat		chimney size		approx. shipping weight
	Net., Mfd., Mixed and LP Gas; LP-Air Gas 525-1400 Btu		Mbh	sq ft	flush jacket	deluxe jacket	diameter inches	height feet	
G-23- [*] S	60	48	36	150	\$224.00	\$238.00	4	20	287
G-24- [*] S	90	72	54	225	281.00	295.00	5	20	363
G-25- [*] S	120	96	72	300	325.00	339.00	6	20	438
G-26- [*] S	150	120	90	375	366.00	380.00	6	20	500
G-27- [*] S	180	144	108	450	402.00	416.00	6	20	563
G-28- [*] S	210	168	126	525	446.00	460.00	7	20	639
G-29- [*] S	240	192	144	600	488.00	502.00	7	20	707
G-210- [*] S	270	216	162	675	519.00	533.00	7	20	771
G-211- [*] S	300	240	180	750	563.00	579.00	7	20	851

*Substitute letter "F" for flush or "D" for deluxe jacket.



Standard equipment:

V-600 combination diaphragm gas valve furnished with all sizes Natural, Mixed, LP-Air, LP gas boilers and G-23 through G-27 Manufactured gas boilers V-600 features built-in gas pressure regulator (except for LP Gas) and thermocouple type safety pilot switch. V-532 diaphragm gas valve furnished for all gases for sizes not listed above with separate gas pressure regulator (except LP) and Baso switch. Manual shut-off valve; pilot cock; pilot filter (for manufactured gas and S.U.R.); drain valve; draft hood; insulated jacket; transformer. Draft hood shipped in separate carton for G-23-D.

For water boilers only:

ASME relief valve; pressure and temperature gauge; CB-65653 immersion limit control.

For steam boilers only:

Steam gauge; ASME safety valve; CB-450552 boiler pressure limit control; gauge glass with trimmings; external resetting low water cut-off; floor pan.

Ordering Examples:

1. Non-packaged all-purpose water boiler with standard equipment and flush jacket:
1 G-27-FW boiler
Nat. gas, 1000 Btu, .6 sg.
2. Non-packaged all-purpose steam boiler with optional equipment and deluxe jacket:
1 G-210-DWT boiler
with (1) No. 232 tankless heater installed Nat gas, 1000 Btu, .6 sg.

Notes:

- For ordering instructions, see page 2.
For optional equipment, see page 9.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.

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AMERICAN-Standard HYDRONIC HEATING

G-2 NON-PACKAGED ALL-PURPOSE AMERICAN-Standard GAS BOILERS

FOR USE WITH "DW" EQUIPMENT

DIRECT TYPE — Water boilers for hot water supply

Flush or Deluxe jacket.
Hydrostatically tested at 200 lbs.
Working pressure 80 lbs.

Not recommended for use in hard water areas.
Controls regularly furnished for 115 volt, 60 cycle current.
Ratings shown are for installation at sea level and up to 2,000 feet.



boiler number	A.G.A. input Mbh	A.G.A. output Mbh	rating—gallons water per hour			Trade Price with "DW" equipment		approx. shipping weight
			60° rise	80° rise	100° rise	flush jacket	deluxe jacket	
	Nat., Mfd., Mixed and LP Gas; LP-Air Gas 525-1400 Btu							
G-23.*W	60	48	96	72	58	\$201.00	\$215.00	277
G-24.*W	90	72	144	108	86	258.00	272.00	353
G-25.*W	120	96	192	144	115	302.00	316.00	428
G-26.*W	150	120	240	180	144	343.00	357.00	490
G-27.*W	180	144	288	216	173	379.00	393.00	553
G-28.*W	210	168	336	252	201	423.00	437.00	629
G-29.*W	240	192	384	288	230	465.00	479.00	697
G-210.*W	270	216	432	324	260	496.00	510.00	761
G-211.*W	300	240	480	360	288	542.00	556.00	841

*Substitute letter "F" for flush or "D" for deluxe jacket.

"DW" standard equipment:

In addition to boiler for water with "standard equipment" page 7, "DW" boilers are furnished with pressure gauge; 80 lb ASME relief valve instead of 30 lb. valve; immersion operating control for use in storage tank; tank thermometer; name and rating plate for 80 lbs. working pressure.

Ordering Examples:

1. Non-packaged all-purpose water boiler with standard equipment and flush jacket for hot water supply:

1 G-24-FW boiler with "DW" equipment
Nat. gas, 1000 Btu, .6 sg.

2. Non-packaged all-purpose boiler with optional equipment and deluxe jacket for hot water supply:

1 G-25-DW boiler with "DW" equipment with manual opening feature on V-600 valve
Nat. gas, 1000 Btu., .6 sg.

FOR USE WITH "IS" EQUIPMENT

INDIRECT TYPE — Steam boilers for hot water supply

Flush or Deluxe jacket.



boiler number	A.G.A. input Mbh	A.G.A. output Mbh	rating—gallons water per hour			Trade Price with "IS" equipment		approx. shipping weight
			60° rise	80° rise	100° rise	flush jacket	deluxe jacket	
	Nat., Mfd., Mixed and LP Gas; LP-Air Gas 525-1400 Btu							
G-23-*S	60	48	96	72	58	\$234.00	\$248.00	287
G-24-*S	90	72	144	108	86	291.00	305.00	363
G-25-*S	120	96	192	144	115	335.00	349.00	438
G-26-*S	150	120	240	180	144	376.00	390.00	500
G-27-*S	180	144	288	216	173	412.00	426.00	563
G-28-*S	210	168	336	252	201	456.00	470.00	639
G-29-*S	240	192	384	288	230	498.00	512.00	707
G-210-*S	270	216	432	324	259	529.00	543.00	771
G-211-*S	300	240	480	360	288	575.00	589.00	851

*Substitute letter "F" for flush or "D" for deluxe jacket.

"IS" standard equipment:

In addition to boiler for steam with "standard equipment" page 7, "IS" boilers are furnished with immersion operating control for use in storage tank.

Ordering Examples:

1. Non-packaged all-purpose steam boiler with standard equipment with deluxe jacket for hot water supply:

1 G-26-DS boiler with "IS" equipment
Nat. gas, 1000 Btu, .6 sg.

2. Non-packaged all-purpose steam boiler with optional equipment with flush jacket for hot water supply:

1 G-24-FS boiler with "IS" equipment with runner type pilot ignition
Nat. gas, 1000 Btu, .6 sg.

Notes:

For ordering instructions, see page 2.

For optional equipment, see page 9.

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

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AMERICAN-Standard HYDRONIC HEATING

**BOILERS—GAS FIRED
STEAM AND WATER**

G-2 OPTIONAL EQUIPMENT

ALL BOILERS Pages 5 thru 8:

Runner type pilot ignition for use with listed gases furnished at no charge when specified on order to meet local utility codes.

Push button electric ignition for use with listed gases. Not available with self-energizing controls. Specify on order and add \$11.85 to Trade Price of boiler.

Floor shield for combustible flooring. Add suffix letter "C" to boiler number and add \$3.00 to Trade Price of boiler.

Pilot filter for natural or mixed gas furnished at no charge when specified on order to meet local utility codes.

Manual opening feature on V-600 or V-532 gas valves furnished at no additional charge when specified on order to meet local utility codes.

Zone valve packages are available for water boilers. For details and prices, see page 30.

PACKAGED GAS BOILERS Page 5 only: options listed above applicable only to these boilers.

PACKAGED ALL-PURPOSE BOILERS Page 6:

Tankless heaters: when boilers (4 thru 7 section) are to be used for forced circulation I=W=H tankless heaters can be installed in opening used for gravity tapping flange cover. See table below for I=W=H ratings and applicable boiler size. Tankless heaters can be ordered shipped separately at the "sold separate" Trade Prices shown below.

Self-energizing controls (consist of gas valve, pilot burner, limit control) for mfd., natural and mixed gas, available when specified on order at no additional charge. Special thermostat required, for Trade Price, see page 30.

Room thermostat prices shown on page 30.

ALL-PURPOSE BOILERS Page 7:

WATER BOILERS

Factory installed tankless heaters: when boilers (4 thru 11 section) are to be used for forced circulation I=W=H tankless heaters can be specified factory installed. See table below for I=W=H ratings and applicable boiler size. Specify heater, add suffix "T" to boiler number and "factory installed" Trade Price shown below.

ALL-PURPOSE BOILERS Page 7:

WATER BOILERS (continued)

Tankless heaters: when boilers (4 thru 11 section) are to be used for forced circulation I=W=H tankless heaters can be installed in opening used for gravity tapping flange cover. See table below for I=W=H ratings and applicable boiler size. Tankless heaters can be ordered shipped separately at the "sold separate" Trade Prices shown below.

STEAM BOILERS

McDonnell-Miller No. 101-24V Electric Water Feeder can be added to the No. 67-G Low Water Cut-off furnished with G-2 All-Purpose Steam Boilers to provide Low Water Cut-off and Feeder Combination. If desired specify on order and add \$37.07 to Trade Price of Steam Boiler.

Side Outlet ASME Safety Valve may be substituted at no additional charge if specified on order to meet local code requirements.

WATER OR STEAM BOILERS

Self-energizing controls (consist of gas valve, pilot burner, limit control, low water cut-off for steam boilers) for manufactured, natural and mixed gas, available when specified on order at no additional charge. Special thermostat required, for Trade Price, see page 30.

Room thermostat prices shown on page 30.

Zone circulator control for water boiler with tankless heater and combination immersion control-relay: Use one CB-52502 thermostat and one relay for second and/or third zone. For Trade Prices, see page 30.

Dual-gas boilers: available for both natural and propane gases. See below for added charges. Boiler prices on Page 7.

boiler no.	added charge	boiler no.	added charge
G-23	\$50.00	G-28	\$60.00
G-24	52.00	G-29	62.00
G-25	54.00	G-210	64.00
G-26	56.00	G-211	66.00
G-27	58.00		

Equipment includes in addition to standard trim two V-532 gas valves, two manifolds with spuds factory assembled, outdoor changeover control.



G-2 Tankless Heaters

Ratings

boiler number	A.G.A. input Btu/hr.	I=W=H Rating •			
		heater 218	heater 222	heater 226	heater 232
G-24	90,000	2½	—	—	—
G-25	120,000	—	3	—	—
G-26	150,000	—	3¼	—	—
G-27	180,000	—	3½	4	—
G-28	210,000	—	3½	4¼	—
G-29	240,000	—	3½	4¼	4½
G-210	270,000	—	3½	4¼	4¾
G-211	300,000	—	3½	4½	5

• Gallons water per minute heated from 40°F to 140°F with 200°F boiler water temperature.

Trade Prices

heater number	*factory installed	sold separate
218	\$41.00	\$19.00
222	43.00	21.00
226	51.00	29.00
232	55.00	33.00

Factory installed additional price includes combination immersion control-relay packed in trim box

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BOILERS — GAS FIRED
STEAM AND WATER

AMERICAN-Standard
HYDRONIC HEATING

G-40 AMERICAN-Standard GAS BOILERS

For Built-In Water Heater Arrangement, see page 11.
Deluxe jacket.
Tested and equipped for 50 lbs. water working pressure.
"Eliminaire" (cast-in air separator in left end section).
Controls regularly furnished for 115 volt, 60 cycle current.
Ratings shown are for installation at sea level and up to 2,000 feet.



WATER

for Natural, Manufactured, Mixed, Gas

boiler number	A.G.A. input	A.G.A. output	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Mbh	Mbh	rating Mbh	sq ft		diam. in.	ht ft	
G-403-W	150	120	90.0	600	\$ 360.00	6	20	827
G-404-W	225	180	135.0	900	460.00	7	20	998
G-405-W	300	240	180.0	1200	555.00	7	20	1162
G-406-W	375	300	225.1	1500	675.00	8	20	1349
G-407-W	450	360	270.1	1800	780.00	8	20	1517
G-408-W	525	420	315.1	2100	860.00	9	20	1686
G-409-W	600	480	360.1	2400	940.00	10	20	1856
G-4010-W	675	540	405.1	2700	1045.00	10	20	2026

STEAM

boiler number	A.G.A. input	A.G.A. output	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Mbh	Mbh	rating Mbh	sq ft		diam. in.	ht ft	
G-403-S	150	120	90.0	375	\$ 397.00	6	20	858
G-404-S	225	180	135.0	563	497.00	7	20	1027
G-405-S	300	240	180.0	750	592.00	7	20	1195
G-406-S	375	300	225.1	938	712.00	8	20	1370
G-407-S	450	360	270.1	1125	818.00	8	20	1544
G-408-S	525	420	315.1	1313	897.00	9	20	1713
G-409-S	600	480	360.1	1500	977.00	10	20	1880
G-4010-S	675	540	405.1	1688	1082.00	10	20	2050

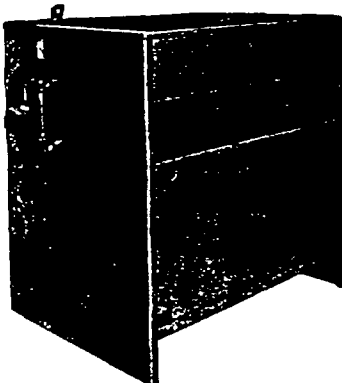
WATER

for LP and LP-Air Gas

boiler number	A.G.A. input	A.G.A. output	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Mbh	Mbh	rating Mbh	sq ft		diam. in.	ht ft	
G-403-W	120	96	72.0	480	\$ 360.00	6	20	827
G-404-W	180	144	108.0	720	460.00	7	20	998
G-405-W	240	192	144.0	960	555.00	7	20	1162
G-406-W	300	240	180.0	1200	675.00	8	20	1349
G-407-W	360	288	216.1	1440	780.00	8	20	1517
G-408-W	420	336	252.1	1680	860.00	9	20	1686
G-409-W	480	384	288.1	1920	940.00	10	20	1856
G-4010-W	540	432	324.1	2160	1045.00	10	20	2026

STEAM

boiler number	A.G.A. input	A.G.A. output	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Mbh	Mbh	rating Mbh	sq ft		diam. in.	ht ft	
G-403-S	120	96	72.0	300	\$ 397.00	6	20	858
G-404-S	180	144	108.0	450	497.00	7	20	1027
G-405-S	240	192	144.0	600	592.00	7	20	1195
G-406-S	300	240	180.0	750	712.00	8	20	1370
G-407-S	360	288	216.1	900	818.00	8	20	1544
G-408-S	420	336	252.1	1050	897.00	9	20	1713
G-409-S	480	384	288.1	1200	977.00	10	20	1880
G-4010-S	540	432	324.1	1350	1082.00	10	20	2050



Standard equipment includes:

V-531 diaphragm gas valve with manual opening feature; Baso automatic pilot switch for non-100% shut-off (100% shut-off controls for LP-air and LP gases consists of Baso combination pilot switch and valve with auxiliary Baso pilot valves. Optional other gases at no additional charge); manual shut-off valve; pilot filter (manufactured gas and SUR); gas pressure regulator (except for LP gas); drain valves; pilot cocks; insulated jacket; draft hood; water heater opening cover plates.

For water boiler only: ASME relief valve for 50 lbs.; pressure and temperature gauge; CB-65653 immersion limit control.

For steam boiler only: Steam gauge; ASME safety valve; CB-450552 boiler pressure limit control; gauge glass with trimmings; external resetting low water cut-off.

Ordering Examples:

1. Water boiler with standard equipment:
1 G-406-W boiler
Nat. gas, 1000 Btu, .6 sg.
2. Steam boiler with optional equipment:
1 G-409-ST
1 No. 226 tankless heater with controls
Nat. gas, 1000 Btu, .6 sg.

Notes:

- For ordering instructions, see page 2.
For optional equipment, see page 11.
For electronic control panel systems, see page 15.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.

AMERICAN-Standard

HYDRONIC HEATING

BOILERS — GAS FIRED
STEAM AND WATER

G-40 OPTIONAL EQUIPMENT

BOILERS WITH TANKLESS HEATERS: water (for forced circulation) and steam boilers can be furnished with tankless heaters. Heaters are limited to boiler sizes as shown in ratings table below. Specify heater and add suffix "T" to boiler number.

Tankless heaters with controls for water boilers: Combination immersion control-relay packed in trim box in place of CB-65653.

Tankless heaters with controls for steam boilers: additional immersion operating control packed in trim box.

If tankless heaters with controls are desired, specify on order with boiler and add to Trade Price of boiler with standard equipment the following charges.

Tankless heaters less controls will be furnished when specified at the Trade Prices shown below for heaters only.

HEATER NO.	HEATER WITH CONTROLS		HEATER ONLY
	Water	Steam	Water or Steam
218	\$41.00	\$29.00	\$19.00
222	43.00	31.00	21.00
226	51.00	39.00	29.00
232	55.00	43.00	33.00
445	72.00	60.00	50.00

Water flow regulators sized for tankless heater involved will be furnished with heater when specified on order to meet local Utility requirement at \$2.00 Trade Price additional charge per heater.

Factory assembled sections: G-403 through G-406 can be shipped with sections factory assembled when specified on order. If desired less tankless heater, add \$15.00 to Trade Price of boiler. If desired with factory installed tankless heater, specify heater number, and add \$15.00 plus price of heater to Trade Price of boiler.

Dual Gas Equipment: available with steam or water boilers for use with Natural and Propane gases only. In addition to standard trim, dual gas equipment includes tube within a tube manifold, two V-532 gas valves, gas pressure regulator (natural gas only), two manual shut-off valves, ribbon burners, 100% shut-off (consists of Baso combination pilot valve and switch with auxiliary Baso pilot valves), pilot cock, outdoor changeover control. Boiler selection should be based on the A.G.A. and I-B-R ratings shown for LP gas. If desired specify on order and add to Trade Price of boiler with standard trim the following charge:

Boiler Number	Add to Boiler Trade Price	Boiler Number	Add to Boiler Trade Price
G-403	\$60.00	G-407	\$68.00
G-404	62.00	G-408	70.00
G-405	64.00	G-409	72.00
G-406	66.00	G-4010	74.00

Electronic Control Systems: available with steam or water boilers. If desired refer to page 15 for complete details and additional Trade Price charges.

F.M. and F.I.A. equipment: requires EG-O or EPG-O electronic control system and special gas control equipment. Price on application.

Try-cock tapings and valves: if desired for steam boilers to meet local code specify on order and add \$4.00 to Trade Price of steam boiler.

Self-energizing controls: available for steam or water (gravity) less tankless heater for natural and mixed gases only. Equipment includes special gas valve, pilot burner, limit control; low water cut-off for steam boilers. Furnished at no additional charge when specified on order. Special room thermostat required, for Trade Price see page 30.

McDonnell-Miller No. 101-24 Volt Electric Water Feeder: can be added to No. 67-G low water cut-off furnished with G-40 Steam Boilers to provide low water cut-off and feeder combination. If desired specify on order and add \$37.07 to Trade Price of steam boiler.

McDonnell-Miller No. 47-2 low water cut-off and feeder combination may be specified in place of regularly furnished No. 67-G for steam boilers. If desired specify on order and add \$33.00 to Trade Price of steam boiler.

McDonnell-Miller No. 247-2 low water cut-off and feeder combination for water boilers is available with G-40 Water Gas Boilers when specified on order. Add to the Trade Price of the water boiler with regular equipment the current Trade Price of this item shown in the current McDonnell-Miller Price Sheet.

Runner type pilot ignition: all sizes of G-40 are available with Runner type pilot ignition for natural, manufactured and mixed gas non-100% shut-off at no additional charge when specified on order to meet local Utility codes.

Push button electric ignition: all sizes of G-40 are available with push button electric ignition for use with natural, manufactured and mixed gas non-100% shut-off and will be furnished when specified on order at \$11.85 added charge.

Pilot filters for G-40 for natural and mixed gases available at no additional charge when specified on order to meet local utility codes.

Thermostats available at Trade Prices shown on Page 30

Zone circulator control for water boiler with tankless heater and combination immersion control-relay: Use one CB-52502 thermostat and one relay for second and/or third zone. For Trade Prices, see page 30.

"IS" Equipment: G-40 Gas Boilers can be furnished for use with Indirect Steam Hot Water Supply systems. CB-65653 immersion operating control for use in storage tank is required and will be furnished when specified on order at extra Trade Price as shown on Page 30.

V-532 Diaphragm Gas Valve without manual opening may be substituted for V-531 Gas Valve with manual opening at no additional charge. If desired, specify on order.

Side Outlet ASME Steam Safety Valves may be substituted at no additional charge if specified on order to meet local code requirements.

Jacket Extension: covers all controls on left end of boiler. If desired, specify on order and add \$25.00 to Trade Price of Boiler. Approximate shipping weight 36 lbs.

G-40 Tankless Heater Ratings (Gallons per minute*)



Boiler	HEATER 218		HEATER 222		HEATER 226		HEATER 232		HEATER 445	
	Steam	Water	Steam	Water	Steam	Water	Steam	Water	Steam	Water
G-403	3	4	—	—	—	—	—	—	—	—
G-404	3½	4	4	4½	—	—	—	—	—	—
G-405	3½	4	4	4½	5½	6	—	—	—	—
G-406	3½	4	4	4½	5½	6	—	—	—	—
G-407	3½	4	4	4½	6	6½	7	7½	—	—
G-408	3½	4	4	4½	6	6½	7½	8	8½	9
G-409	3½	4	4	4½	6	6½	7½	8	8½	9
G-4010	3½	4	4	4½	6	6½	7½	8	8½	9

*Gallons of water per minute raised from 40°F. to 140°F.

04652

**BOILERS — GAS FIRED
STEAM AND WATER**

**AMERICAN-Standard
HYDRONIC HEATING**

G-60 AMERICAN-Standard GAS BOILERS

for Natural, Manufactured, Mixed Gas

Jacketed.

Tested and equipped for 50 lbs. water working pressure.

Available for 80 lbs. working pressure on special order.

Controls regularly furnished for 115 volt, 60 cycle current.

Ratings shown are for installation at sea level and up to 2,000 feet.



WATER

boiler number	A.G.A. input	A.G.A. output	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Mbh	Mbh	net I=B=R rating Mbh	net rating sq ft water		diam. in.	ht ft	
G-606-W	725	580	435.1	2900	\$ 961.00	11	20	2741
G-607-W	870	696	522.1	3480	1118.00	12	20	3141
G-608-W	1015	812	609.2	4060	1283.00	13	20	3527
G-609-W	1160	928	696.2	4640	1461.00	13	20	3923
G-6010-W	1305	1044	783.2	5220	1638.00	14	20	4335
G-6011-W	1450	1160	870.2	5800	1783.00	15	20	4728
G-6013-W	1740	1392	1054.5	7030	2092.00	15	20	6049
G-6015-W	2030	1624	1248.3	8320	2408.00	16	20	6835
G-6017-W	2320	1856	1438.8	9590	2711.00	16	30	7620
G-6019-W	2610	2088	1621.1	10805	3020.00	17	30	8503
G-6021-W	2900	2320	1801.2	12010	3329.00	18	30	9292
G-6022-W	3045	2436	1891.3	12610	3533.00	19	30	10139
G-6025-W	3480	2784	2161.5	14410	3967.00	20	30	11334
G-6028-W	3915	3132	2430.1	16200	4296.00	21	30	12616
G-6031-W	4350	3480	2701.9	18010	4895.00	22	30	13809
G-6033-W	4640	3712	2880.4	19205	5184.00	24	30	15036
G-6037-W	5220	4176	3245.3	21635	5803.00	26	30	16690
G-6041-W	5800	4640	3602.5	24015	6421.00	26	30	18316

STEAM

boiler number	A.G.A. input	A.G.A. output	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
	Mbh	Mbh	Mbh	sq ft		diam. in.	ht ft	
G-606-S	725	580	435.1	1813	\$ 998.00	11	20	2751
G-607-S	870	696	522.1	2176	1155.00	12	20	3151
G-608-S	1015	812	609.2	2538	1320.00	13	20	3537
G-609-S	1160	928	696.2	2901	1498.00	13	20	3934
G-6010-S	1305	1044	783.2	3263	1675.00	14	20	4346
G-6011-S	1450	1160	870.2	3626	1820.00	15	20	4739
G-6013-S	1740	1392	1054.5	4394	2129.00	15	20	6069
G-6015-S	2030	1624	1248.3	5201	2445.00	16	20	6855
G-6017-S	2320	1856	1438.8	5995	2748.00	16	30	7640
G-6019-S	2610	2088	1621.1	6755	3057.00	17	30	8523
G-6021-S	2900	2320	1801.2	7505	3366.00	18	30	9312
G-6022-S	3045	2436	1891.3	7880	3570.00	19	30	10154
G-6025-S	3480	2784	2161.5	9006	4004.00	20	30	11361
G-6028-S	3915	3132	2430.1	10126	4333.00	21	30	12648
G-6031-S	4350	3480	2701.9	11258	4932.00	22	30	13841
G-6033-S	4640	3712	2880.4	12002	5221.00	24	30	15068
G-6037-S	5220	4176	3245.3	13522	5840.00	26	30	16720
G-6041-S	5800	4640	3602.5	15010	6458.00	26	30	18346

Standard equipment includes:

V-531 diaphragm gas valve with manual opening feature; Baso automatic pilot switch for non-100% shut-off (100% shut-off controls consisting of Baso combination pilot switch and valve with auxiliary Baso pilot valves, optional at no additional charge); manual shut-off valve; pilot filter (manufactured gas and SUR); gas pressure regulator; boiler drains and pilot cocks; insulated jacket; draft hood; transformer.

For water boiler only:

ASME relief valve for 50 lbs.; pressure and temperature gauge; CB-65653 immersion limit control.

For steam boiler only:

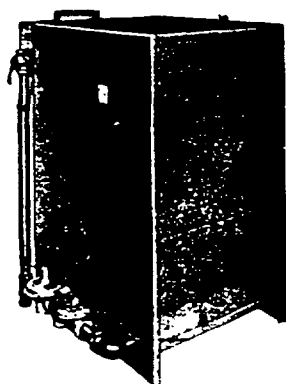
Steam gauge; ASME safety valve; CB-450552 boiler pressure limit control; gauge glass with trimmings; resetting low water cut-off.

Ordering Examples:

1. Water boiler with standard equipment:
1 G-608-W boiler
Nat. gas, 1000 Btu, .6 sg.
2. Steam boiler with optional equipment:
1 G-6011-S boiler
with push button electric ignition
Nat. gas, 1000 Btu, .6 sg.

Notes:

- For ordering instructions, see page 2.
For optional equipment, see page 14.
For electronic control panel systems, see page 15.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.



AMERICAN-Standard HYDRONIC HEATING

BOILERS—GAS FIRED
STEAM AND WATER

G-60 AMERICAN-Standard GAS BOILERS

for LP and LP-Air Gas

Jacketed.

Tested and equipped for 50 lbs. water working pressure.

Available for 80 lbs. working pressure on special order.

Controls regularly furnished for 115 volt, 60 cycle current.

Ratings shown are for installation at sea level and up to 2,000 feet.



WATER

boiler number	A.G.A. input Mbh	A.G.A. output Mbh	net I=B=R rating Mbh	net rating sq. ft. water	Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
						diam. in.	ht. ft.	
G-606-W	650	520	390.1	2600	\$ 961.00	11	20	2741
G-607-W	780	624	468.1	3120	1118.00	12	20	3141
G-608-W	910	728	546.1	3640	1283.00	13	20	3527
G-609-W	1040	832	624.2	4160	1461.00	13	20	3923
G-6010-W	1170	936	702.2	4680	1638.00	14	20	4335
G-6011-W	1300	1040	780.2	5200	1783.00	15	20	4728
G-6013-W	1560	1248	936.2	6240	2092.00	15	20	6049
G-6015-W	1820	1456	1108.1	7385	2408.00	16	20	6835
G-6017-W	2080	1664	1282.0	8545	2711.00	16	30	7620
G-6019-W	2340	1872	1452.3	9680	3020.00	17	30	8503
G-6021-W	2600	2080	1614.9	10765	3329.00	18	30	9292
G-6022-W	2730	2184	1695.7	11305	3533.00	19	30	10139
G-6025-W	3120	2496	1937.9	12920	3967.00	20	30	11334
G-6028-W	3510	2808	2180.1	14535	4296.00	21	30	12616
G-6031-W	3900	3120	2422.4	16150	4895.00	22	30	13809
G-6033-W	4160	3328	2585.4	17235	5184.00	24	30	15036
G-6037-W	4680	3744	2903.7	19360	5803.00	26	30	16690
G-6041-W	5200	4160	3229.8	21530	6421.00	26	30	18316

STEAM

boiler number	A.G.A. input Mbh	A.G.A. output Mbh	net I=B=R rating		Trade Price with standard equipment less thermostat	chimney size		approx. shipping weight
			Mbh	sq. ft.		diam. in.	ht. ft.	
G-606-S	650	520	390.1	1625	\$ 998.00	11	20	2751
G-607-S	780	624	468.1	1950	1155.00	12	20	3151
G-608-S	910	728	546.1	2276	1320.00	13	20	3537
G-609-S	1040	832	624.2	2601	1498.00	13	20	3934
G-6010-S	1170	936	702.2	2926	1675.00	14	20	4346
G-6011-S	1300	1040	780.2	3251	1820.00	15	20	4739
G-6013-S	1560	1248	936.2	3901	2129.00	15	20	6069
G-6015-S	1820	1456	1108.1	4617	2445.00	16	20	6855
G-6017-S	2080	1664	1282.0	5342	2748.00	16	30	7640
G-6019-S	2340	1872	1452.3	6051	3057.00	17	30	8523
G-6021-S	2600	2080	1614.9	6729	3366.00	18	30	9312
G-6022-S	2730	2184	1695.7	7065	3570.00	19	30	10154
G-6025-S	3120	2496	1937.9	8075	4004.00	20	30	11361
G-6028-S	3510	2808	2180.1	9084	4333.00	21	30	12648
G-6031-S	3900	3120	2422.4	10093	4932.00	22	30	13841
G-6033-S	4160	3328	2585.4	10773	5221.00	24	30	15068
G-6037-S	4680	3744	2903.7	12099	5840.00	26	30	16720
G-6041-S	5200	4160	3229.8	13458	6458.00	26	30	18346

Standard equipment includes:

V-531 diaphragm gas valve with manual opening; 100% shut-off (100% shut-off controls for LP-air and LP gases consists of Baso combination pilot switch and valve with auxiliary Baso pilot valves); manual shut-off valve; gas pressure regulator (except for LP-gas); drain valves; pilot cocks; insulated jacket; draft hood; transformer.

For water boiler only:

ASME relief valve for 50 lbs.; pressure and temperature gauge; CB-65653 immersion limit control.

For steam boiler only:

Steam gauge; ASME safety valve; CB-450552 boiler pressure limit control; gauge glass with trimmings; resetting low water cut-off.

Ordering Examples:

1. Water boiler with optional equipment:

1 G-6013-W boiler
with dual gas equipment
Propane gas.

2. Steam boiler with standard equipment:

1 G-6015-S boiler
Butane gas

Notes:

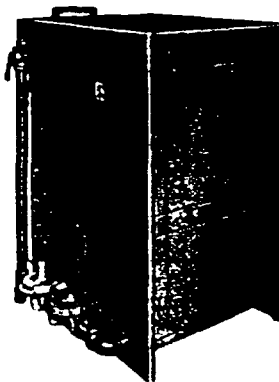
For ordering instructions, see page 2.

For optional equipment, see page 14.

For electronic control panel systems, see page 15.

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.



AMERICAN-Standard HYDRONIC HEATING

G-60 OPTIONAL EQUIPMENT

Push button electric ignition: all sizes of G-60 are available with push button electric ignition for use with natural, manufactured and mixed gas non-100% shut-off, and will be furnished when specified on order at the following added charges:

<u>boiler size</u>	<u>added charge</u>
G-606 thru G-6011	\$11.85
G-6013 thru G-6021	23.70
G-6022 thru G-6031	35.55
G-6033 thru G-6041	47.40

Pilot filters for G-60 for natural and mixed gases available at no additional charge when specified on order to meet local utility codes.

Room thermostats available at Trade Prices shown on page 30.

McDonnell-Miller Low Water Cut-off No. 67 external type can be substituted for the regular No. 69 Low Water Cut-off on G-60 steam gas boilers at no additional charge. If desired, specify on order.

"IS" Equipment: G-60 gas boilers can be furnished for use with Indirect Steam Hot Water Supply Systems. CB-65653 immersion operating control for use in storage tank is required and will be furnished when specified on order at extra Trade Price as shown on page 30. This control operates gas valves on boiler electrically as required. Shipping weights of gas boilers for hot water supply are same as shown for regular gas boilers.

Try-cock tappings and valve: if desired for steam boiler to meet local code specify on order and add \$4.00 to Trade Price of steam boiler.

G-60 available tested for 80 lbs. water working pressure when specified on order. Add \$3.00 per section to Trade Price of water boiler.

McDonnell-Miller No. 47-2 and 51-2 Low Water Cut-off and Feeder combinations are available with G-60 steam gas boilers in place of regularly furnished No. 69 low water cut-off, when specified on order, at the following added charges to Trade Price of steam boilers with regular equipment:

<u>boiler number</u>	<u>combination number</u>	<u>added charges</u>
G-606 thru G-6011	47-2	\$38.00
G-6013 thru G-6041	51-2	54.00

McDonnell-Miller No. 247-2 and 51-2 low water Cut-off and Feeder combinations for water boilers are available with G-60 water gas boilers when specified on order. Add to the Trade Price of the water boiler with regular equipment the current Trade Price for these items shown in the current McDonnell-Miller price sheet.

F.M. and F.I.A. equipment: requires EG-0 or EPG-0 electronic control system and special gas control equipment. Price on application.

V-532 Diaphragm gas valve without manual opening may be substituted for V-531 Gas valve with manual opening at no additional charge. If desired specify on order.

Side Outlet Steam ASME Safety Valves may be substituted at no additional charge if specified on order to meet local code requirements.

G-60 external water heater tappings: maximum size all sections 1 1/4". Add to Trade Price of boiler \$2.00 per section tapping and \$2.00 per jacket punching.

G-60 Right end steam trim tappings for pressure gauge and water column gauge glass furnished when specified on order at Trade Price additional charge of \$10.00 per boiler.

G-60 DUAL GAS BOILERS Natural and Propane Gases

04655

G-60 steam or water boilers are available with dual gas equipment using natural and propane gases. Specify on order and add the charge shown below to boiler with standard equipment. Selection of the boiler should be based on the A.G.A. and I=B=R ratings shown on page 12.

<u>boiler number</u>	<u>add to boiler Trade Price</u>	<u>boiler number</u>	<u>add to boiler Trade Price</u>
G-606	\$ 95.00	G-6019	\$205.00
G-607	100.00	G-6021	225.00
G-608	105.00	G-6022	240.00
G-609	110.00	G-6025	270.00
G-6010	115.00	G-6028	300.00
G-6011	120.00	G-6031	350.00
G-6013	145.00	G-6033	375.00
G-6015	165.00	G-6037	445.00
G-6017	185.00	G-6041	480.00

Dual gas equipment:

In addition to boiler with standard trim, dual gas boilers include:

Two V-532 diaphragm gas valves; two manifolds; gas pres-

sure regulator (natural gas only); manual shut-off valves; ribbon burners; 100% safety shut-off (consists of Baso combination pilot switch and valve with auxiliary Baso pilot valves); pilot cock; outdoor change-over control.

AMERICAN-Standard

HYDRONIC HEATING

BOILERS — GAS FIRED
STEAM AND WATER

G-40 AND G-60 ELECTRONIC CONTROL PANEL SYSTEMS

Panel System EPG-0: Provides electronic supervision of each primary pilot in each combustion chamber (1 to 4) and intermittent electric ignition of all pilots. Complete automatic operation of boiler. 100% safety shut-off. Equipment includes: one main control panel with 1 to 3 auxiliary panels pre-wired and factory assembled; Q179A flame rod and electric ignition pilots; ignition transformer; V495B pilot solenoid valves; RA890E electronic relay for each panel with 2-4 seconds response timing and alarm contacts; minimum of 3 ft. of flame rod wire and 3 ft. of ignition cable per pilot, as required. See additional charges below.

Panel System EPG-1: Provides manual ignition, non-100% shut-off. Available for Natural, Manufactured and Mixed Gas only. Electronic supervision of a primary pilot and thermocouple supervision of all auxiliary pilots. Main burner gas supply only turned off on pilot failure. Continuous flame pilot operation. Equipment includes: one main control panel and for certain boiler sizes one auxiliary panel factory wired and assembled to main panel; Q179B flame rod primary pilot(s); Baso auxiliary pilot burners; Baso 850-1 switches with thermocouples; RA890E electronic relay for each panel with 2-4 seconds response timing and alarm contacts; minimum of 3 ft. of flame rod wire per pilot, as required. See additional charges below.

Panel System EPG-2: Provides manual ignition, 100% shut-off. Available for all gases. Electronic supervision of a pri-

mary pilot and thermocouple supervision of all auxiliary pilots. Main burner and pilot burner gas supply turned off on pilot failure. Continuous flame pilot operation. Equipment includes: one main control panel and for certain boiler sizes one auxiliary panel factory wired and assembled to main panel; Q179B flame rod primary pilot(s) with special adapter for thermocouple; Baso auxiliary pilot burners; Baso 817-F-11 pilot valves with thermocouples; RA890E electronic relay for each panel with 2-4 seconds response timing and alarm contacts; minimum of 3 ft. of flame rod wire per pilot, as required. See additional charges below.

Panel System EPG-3: Provides intermittent electric ignition on a primary pilot and continuous flame auxiliary pilots with 100% shut-off. Available for all gases. Electronic supervision of a primary pilot and thermocouple supervision of auxiliary pilots. Main burner and pilot burner gas supply shut-off on pilot failure. Equipment includes: one main control panel and for certain boiler sizes one auxiliary panel factory wired and assembled to main panel; Q179A flame rod and electric ignition primary pilot(s); primary pilot solenoid valve(s) V495B; Baso auxiliary pilot burner; Baso 817-F-11 pilot valves with thermocouples; 6000 volt secondary ignition transformer(s); RA890E electronic relay for each panel with 2-4 seconds response timing and alarm contacts; minimum of 3 ft. of flame rod wire and 3 ft. of ignition cable per pilot, as required. See additional charges below.

ADDITIONAL CHARGES—Trade Price

Specify on order type of system desired, as described above, and add charge listed for boiler size involved to Trade Price of G-40 or G-60 boiler with regular equipment.

Ordering Example: 1 G-404-S boiler with EPG-0 System nat. gas, 1000 Btu .65g.

Panel System EPG-0		Panel System EPG-1		Panel System EPG-2		Panel System EPG-3	
boiler number	added charge	boiler number	added charge	boiler number	added charge	boiler number	added charge
G- 403 thru 407	\$166.00	G- 403 thru 4010	\$151.00	G- 403 thru 4010	\$172.00	G- 403 thru 4010	\$188.00
G- 408 thru 4010	182.00	G- 606 thru 6037	151.00	G- 606 thru 6037	172.00	G- 606 thru 6037	188.00
G- 606 thru 6011	182.00	G-6041	282.00	G-6041	284.00	G-6041	337.00
G-6013 thru 6021	369.00	Mfd. gas only:		Mfd. gas only:		Mfd. gas only:	
G-6022 thru 6031	553.00	G-6028 thru 6037	\$283.00	G-6028 thru 6037	\$285.00	G-6028 thru 6037	\$340.00
G-6033 thru 6041	738.00						

■ Panel System EPG-1 available for Natural, Manufactured and Mixed gases only. Balance for all gases.

G-40 AND G-60 ELECTRONIC CONTROL SYSTEMS (less Panels)

The following systems (EG-0, EG-1, EG-2 and EG-3) are also available, but do not include factory wired and assembled control panel. These systems provide the same function and

are equipped with the same basic parts (less panel) as described for EPG-0, EPG-1, EPG-2, and EPG-3.

System EG-0: (Same function as EPG-0 less panel.) See additional charges below.

System EG-1: (Same function as EPG-1 less panel.) See additional charges below.

System EG-2: (Same function as EPG-2 less panel.) See additional charges below.

System EG-3: (Same function as EPG-3 less panel.) See additional charges below.

04656

ADDITIONAL CHARGES—Trade Price

Specify on order type of system desired, as described above, and add charge listed for boiler size involved to Trade Price of G-40 or G-60 boiler with regular equipment.

Ordering Example: 1 G-6015-W boiler with EG-1 System mfd. gas, 550 Btu .65sg.

Control System EG-0		Control System EG-1		Control System EG-2		Control System EG-3	
boiler number	added charge	boiler number	added charge	boiler number	added charge	boiler number	added charge
G- 403 thru 407	\$111.00	G- 403 thru 4010	\$ 87.00	G- 403 thru 4010	\$ 97.00	G- 403 thru 4010	\$116.00
G- 408 thru 4010	145.00	G- 606 thru 6037	87.00	G- 606 thru 6037	97.00	G- 606 thru 6037	116.00
G- 606 thru 6011	145.00	G-6041	174.00	G-6041	176.00	G-6041	230.00
G-6013 thru 6021	290.00	Mfd. gas only:		Mfd. gas only:		Mfd. gas only:	
G-6022 thru 6031	435.00	G-6028 thru 6037	\$175.00	G-6028 thru 6037	\$177.00	G-6028 thru 6037	\$233.00
G-6033 thru 6041	580.00						

■ Control System EG-1 available for Natural, Manufactured and Mixed gases only. Balance for all gases.

Ignition Cable: Trade Price per foot \$0.70
Flame rod wire: Trade Price per foot \$0.30

**PACKAGED
BOILER-BURNER UNITS
WATER**

**AMERICAN-Standard
HYDRONIC HEATING**

APR PACKAGED BOILER-BURNER UNITS

Designed and equipped with controls for forced circulation.

Factory assembled with jacket and crated.

Built-in air-separator in top section.

Motors and controls regularly furnished for 115 volt, 60 cycle current.



WATER

packaged unit number	gross I=B=R output Mbh	* I=B=R burner capacity gph	net I=B=R rating Mbh	net rating sq ft water	Trade Price with standard equipment	chimney size	approx. shipping weight
APR-72	72	0.70	54.0	360	\$300.00	8 x 8 x 15	306
APR-90	90	0.90	67.5	450	325.00	8 x 8 x 15	344

*Nozzle sizes 60° solid, gph, furnished with APR packaged units: APR-72, 0.75; APR-90, 0.85.

Standard equipment all Units:

Model DH-5 Arcoflame oil burner with sling mounting and factory installed light sensing flame detector.

Constant ignition light sensing primary control.

Unitized ceramic fiber refractory combustion chamber.

Draft regulator.

ASME relief valve.

1" circulator.

Wiring harness and junction box.

Drain valve.

Pressure and temperature gauge.

CB-58000 thermostat.

AY-553 and AY-686 limit controls with Hi-Lo selector switch.

Two-stage fuel unit available at \$5.00 Trade Price extra.

Note: APR units are shipped with jacket and electrical controls (except thermostat), combustion chamber, circulator, factory assembled and wired. Arcoflame oil burner shipped separately. Draft regulator, relief valve and thermostat are secured inside boiler box.

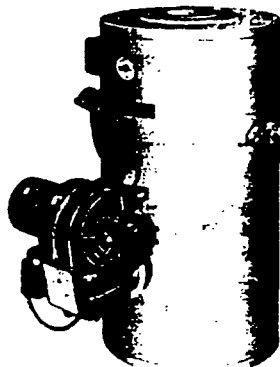
Zone valve packages are available for APR units. For details and prices, see page 30.

Ordering Example:

Packaged unit with standard equipment:
1 APR-90

Notes:

For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.



04657

AMERICAN-Standard HYDRONIC HEATING

**PACKAGED
BOILER-BURNER UNITS
WATER**

APH PACKAGED BOILER-BURNER UNITS

Designed and equipped with controls for forced circulation.

Factory assembled and crated.

Square jacket.

Built-in air-separator in top section.

Motors and controls regularly furnished for 115 volt, 60 cycle current.



WATER

packaged unit number	gross I=B=R output Mbh	I=B=R burner capacity gph	net I=B=R rating Mbh	net rating sq ft water	Trade Price with standard equipment	chimney size	approx. shipping weight
APH-115	115	1.15	86	575	\$350.00	8 x 8 x 15	330
APH-150	150	1.45	113	750	410.00	8 x 8 x 15	375
APH-185	185	1.80	139	925	470.00	8 x 8 x 15	420

*Nozzle sizes, gph, 60° solid, furnished with APH packaged units: APH-115, 1.10; APH-150, 1.35; APH-185, 1.75.

Standard equipment all Units:

Model DH-5 Arcoflame oil burner with sling mounting and factory installed light sensing flame detector.

Constant ignition light sensing primary control.

Unitized ceramic fiber refractory combustion chamber.

Draft regulator.

ASME relief valve.

1 1/4" circulator.

Wiring harness and junction box.

Pressure and temperature gauge.

Drain valve.

CB-52502 thermostat.

AY-553 and AY-686 limit controls with HI-LO limit selector switch.

Two-stage fuel unit is available at \$5.00 Trade Price extra.

Note: APH units are shipped with jacket and electrical controls (except thermostat), combustion chamber, circulator, factory assembled and wired. Oil burner shipped separately. Draft regulator, relief valve and thermostat are secured inside boiler crate.

Zone valve packages are available for APH units. For details and prices, see page 30.

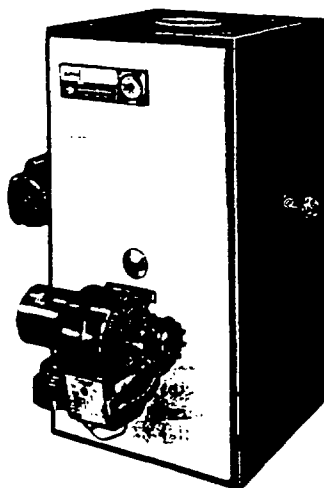
Ordering Example:

Packaged unit with standard equipment:

1 APH-115

Notes:

For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.



04658

AMERICAN-Standard

HYDRONIC HEATING

BOILER-BURNER UNITS
STEAM AND WATER

A-3 NON-PACKAGED ALL-PURPOSE BOILER-BURNER UNITS

Equipped with controls for water (forced or gravity circulation) or steam.
Factory assembled sections.

Wet base construction.

Flush jacket.

Motors and controls regularly furnished for 115 volt, 60 cycle current.



WATER

boiler-burner unit number	gross I=B=R output Mbh	I=B=R burner capacity gph	tankless heater number	A I=W=H rating	net I=B=R rating Mbh	net rating sq ft water	Trade Price with standard equipment	chimney size	approx. shipping weight
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Forced circulation units with factory installed tankless heater: With R8182A Aquastat-relay combination, high limit, low limit and circulator control, light sensing constant ignition control.

A-33-WBT	100	0.95	222	4	75.0	500	\$378.50	8 x 8 x 15	666
A-34-WBT	136	1.35	230	4	102.0	680	448.50	8 x 8 x 15	751
A-35-WBT	173	1.70	328	4 3/4	129.8	865	530.50	8 x 8 x 15	878
A-36-WBT	208	2.00	335	5 1/2	156.0	1040	600.50	8 x 8 x 15	1016
A-37-WBT	244	2.30	335	5 3/4	183.0	1220	676.50	8 x 12 x 15	1148

Forced circulation units less heater: With R8182C Aquastat combination, limit and circulator control, light sensing constant ignition primary control.

A-33-WB	100	0.95			75.0	500	\$351.50	8 x 8 x 15	655
A-34-WB	136	1.35			102.0	680	420.50	8 x 8 x 15	737
A-35-WB	173	1.70			129.8	865	497.50	8 x 8 x 15	872
A-36-WB	208	2.00			156.0	1040	561.50	8 x 8 x 15	1002
A-37-WB	244	2.30			183.0	1220	637.50	8 x 12 x 15	1135

Gravity units less heater: With L4080 Aquastat limit control, and separate R8184A light sensing constant ignition primary control.

A-33-WBG	100	0.95			75.0	500	\$347.00	8 x 8 x 15	660
A-34-WBG	136	1.35			102.0	680	416.00	8 x 8 x 15	742
A-35-WBG	173	1.70			129.8	865	493.00	8 x 8 x 15	877
A-36-WBG	208	2.00			156.0	1040	557.00	8 x 8 x 15	1006
A-37-WBG	244	2.30			183.0	1220	633.00	8 x 12 x 15	1138

STEAM

boiler-burner unit number	gross I=B=R output Mbh	I=B=R burner capacity gph	tankless heater number	A I=W=H rating	net I=B=R rating Mbh	net I=B=R sq ft steam	Trade Price with standard equipment	chimney size	approx. shipping weight
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Steam units with factory installed tankless heater: With PA404A Pressuretrol, L4006A Aquastat operating control, and separate R8184A light sensing constant ignition primary control.

A-33-SBT	100	0.95	222	3 1/2	75.0	313	\$375.00	8 x 8 x 15	666
A-34-SBT	136	1.35	230	3 1/2	102.0	425	446.00	8 x 8 x 15	751
A-35-SBT	173	1.70	328	4 1/4	129.8	541	528.00	8 x 8 x 15	878
A-36-SBT	208	2.00	335	4 3/4	156.0	650	598.00	8 x 8 x 15	1016
A-37-SBT	244	2.30	335	5 1/4	183.0	763	674.00	8 x 12 x 15	1148

Steam units less heater: With PA404A Pressuretrol, and separate R8184A light sensing constant ignition primary control.

A-33-SB	100	0.95			75.0	313	\$347.00	8 x 8 x 15	661
A-34-SB	136	1.35			102.0	425	416.00	8 x 8 x 15	743
A-35-SB	173	1.70			129.8	541	493.00	8 x 8 x 15	878
A-36-SB	208	2.00			156.0	650	557.00	8 x 8 x 15	1007
A-37-SB	244	2.30			183.0	763	633.00	8 x 12 x 15	1139

*Nozzle sizes, gph, 60° furnished with A-3 boiler-burner units:

A-33-B, 0.90—H; A-34-B, 1.25—H; A-35-B, 1.50—S; A-36-B, 1.75—S; A-37-B, 2.25—S.

▲Gallons of water per minute heated from 40F to 140F with 200F boiler water temperature.

04660



Standard equipment:

Model DH-5 Arcoflame oil burner with sling mounting and factory installed cad cell, bracket and leads. CB-52502 thermostat. Nozzle. Draft regulator. High temperature steel combustion chamber. Drain valve.

For units WITH water heater, 1 cover plate with 3/4" control tapping.

For units LESS water heater, 2 cover plates for heater openings.

Water: Pressure and temperature gauge. ASME relief valve.

Steam: Steam gauge. ASME safety valve. Gauge glass and trimmings.

Ordering Examples:

1. All-Purpose boiler-burner unit with standard equipment.

For forced circulation, with heater:

1 A-37-WBT boiler-burner unit

For gravity circulation:

1 A-33-WBG boiler-burner unit

2. All-Purpose boiler-burner unit with optional equipment:

For forced circulation, less heater:

1 A-35-WB boiler-burner unit with two-stage fuel unit

Notes:

For optional equipment, see page 21.

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

OIL FIRED BOILERS
STEAM AND WATER

AMERICAN-Standard

HYDRONIC HEATING

A-3 ALL-PURPOSE OIL FIRED BOILERS

For water (forced or gravity circulation) or steam.
Factory assembled sections.
Wet base construction.
Flush jacket.



WATER

boiler number	gross I=B=R output Mbh	I=B=R burner capacity gph	tankless heater number	Δ I=W=H rating	net I=B=R rating Mbh	net rating sq ft water	Trade Price	chimney size	approx. shipping weight
Boiler with factory installed tankless heater—forced circulation									
A-33-WT	100	0.95	222	4	75.0	500	\$250.00	8 x 8 x 15	613
A-34-WT	136	1.35	230	4	102.0	680	321.00	8 x 8 x 15	698
A-35-WT	173	1.70	328	4 3/4	129.8	865	403.00	8 x 8 x 15	825
A-36-WT	208	2.00	335	5 1/2	156.0	1040	473.00	8 x 8 x 15	962
A-37-WT	244	2.30	335	5 3/4	183.0	1220	549.00	8 x 12 x 15	1093

Boiler less heater—gravity or forced circulation

A-33-W	100	0.95	...	...	75.0	500	\$232.00	8 x 8 x 15	605
A-34-W	136	1.35	...	...	102.0	680	301.00	8 x 8 x 15	687
A-35-W	173	1.70	...	...	129.8	865	378.00	8 x 8 x 15	822
A-36-W	208	2.00	...	...	156.0	1040	442.00	8 x 8 x 15	951
A-37-W	244	2.30	...	...	183.0	1220	518.00	8 x 12 x 15	1083

STEAM

boiler number	gross I=B=R output Mbh	I=B=R burner capacity gph	tankless heater number	Δ I=W=H rating	net I=B=R rating Mbh	net I=B=R sq ft steam	Trade Price	chimney size	approx. shipping weight
Boiler with factory installed tankless heater									
A-33-ST	100	0.95	222	3 1/2	75.0	313	\$250.00	8 x 8 x 15	614
A-34-ST	136	1.35	230	3 1/2	102.0	425	321.00	8 x 8 x 15	699
A-35-ST	173	1.70	328	4 1/4	129.8	541	403.00	8 x 8 x 15	826
A-36-ST	208	2.00	335	4 3/4	156.0	650	473.00	8 x 8 x 15	963
A-37-ST	244	2.30	335	5 1/4	183.0	763	549.00	8 x 12 x 15	1094

Boiler less heater

A-33-S	100	0.95	...	...	75.0	313	\$232.00	8 x 8 x 15	606
A-34-S	136	1.35	...	...	102.0	425	301.00	8 x 8 x 15	688
A-35-S	173	1.70	...	...	129.8	541	378.00	8 x 8 x 15	823
A-36-S	208	2.00	...	...	156.0	650	442.00	8 x 8 x 15	952
A-37-S	244	2.30	...	...	183.0	763	518.00	8 x 12 x 15	1084

Δ Gallons of water per minute heated from 40F to 140F with 200F boiler water temperature.

Standard equipment all boilers:

High temperature steel combustion chamber. Drain valve.

Water: Pressure and temperature gauge, ASME relief valve.

Steam: Steam gauge, ASME safety valve, gauge glass and trimmings.

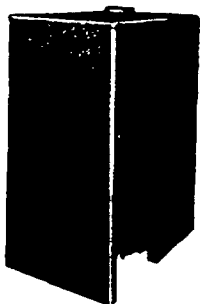
Note: Boilers with factory installed tankless heater are shipped with one water heater opening cover plate with 3/4" control tapping. Boilers less factory installed heater are shipped with an additional water heater opening cover plate (blank).

Ordering Examples:

1. Water boiler less heater with standard equipment:
1 A-34-W boiler
2. Steam boiler with heater with standard equipment:
1 A-36-ST boiler
3. Water boiler with heater with optional equipment:
1 A-35-WT boiler
with jacket extension

Notes:

For optional equipment, see page 21.
For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.



AMERICAN-Standard HYDRONIC HEATING

**BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER**

A-3 OPTIONAL EQUIPMENT

FOR PACKAGED AND ALL-PURPOSE BOILER-BURNER UNITS AND OIL FIRED BOILERS:

Jacket extension: Specify on order and add \$28.00 to Trade Price of boiler or unit. Jacket extension provides 15 3/4" in front for concealment of oil burner and controls; approximate shipping weight 35 lbs.

FOR PACKAGED AND ALL-PURPOSE BOILER-BURNER UNITS:

Two-stage fuel unit will be furnished on order at \$5.00 Trade Price extra.

For substitution of No. 4 control set consisting of CB-52502 thermostat, L4062B Aquastat limit and circulator control, plus a No. R8184A light sensing constant ignition primary control, instead of R8182C combination control, add to price of non-packaged A-3 boiler-burner units for forced circulation LESS heater \$2.50 Trade Price extra.

For substitution of No. 5 control set consisting of CB-52502 thermostat, L8024A Aquastat, limit, reverse and operating control, circulator relay, plus a No. R8184A light sensing constant ignition primary control, instead of R8182A combination control, add to price of non-packaged A-3 boiler-burner units for forced circulation WITH tankless heater \$2.50 Trade Price extra.

Order add-on No. 5-Z control set at \$19.35 Trade Price extra

for use with A-3 packaged or all-purpose non-packaged boiler-burner units with tankless heater.

Order R8182A Aquastat-relay combination at \$10.00 Trade Price extra instead of R8182C control to permit use of tankless heater with A-3 non-packaged boiler-burner units furnished less water heater.

Controls and Arcoflame control sets are shown on page 30. McDonnell-Miller No. 67 low water cut-off with quick hook-up fittings is available at current price for A-3 steam units and boilers.

Zone valve packages are available for water units and boilers. For details and prices, see page 30.

BUILT-IN TANKLESS HEATERS:

Built-in tankless heaters can be ordered for separate shipment with packaged and all-purpose boiler-burner units and oil fired boilers less factory installed heaters at the following Trade Prices:

Heater number	Trade Price
222	\$21.00
230	23.00
328	28.00
335	34.00

NOTE: For I=W=H ratings and boilers or units with which heaters can be used, see table below.

I=W=H RATED TANKLESS WATER HEATERS FOR A-3:

Heaters tested with boilers.

Built-in tankless heaters for boiler-burner units and oil boilers can be ordered for separate shipment with units or boilers specified less tankless heaters at Trade Prices shown above. Select heater from table below.



unit or boiler size	I=B=R burner capacity gph	heater number	▲ I=W=H rating	
			water	steam
A-33	0.95	222	4	3 1/2
A-34	1.35	230	4	3 1/2
A-35	1.70	328	4 3/4	4 1/4
A-36	2.00	335	5 1/2	4 3/4
A-37	2.30	335	5 3/4	5 1/4

▲ Gallons of water per minute heated from 40F to 140F with 200F boiler water temperature.

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BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER

AMERICAN-Standard
HYDRONIC HEATING

SEVERN BOILER-BURNER UNITS

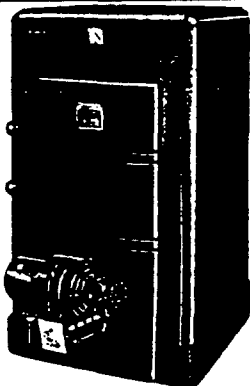
Flush jacket.

Motors and controls regularly furnished for 115 volt, 60 cycle current.

boiler-burner unit number		gross output Mbh	firing rate gph	installed radiation			Trade Price with standard equipment	approx. shipping weight
STEAM	WATER			sq ft steam	Mbh	sq ft water		
NOT TAPPED FOR BUILT-IN TANK TYPE WATER HEATER (see options)								
S-17-OB	W-17-OB	146	1.5	456	109.5	730	\$489.00	1283
S-21-OB	W-21-OB	168	1.7	525	126.0	840	531.00	1438
S-25-OB	W-25-OB	188	1.9	588	141.0	940	572.00	1550
S-29-OB	W-29-OB	216	2.2	675	162.0	1080	615.00	1690
S-33-OB	W-33-OB	247	2.5	772	185.3	1235	680.00	1795
S-37-OB	W-37-OB	278	2.8	869	208.6	1390	738.00	1955

ARRANGED FOR BUT LESS BUILT-IN TANK OR TANKLESS TYPE WATER HEATER

S-17-OB-T	W-17-OB-T	146	1.5	456	109.5	730	\$495.00	1292
S-21-OB-T	W-21-OB-T	168	1.7	525	126.0	840	537.00	1447
S-25-OB-T	W-25-OB-T	188	1.9	588	141.0	940	578.00	1559
S-29-OB-T	W-29-OB-T	216	2.2	675	162.0	1080	621.00	1699
S-33-OB-T	W-33-OB-T	247	2.5	772	185.3	1235	686.00	1804
S-37-OB-T	W-37-OB-T	278	2.8	869	208.6	1390	744.00	1964



*Nozzle sizes, gph 60° Solid, furnished with Severn boiler-burner units:
 No. 17, 1.35; No. 21, 1.50; No. 25, 1.75; No. 29, 2.00; No. 33, 2.25; No. 37, 2.50.

Standard equipment:

Model DH-6 Arcoflame oil burner with factory installed light sensing flame detector with sling mounting.

Constant ignition light sensing primary control. Draft regulator.

Heat Lib-O-Rator refractory combustion chamber; model number and deduction for omission listed on page 23.

For steam—No. 1 control set: CB-52502 thermostat, PA404A Pressuretrol, nozzle. Steam gauge. ASME safety valve. Gauge glass and trimmings.

For water—No. 3 control set: CB-52502 thermostat, L4080 Aquastat limit control, nozzle. Pressure and temperature gauge. ASME relief valve.

SEVERN OIL FIRED BOILERS

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Flush jacket.

boiler-number		gross output Mbh	firing rate gph	installed radiation			Trade Price with standard equipment	approx. shipping weight
STEAM	WATER			sq ft steam	Mbh	sq ft water		
NOT TAPPED FOR BUILT-IN TANK TYPE WATER HEATER (see options)								
S-17-O	W-17-O	146	1.5	456	109.5	730	\$355.00	1075
S-21-O	W-21-O	168	1.7	525	126.0	840	397.00	1230
S-25-O	W-25-O	188	1.9	588	141.0	940	436.00	1325
S-29-O	W-29-O	216	2.2	675	162.0	1080	479.00	1465
S-33-O	W-33-O	247	2.5	772	185.3	1235	542.00	1560
S-37-O	W-37-O	278	2.8	869	208.6	1390	600.00	1720

ARRANGED FOR BUT LESS BUILT-IN TANK OR TANKLESS TYPE WATER HEATER

S-17-O-T	W-17-O-T	146	1.5	456	109.5	730	\$361.00	1084
S-21-O-T	W-21-O-T	168	1.7	525	126.0	840	403.00	1239
S-25-O-T	W-25-O-T	188	1.9	588	141.0	940	442.00	1334
S-29-O-T	W-29-O-T	216	2.2	675	162.0	1080	485.00	1474
S-33-O-T	W-33-O-T	247	2.5	772	185.3	1235	548.00	1569
S-37-O-T	W-37-O-T	278	2.8	869	208.6	1390	606.00	1729

Standard equipment:

For Steam only: Steam gauge. ASME safety valve. Gauge glass and trimmings.

For Water only: Pressure and temperature gauge. ASME relief valve.

Notes:

For optional equipment, see page 23.

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

Ordering Examples:

- Boiler-Burner Unit for steam not tapped for heater with standard equipment:
 1 S-25-OB boiler-burner
- Boiler-Burner Unit for water arranged for but less heater with optional equipment:
 1 W-33-OB-T boiler-burner with two-stage fuel unit.
- Boiler only for water arranged for but less heater with optional equipment:
 1 W-21-O-T boiler with heater opening cover plate

AMERICAN-Standard HYDRONIC HEATING

BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER

SEVERN OPTIONAL EQUIPMENT

BOILER-BURNER UNITS only:

Arcoflame control sets other than those included in Trade Price of boiler-burner units will be furnished when specified on order at the following added charges:

Control Set	Added Charge
Steam control set No. 2	\$10.00
Water control set No. 4	5.80
Water control set No. 6	24.30
Water control set No. 7	22.45

Controls and Arcoflame control sets are shown on page 30.

Two-stage fuel unit is available for DH-6 oil burner at added Trade Price charge of \$5.00

BOILER-BURNER UNITS or OIL FIRED BOILERS:

Zone valve packages are available for water boilers. For details and prices, see page 30.

For low water cut-off for use with steam units, see page 30.

Molded refractory combustion chambers for Severn boilers: Trade Prices are same as "Deduct for Omission" prices shown below.

Cover plate for water heater opening will be furnished if specified on order for "T" type boiler at an added Trade Price charge of \$3.70.

BUILT-IN HEATERS:

If 2½" right or left side tapping in back section for built-in heater No. 703 is desired, specify on order and add \$2.00 to Trade Price of unit or boiler.

Below are the ratings and Trade Prices covering built-in tank or tankless heaters available for Severn units. For detailed information on ratings, see page 2.

Heater No.	Heater Type	Heater Ratings gals. capacity	Trade Price	approx. shipping weight
703	tank	66	\$ 9.00	7
594	tank	100	48.00	54
595	tank	160	42.50	51
590	tankless	3½ per minute	36.00	60

HEAT LIB-O-RATOR MOLDED REFRACTORY COMBUSTION CHAMBERS

unit number	Heat Lib-O-Rator model No. included	maximum firing rate gallons per hour	deduct for omission	approx. shipping weight
17, 21	No. 1	1.75	\$18.85	153
25, 29	No. 2	2.25	20.85	170
33, 37	No. 3	3.00	22.85	180

For discount on repairs, see page 2.

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**BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER**

**AMERICAN-Standard
HYDRONIC HEATING**

A-5 BOILER-BURNER UNITS



Flush jacket.

Tested and equipped for 50 lbs. water working pressure.

Motors and controls regularly furnished are for 115 volt, 60 cycle current.

boiler-burner unit number		gross l=B=R output Mbh	l=B=R burner capacity gph	net l=B=R rating		net rating sq ft water	Trade Price with standard equipment	chimney size	approx. shipping weight
STEAM	WATER			sq ft steam	Mbh				
For Built-in Water Heater Arrangement, see page 25.									
A-504-SB(T)	A-504-WB(T)	261	2.55	816	195.8	1305	\$ 700.00	8 x 12 x 15	1702
A-505-SB(T)	A-505-WB(T)	346	3.30	1082	259.6	1731	844.00	8 x 12 x 20	1971
A-506-SB(T)	A-506-WB(T)	426	4.00	1332	319.6	2131	952.00	12 x 12 x 20	2286
A-507-SB(T)	A-507-WB(T)	508	4.75	1588	381.1	2541	1068.00	12 x 12 x 20	2565
A-508-SB(T)	A-508-WB(T)	588	5.55	1838	441.1	2941	1153.00	12 x 16 x 25	2809
A-509-SB(T)	A-509-WB(T)	668	6.30	2088	501.1	3341	1248.00	12 x 16 x 25	3109
A-510-SB(T)	A-510-WB(T)	748	7.00	2338	561.1	3741	1390.00	12 x 16 x 25	3377
A-511-SB(T)	A-511-WB(T)	830	7.65	2594	622.7	4151	1528.00	16 x 16 x 30	3684

*Nozzle sizes, gph, furnished with A-5 units are as follows: No. A-504, 1 2.50 60°S; A-505, 2 1.65 70°S; A-506 2 2.00 70°S; A-507 1 2.25 & 1 2.50 80°H; A-508 2 2.75 80°H; A-509, 1 3.00 & 1 3.25 80°H; A-510 2 3.50 80°S; A-511 1 3.50 & 1 4.00 80°S. Suffix "T" denotes unit or boiler with openings in center sections for tankless heaters.

Standard equipment:



boiler model oil burner
A-504 DH-5, sling mounted; 1-stage fuel unit.
A-505, A-506 45WU-3606 } flange mounted;
A-507, A-508, A-509 62A-7058-1 } 2-stage fuel unit.
A-510 96-7506-1
The above burners are furnished with factory installed light sensing flame detector, constant ignition light sensing primary control.
A-511 96-7506 flange mounted; 2-stage fuel unit.
The above burner is furnished with electronic flame safeguard control: RA890E Protectorelay and Q270A base, C7013A photocell, delayed oil valve.
Draft regulator. Drain valve.
Heat Lib-O-Rator refractory combustion chamber; model number and deduction for omission listed on page 25.
For Steam-No. 1 control set: CB-52502 thermostat, PA404A Pressuretrol, nozzle(s). Steam gauge. ASME safety valve. Gauge glass and trimmings.
For Water-No. 3 control set: CB-52502 thermostat, L4080 Aquastat limit control, nozzle(s). Pressure and temperature gauge. ASME relief valve.

A-5 OIL FIRED BOILERS



Flush jacket.

Tested and equipped for 50 lbs. water working pressure.

boiler number		gross l=B=R output Mbh	l=B=R burner capacity gph	net l=B=R rating		net rating sq ft water	Trade Price	chimney size	approx. shipping weight
STEAM	WATER			sq ft steam	Mbh				
For Built-in Water Heater Arrangement, see page 25.									
A-504-S(T)	A-504-W(T)	261	2.55	816	195.8	1305	\$ 560.00	8 x 12 x 15	1489
A-505-S(T)	A-505-W(T)	346	3.30	1082	259.6	1731	660.00	8 x 12 x 20	1750
A-506-S(T)	A-506-W(T)	426	4.00	1332	319.6	2131	760.00	12 x 12 x 20	2050
A-507-S(T)	A-507-W(T)	508	4.75	1588	381.1	2541	860.00	12 x 12 x 20	2306
A-508-S(T)	A-508-W(T)	588	5.55	1838	441.1	2941	945.00	12 x 16 x 25	2550
A-509-S(T)	A-509-W(T)	668	6.30	2088	501.1	3341	1030.00	12 x 16 x 25	2825
A-510-S(T)	A-510-W(T)	748	7.00	2338	561.1	3741	1115.00	12 x 16 x 25	3075
A-511-S(T)	A-511-W(T)	830	7.65	2594	622.7	4151	1200.00	16 x 16 x 30	3377

Suffix "T" denotes unit or boiler with openings in center sections for tankless heaters.

Standard equipment:

For Steam only: Steam gauge, ASME safety valve, gauge glass and trimmings. Drain valve.

For Water only: Pressure and temperature gauge. ASME relief valve for 50 lbs. Drain valve.

Notes:

For optional equipment, see page 25.

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

Ordering Examples:

- Boiler-Burner Unit for water with standard equipment:
1 A-507-WB boiler-burner
- Boiler-Burner Unit for steam with optional equipment:
1 510-SBT boiler-burner with No. 2 control set
3 No. 530 Tankless Heaters
1 3-heater manifold assembly
- Boiler only for water with optional equipment
1 A-506-W boiler with jacket extension

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AMERICAN-Standard HYDRONIC HEATING

**BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER**

A-5 OPTIONAL EQUIPMENT

BOILER-BURNER UNITS ONLY:

Arcoflame control sets other than those included in Trade Price of boiler-burner units will be furnished when specified on order at the following added charges:

Control Set	added charge
Steam control set No. 2	\$10.00
Water control set No. 4	5.80
Water control set No. 5	14.55
Water control set No. 5-Z	19.35
(Add-on zone. Use only with No. 5 control set.)	

Detailed description of control sets is shown on page 30.

ELECTRONIC FLAME SAFEGUARD CONTROL EQUIPMENT:

boiler-burner unit	burner model	added Trade Price charge
A-507, A-508, A-509	62A-7056-1-F	\$90.00
A-510	96-7506	53.00

With RA890E Protectorelay, Q270A base, C7013A photocell, delayed oil valve.

For installations requiring Factory Mutual Approval and in states and municipalities with regulations more stringent than UL, oil burners are available with special electronic flame safeguard controls for A-5 boiler burner units as follows:

boiler-burner unit	burner model	added Trade Price charge
A-507, A-508, A-509	62A-7056-1-FFM	\$120.00
A-510	96-7507	87.00
A-511	96-7507	34.00

Two-stage fuel unit is available for DH-5 oil burner at added Trade Price charge of.....\$5.00

BOILER-BURNER UNITS or OIL FIRED BOILERS:

Jacket extension; if desired specify on order and add \$33.85 to Trade Price of boiler. Jacket extension provides 25" enclosure in front for concealment of oil burner and controls. Approximate shipping weight 57 lbs.

For low water cut-off for use with steam units, see page 30.

Molded refractory combustion chambers for A-5 boilers: Trade Prices are same as "Deduct for Omission" Prices shown below.

If desired, provision for tankless heaters is available at no additional charge. When suffix letter "T" is added on order to unit or boiler numbers, the following number of openings in center sections will be furnished.

Unit No.	Openings
A-504-T	2
A-505-T thru A-508-T	3
A-509-T thru A-511-T	4

Note: Additional openings can be specified on order.

Cover plate for water heater opening will be furnished if specified on order for "T" type boiler at added Trade Price of \$3.35 each.

NO. 530 TANKLESS HEATER:

No. 530 tankless heater available in single or quantity lot price at \$30.65 Trade Price each.

The following table shows the recommended number of heaters to be used with each boiler and the ratings attained if more than one heater is connected in parallel:

boiler no.	no. of heaters	*rating-gpm
All Sizes	1	4
All Sizes	2	7
A-505-A-511	3	10
A-508-A-511	4	13
A-510-A-511	5	16

Note: Additional heaters can be added if the heaters are serving different systems and it is not likely that heaters will all be in use at the same time.

*Gallons of water per minute raised from 40 F to 140 F with 200 F boiler water temperature.

Copper pipe manifolds factory assembled for multiple heater parallel hookup shipped in boxes of two manifold assemblies per box when specified with heaters are available at the following charges:

Manifold assembly	Trade Price per Box
2 heater	\$4.80
3 heater	6.80
4 heater	8.80

HEAT LIB-O-RATOR MOLDED REFRACTORY COMBUSTION CHAMBERS

unit number	Heat Lib-O-Rator model No. Included	maximum firing rate gallons per hour	deduct for omission	approx. shipping weight
A-504	14-A	2.55	\$24.85	158
A-505	15-A	3.30	25.00	163
A-506	15-AA	4.00	33.00	176
A-507, A-508	16-A	5.55	33.00	180
A-509, A-510, A-511	17-A	7.65	38.00	200

For discount on repairs, see page 2.

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**BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER**

**AMERICAN-Standard
HYDRONIC HEATING**

A-7 BOILER-BURNER UNITS

Jacketed and unjacketed.

Tested and equipped for 50 lbs. water working pressure.

Motors and controls regularly furnished for 115 volt, 60 cycle current.



boiler-burner unit number		gross l=B=R output Mbh	l=B=R burner capacity gph	net l=B=R rating		net rating sq ft water	chimney size	unjacketed		jacketed	
STEAM	WATER			sq ft steam	Mbh			Trade Price with standard equipment	approx. shipping weight	Trade Price with standard equipment	approx. shipping weight
A-705-SO-B	A-705-WO-B	866	8.15	2707	649.7	4331	16 x 16 x 28	\$1633.00	4231	\$1714.00	4403
A-706-SO-B	A-706-WO-B	1012	9.55	3163	759.2	5061	16 x 16 x 30	1753.00	4883	1846.00	5058
A-707-SO-B	A-707-WO-B	1196	11.25	3738	897.2	5981	16 x 20 x 36	1928.00	5532	2033.00	5715
A-708-SO-B	A-708-WO-B	1376	12.90	4340	1041.6	6944	16 x 20 x 42	2277.00	6283	2394.00	6492
A-709-SO-B	A-709-WO-B	1570	14.65	5013	1203.1	8020	16 x 20 x 45	2429.00	6919	2558.00	7134
A-710-SO-B	A-710-WO-B	1760	16.30	5672	1361.2	9075	20 x 20 x 50	2607.00	7603	2748.00	7822
A-711-SO-B	A-711-WO-B	1956	18.00	6328	1518.6	10125	20 x 20 x 55	2804.00	8195	2957.00	8456
A-712-SO-B	A-712-WO-B	2148	19.65	6949	1667.7	11118	20 x 20 x 60	2974.00	8871	3139.00	9169
A-713-SO-B	A-713-WO-B	2340	21.45	7570	1816.8	12112	20 x 24 x 70	3297.00	9613	3474.00	9883
A-714-SO-B	A-714-WO-B	2532	23.20	8191	1965.8	13105	20 x 24 x 80	3469.00	10341	3658.00	10611

*Nozzle sizes, gph, 80°S, furnished with A-7 units are as follows: A-705, 2 4.00; A-706, 1 4.50, 1 5.00; A-707, 2 5.50; A-708 1 4.00, 2 4.50; A-709, 1 4.50, 2 5.00; A-710, 1 5.00, 2 5.50; A-711, 3 6.00; A-712, 3 6.50; A-713, 2 5.00, 1 11.00; A-714, 2 5.50, 1 12.00.

Standard equipment:

boiler model

oil burner

A-705, A-706, A-707

96-7508

A-708, A-709, A-710

97-7606

A-711, A-712

98-7706

A-713, A-714

97A Hi-Lo 7668

} pedestal mounted;
2-stage fuel unit

All the above burners include RA890E Protectorelay and Q270A base, C7013A photocell.

On 96-7508 burner, Q270A base is mounted on burner housing. On 97-7606, 98-7606, and 97A Hi-Lo 7668, W415B1 panel is furnished with Q270A base and R488E load relay.

Delayed oil valve with 96, 97 and 98 burners; 3 oil valves with model 97A Hi-Lo.

Draft regulator. Drain valve.

Steel pedestal base in addition to regular 12" base: 8" height for 5 through 7 section; 10" height for 8 through 14 section.

For Steam: PA404A Pressuretrol, nozzles. Steam gauge. ASME safety valve. Gauge glass and trimmings.

For Water: L4080 Aquastat limit control, nozzles. Pressure and temperature gauge. ASME relief valve for 50 lbs.

Combustion chamber not furnished. See Installation-Operation and Maintenance Manual for combustion chambers for A-7 boiler-burner units.

A-7 OIL FIRED BOILERS

Jacketed and unjacketed.

Tested and equipped for 50 lbs. water working pressure.



boiler number		gross l=B=R output Mbh	l=B=R burner capacity gph	net l=B=R rating		net rating sq ft water	chimney size	unjacketed		jacketed	
STEAM	WATER			sq ft steam	Mbh			Trade Price	approx. shipping weight	Trade Price	approx. shipping weight
A-705-SO	A-705-WO	866	8.15	2707	649.7	4331	16 x 16 x 28	\$1260.00	3882	\$1341.00	4054
A-706-SO	A-706-WO	1012	9.55	3163	759.2	5061	16 x 16 x 30	1380.00	4518	1473.00	4693
A-707-SO	A-707-WO	1196	11.25	3738	897.2	5981	16 x 20 x 36	1555.00	5149	1660.00	5332
A-708-SO	A-708-WO	1376	12.90	4340	1041.6	6944	16 x 20 x 42	1725.00	5720	1842.00	5929
A-709-SO	A-709-WO	1570	14.65	5013	1203.1	8020	16 x 20 x 45	1877.00	6330	2006.00	6545
A-710-SO	A-710-WO	1760	16.30	5672	1361.2	9075	20 x 20 x 50	2055.00	6990	2196.00	7209
A-711-SO	A-711-WO	1956	18.00	6328	1518.6	10125	20 x 20 x 55	2227.00	7556	2380.00	7817
A-712-SO	A-712-WO	2148	19.65	6949	1667.7	11118	20 x 20 x 60	2397.00	8208	2562.00	8506
A-713-SO	A-713-WO	2340	21.45	7570	1816.8	12112	20 x 24 x 70	2567.00	8912	2744.00	9182
A-714-SO	A-714-WO	2532	23.20	8191	1965.8	13105	20 x 24 x 80	2739.00	9616	2928.00	9886

Standard equipment:

For Steam only: Steam gauge. ASME safety valve. Gauge glass and trimmings.

For Water only: Pressure and temperature gauge. ASME relief valve for 50 lbs.

Notes:

For optional equipment, see page 27.

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

Ordering Examples:

- Boiler-Burner Unit with jacket for steam with standard equipment:
1 A-707-SO-B boiler-burner jacketed
- Boiler-Burner Unit less jacket for water with optional equipment:
1 A-710-WO-B boiler-burner unjacketed with 97-7607 oil burner
- Boiler only with jacket for steam with optional equipment
1 A-711-SO boiler with steel pedestal base

04667

AMERICAN-Standard HYDRONIC HEATING

BOILER-BURNER UNITS
OIL FIRED BOILERS
STEAM AND WATER

A-7 OPTIONAL EQUIPMENT

ELECTRONIC FLAME SAFEGUARD CONTROL EQUIPMENT:

For installations requiring Factory Mutual Approval and in states and municipalities with regulations more stringent than UL, oil burners are available with special electronic flame safeguard controls for A-7 boiler-burner units as follows:

boiler-burner unit	burner model	added Trade Price charge
A-705, A-706, A-707	96-7509	\$34.00
A-708, A-709, A-710	97-7607	15.00
A-711, A-712	98-7707	15.00
A-713, A-714	97A Hi-Lo 7669	15.00

Other temperature controls are shown on page 30.

BOILER-BURNER UNITS or OIL FIRED BOILERS:

McDonnell-Miller No. 47-2 and No. 51-2 low water cut-off and feeder combinations: No. 47-2 used with A-705 through A-707 and No. 51-2 used with balance of sizes. Special equalizer tapping for bottom connection of No. 51-2 located 6 inches below water line on front section. Specify No. 47-2 or No. 51-2 on order at current McDonnell-Miller prices.

For No. 369 low water cut-off for use with steam units, see page 30.

OIL FIRED BOILERS only:

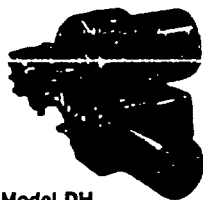
Steel pedestal bases for installation under the regularly furnished 12" base for greater base heights will be furnished when specified on order at the following added charges:

section size	base height	added charge
5 through 7	8"	\$46.00
8 through 14	10"	78.00

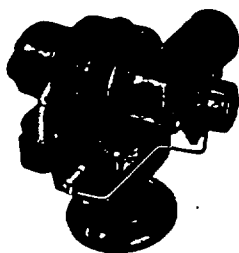
04668

AMERICAN-Standard HYDRONIC HEATING

OIL BURNERS



Model DH



Model 96-7508

OIL BURNERS for A-3, A-5, A-7 and Severn boiler-burner units motors and controls regularly furnished are for 115 volt, 60 cycle current

model number	capacity gal. per hour	air tube		mounting	Trade Price	approx shipping weight
		diam.	length			
DH-5	.55- 3.00	4	5	sling	\$115.15	55
DH-6	.55- 3.00	4	6	sling	115.15	55
45WU-3606	3.00- 4.00	4 1/4	7 3/4	flange	159.00	58
*62A-7056-1	4.00- 6.50	6 1/8	10 1/8	flange	175.00	79
*62A-7056-1	4.00- 6.50	6 1/8	10 1/8	flange	180.00	84

Including constant ignition light sensing primary control with No. 1 steam or No. 3 water control set

Including electronic flame safeguard primary control with No. 1 steam or No. 3 water control set

96-7506	6.00-12.00	6 1/8	10 1/8	flange	290.00	107
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Including electronic flame safeguard primary control with steam or water limit control

96-7508	6.00-12.00	6 1/8	10 1/8	pedestal	327.00	145
97-7606	10.00-17.00	7	10 1/4	pedestal	476.00	208
98-7706	14.00-20.00	8	10 1/4	pedestal	501.00	214
97A Hi-Lo 7668	12.00-24.00	7 1/8	10 1/4	pedestal	654.00	223

*62A-7056-1 burner supplied with 9" draft regulator for A-507 and A-508, and with 12" draft regulator for A-509 units.

boiler-burner unit oil burner

APR DH-5
APH DH-5
A-3 packaged DH-5

A-3 boiler unit DH-5
A-504 boiler unit DH-5
Severn unit DH-6

controls

Primary control, light sensing cell and controls, except thermostat, factory installed. Draft regulator.

Primary control. Controls. Light sensing cell factory installed in burner. Draft regulator.

Note: For A-3 units pressure ring is packed with DH-5 burner. For A-504 unit pressure ring, mounting plate and hanger bracket are packed with DH-5 burner.

For Severn unit pressure plate, mounting bracket and draft tube sleeve are packed with draft regulator.

A-505, A-506, 45WU-3606
A-507, A-508, 62A-7056-1
A-509

A-510 96-7506-1
Note: Model 96-7506-1 furnished with delayed oil valve.

A-511 96-7506

Primary control. Control set. Light sensing cell factory installed in burner. Draft regulator.

RA890E Protectorelay packed with burner; Q270A base mounted on burner; C7013A photocell installed in air tube. Control set. Draft regulator.

A-705, A-706, 96-7508
A-707

RA890E Protectorelay packed with burner; Q270A base mounted on burner; C7013A photocell installed in air tube. Limit control. Fire tile. Draft regulator.

A-708, A-709, 97-7606
A-710

RA890E Protectorelay packed with burner; C7013A photocell installed in air tube; W415B1 panel furnished with Q270A base and R488E load relay. Limit control. Fire tile. Draft regulator.

A-711, A-712 98-7706
A-713, A-714 97A Hi-Lo 7668
Note: Delayed oil valve on 98, 97 and 98 burners. One delayed and two magnetic valves on 97A Hi-Lo burner.

*DH-5 burners for APR and APH furnished with refractory tur-
bulator and are not interchangeable with other DH-5 models.

OPTIONAL ELECTRONIC FLAME SAFEGUARD EQUIPMENT

boiler-burner unit	burner model	added Trade Price charge
A-507, A-508, A-509	62A-7056-1-F (instead of 62A-7056-1)	\$90.00
A-510	96-7506 (instead of 96-7506-1)	53.00

With RA890E Protectorelay, Q270A base, C7013A photocell, delayed oil valve.

For installations requiring Factory Mutual Approval and in states and municipalities with regulations more stringent than UL, oil burners are available with special electronic controls at charges to be added to Trade Prices shown above for burners with standard equipment:

boiler-burner unit	burner model	added Trade Price charge
A-507, A-508, A-509	62A-7056-1-FFM	\$120.00
A-510	96-7507	87.00
A-511	96-7507	34.00
A-705, A-706, A-707	96-7509	34.00
A-708, A-709, A-710	97-7607	15.00
A-711, A-712	98-7707	15.00
A-713, A-714	97A Hi-Lo 7669	15.00

Two-stage fuel unit is available for DH oil burners at added Trade Price charge of.....\$5.00

Two-stage fuel unit is standard equipment with 45WU, 62A, 96, 97, 97A Hi-Lo and 98 oil burners.

V4001A delayed oil valve is available installed on 45WU and 62A burners at added Trade Price charge of.....\$13.00

Controls and control sets are shown on page 30.

Ordering Examples:

- Oil Burner
1 DH-5 oil burner with No. 5 control set and 2.50 gph 60" S nozzle for A-504-WBT boiler-burner unit.
- Oil Burner
1 62A-7056-1 oil burner with No. 1 control set, two 2.75 gph 80" H nozzles and 9" draft regulator for A-508-SB boiler-burner unit.

04669

AMERICAN-Standard HYDRONIC HEATING

OIL BURNERS

OIL BURNERS for conversion and replacement

motors and controls regularly furnished are for 115 volt, 60 cycle current

model number	capacity gal. per hour	air tube		mounting	(48.5) Trade Price			shipping weight
		diam.	length		with controls	with primary control and nozzle(s) only	burner with nozzle(s) only	
Including No. 1 steam or No. 3 water control set and constant ignition light sensing primary control if specified								
DH-8	.65- 3.00	4	8	{ SPECIFY: pedestal or flange pedestal }	\$115.15	\$103.00	\$ 77.50	60
DH-15	.65- 3.00	4	15		117.15	105.00	79.50	64
DH-23	.65- 3.00	4	23		118.15	106.00	80.50	68
*52A	3.00- 4.00	4 1/8	7 3/4 or 10 3/4		155.00	141.50	116.00	66
62-1-7000	4.00- 7.00	6 1/8	16 1/8		170.00	156.50	131.00	73

Optional air tube lengths are available for 52A burner; add to Trade Price for 16 3/4" length, \$3.50; for 22 3/4" length, \$5.50.

Including No. 1 steam or No. 3 water control set if specified and electronic flame safeguard primary control

62-2-7002	5.00- 8.00	6 1/8	16 1/8	pedestal	275.00	261.50	—	84
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including steam or water limit control if specified and electronic flame safeguard primary control

96-7501	6.00-12.00	6 1/8	16 1/8	pedestal	290.00	278.50	—	91
97-7601	10.00-17.00	7	16 1/4	pedestal	476.00	464.50	—	168
98-7701	14.00-20.00	8	16 1/4	pedestal	501.00	489.50	—	176
97A Hi-Lo 7655	12.00-24.00	7 1/8	16 1/4	pedestal	654.00	642.50	—	180

When ordering oil burners be sure to specify nozzle sizes wanted. One nozzle is furnished with DH, two nozzles with 52A, 62, and 96, and three nozzles with 97, 98 and 97A Hi-Lo oil burners.

Nozzles and strainers are as follows:

For DH:

Hollow cone, 60°, 0.65-1.25 gph.
Solid cone, 60°, 1.35-3.00 gph.

For 52A, 62, 96, 97, 98, and 97A Hi-Lo:

Solid cone, 70°, 1.50-2.00 gph.
Solid cone, 80°, 2.25-6.50 gph.

Disc-turbulator combinations furnished with model DH oil burners are as follows:

no.	disc-turbulator identification capacity range gph	nozzle spray angle and type	
		H=hollow	S=solid
R1	.55-1.10	60° H	
R2	1.00-1.85	60° H	
1	.65-1.10	60° H	
2	.90-1.75	60° H	(0.90-1.25 gph)
		60° S	(1.35-1.75 gph)
3	1.80-2.30	60° S	
4	2.35-3.00	60° S	

The correct disc-turbulator combination is furnished installed in the DH burner for nozzle size specified on order.

Two-stage fuel unit is available for DH oil burners at added Trade Price charge of \$5.00

Two-stage fuel unit is standard equipment with 52A, 62, and 90 series oil burners.

Electric Clock Thermostat: Substitute T852A for CB-52502 thermostat; specify on order control set with suffix "B", and add to Trade Price \$29.40

Controls and control sets are shown on page 30.

Ordering Examples:

1. Oil Burner

1 DH-23 oil burner with No. 3 control set, 1 50 gph
60° H nozzle, pedestal.

2. Oil Burner

1 96-7502 oil burner with steam limit control,
nozzles for 11 gph firing rate.

Oil burners listed in this Price Book are approved by the National Board of Fire Underwriters, comply with Commercial Standard CS-75, and are for use with No. 1 or No. 2 fueloil. Capacities of oil burners using No. 1 or No. 2 fueloil are for

installations at sea level and at elevations up to 1,000 feet. Reduce by 4% for each additional 1,000 feet above sea level

For discount on repairs, see page 2.

• Deduct from shipping weight of burner with control set:
less control set 3 lbs.
less control set and primary control 9 lbs.

Burners with electronic controls include:

oil burner	controls
62-2-7002	control set or limit control if specified.
96-7501	RA890E Protectorelay packed with burner; Q270A base mounted on burner; C7013A photocell installed in air tube.
97-7601	limit control if specified.
98-7701	RA890E Protectorelay packed with burner; C7013A photocell installed in air tube;
97A Hi-Lo 7655	W415B1 panel furnished with Q270A base and R488E load relay.

OPTIONAL ELECTRONIC FLAME SAFEGUARD CONTROL EQUIPMENT

oil burner	controls	added Trade Price charge
*52A-4322F	control set if specified. RA890E Protectorelay packed with burner; Q270A base mounted on burner; C7013A photocell installed in air tube; add to price of 52A burner	\$104.00

For installations requiring Factory Mutual Approval and in states and municipalities with regulations more stringent than UL, oil burners are available with special electronic flame safeguard controls as follows:

oil burner	controls	added Trade Price charge
62-2-7003	add to price of 62-2-7002	\$34.00
96-7502	add to price of 96-7501	34.00
97-7602	add to price of 97-7601	15.00
98-7702	add to price of 98-7701	15.00
97A Hi-Lo 7656	add to price of 97A Hi-Lo 7655	15.00

Delayed oil valves are standard on all the above burners with electronic controls. One delayed and two magnetic valves on 97A Hi-Lo burners.

V4001A delayed oil valve is available installed on 52A and 62-1-7000 burners at added Trade Price charge of \$13.00

**CONTROL SETS, CONTROLS
LOW-WATER CUT-OFF
ZONE VALVE PACKAGES**

**AMERICAN-Standard
HYDRONIC HEATING**

CONTROL SETS FOR BOILER-BURNER UNITS

Control set	for	contents of control set		add to Trade Price of oil burner with basic control set
		control number	description	
no. 1 steam	boiler without domestic hot water	CB-52502 PA404A	Thermostat Pressuretrol	
no. 2 steam	boiler with year-round domestic hot water, tankless heater	CB-52502 PA404A L4006A	Thermostat Pressuretrol AquaStat operating control	\$10.00
no. 3 gravity water	boiler without domestic hot water, immersion control	CB-52502 L4080	Thermostat AquaStat limit control	
no. 4 forced water	boiler without domestic hot water	CB-52502 L4062B	Thermostat AquaStat limit and circulator control	\$ 5.80
no. 5 forced water	A-3 and A-5 units only with year-round domestic hot water	CB-52502 L8024A	Thermostat AquaStat limit, reverse and operating control, circulator relay	\$14.55
no. 5-Z forced water	A-3 and A-5 units only. (1 no. 5-Z set is required for each zone in addition to the first zone which is controlled by the no. 5 control set.)	CB-52502 R845A	Thermostat Relay	\$19.35
no. 6 forced water	boiler with year-round domestic hot water, storage tank heater	CB-52502 L4006A L4080 R845A	Thermostat AquaStat operating control AquaStat limit control Relay	\$24.30
no. 7 forced water	boiler with year-round domestic hot water, tankless heater	CB-52502 L6006A L4080 RA89A	Thermostat AquaStat operating and circulator control AquaStat limit control Relay	\$22.45

CONTROLS

number	description	Trade Price	number	description	Trade Price
CB-52502	AMERICAN-STANDARD Horizontal thermostat, low voltage, adjustable heater, 0.3 to 1.0 amp	\$ 5.10	L4080	AquaStat limit control	\$ 8.44
CB-65653	Limit or operating control	8.44	L4062B	AquaStat limit and circulator control	14.29
CB-65655	Reverse acting control	8.44	L6006A	AquaStat operating and circulator control	11.18
CB-65690	Limit or operating control (millivolt)	8.44	R8182A	AquaStat-relay combination, high limit, low limit and circulator control, light sensing constant ignition primary control	45.75
CB-85111	Circulator-limit control	14.36	R8182C	AquaStat combination, limit and circulator control, light sensing constant ignition primary control	37.76
CB-26203	Relay	12.60	L8024A	AquaStat limit, reverse and operating control, circulator relay	23.18
AY-553	High range limit control	3.00	L8024G	AquaStat limit control, switching relay and transformer	25.43
AY-686	Low range limit control	3.00	PA404A	Pressuretrol	11.51
AY-552	High range limit control (millivolt)	3.00	RA89A	Relay, SPST	11.55
AY-687	Low range limit control (millivolt)	3.00	R845A	Relay, DPST	14.51
TS88A	HONEYWELL Thermostat (millivolt)	4.73	R8184A	Light sensing constant ignition primary control	24.94
T832A	Thermostat, low voltage, manual turndown	21.96	120272	Cadmium cell only	1.88
T852A	Thermostat, electric clock	34.91			
L4006A	AquaStat operating control	10.13			

No. 369 McDonnell & Miller low water cut-off for automatically fired steam A-5, A-7, Severn and Exbrook boilers and/or boiler-burner units.....Trade Price each \$16.75

04671

HYDRONIC ZONE VALVE MANIFOLD PACKAGES

Assembled zone valve manifold packages utilize the thermostat furnished with American-Standard gas and oil packaged units. When the listed packages are to be used with other

forced hot water installations, an additional 2-wire thermostat is needed to control the first zone.

No. 2-Z package for 2 zones		No. 3-Z package for 3 zones	
1 CB-52502 thermostat		2 CB-52502 thermostats	
2 ZV-20000 3/4" 24 volt zone valves assembled to manifold		3 ZV-20000 3/4" 24 volt zone valves assembled to manifold	
1 40 VA transformer		1 40 VA transformer	
Trade Price.....\$51.00		Trade Price.....\$76.00	

ZV-20000 3/4" 24 volt zone valve.....Trade Price each \$18.00

NOTE: RA89A relay for intermittent circulator operation with zone valves—see Trade Price above.

AMERICAN-Standard HYDRONIC HEATING

STOKER FIRED BOILERS
STEAM AND WATER

SEVERN STOKER FIRED BOILERS

Flush jacket.

boiler number		gross output Mbh	firing rate pounds per hour	net installed rating			Trade Price	approx. shipping weight
STEAM	WATER			sq ft steam	Mbh	sq ft water		
Not adapted for Built-in Water Heater (see options below)								
SC-17 (T)	WC-17 (T)	146	16	456	109.5	730	\$355.00	1053
SC-21 (T)	WC-21 (T)	168	18	525	126.0	840	397.00	1220
SC-25 (T)	WC-25 (T)	188	21	588	141.0	940	436.00	1301
SC-29 (T)	WC-29 (T)	216	24	675	162.0	1080	479.00	1457
SC-33 (T)	WC-33 (T)	247	27	772	185.3	1235	542.00	1534
SC-37 (T)	WC-37 (T)	278	31	869	208.6	1390	600.00	1687

Suffix "T" denotes boiler arranged for but less built-in heater.

Standard equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings.

For Water: Pressure and temperature gauge, ASME relief valve.

Optional equipment:

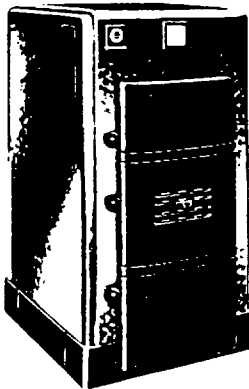
Boilers arranged for but less Built-in heaters: If desired, for use with heaters No. 590, 594 and 595, add suffix letter "T" to boiler number and add \$6.00 to Trade Price of boiler with standard equipment.

If 2½" right or left side tapping in back section for Built-in heater No. 703 is desired, specify on order and add \$2.00 to Trade Price of boiler.

For low water cut-off for use with steam Severn boilers, see page 30.

Cover plate for water heater opening will be furnished if specified on order for "T" type boiler at an added Trade Price charge of \$3.70.

Below are the ratings and Trade Prices for Built-in heaters available for Severn stoker boilers. For detailed information on ratings, see page 2.



Heater No.	Heater Type	Heater ratings gals. capacity	Trade Price	approx. shipping weight
703	tank	66	\$ 9.00	7
594	tank	100	48.00	54
595	tank	160	42.50	51
590	tankless	3½ per minute	36.00	60

Ordering Examples:

- Boiler for water with standard equipment:
1 WC-25 boiler
- Boiler for steam and arranged for but less built-in heater:
1 SC-33-T boiler

Notes:

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

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STOKER FIRED BOILERS
STEAM AND WATER

AMERICAN-Standard

HYDRONIC HEATING

EXBROOK STOKER FIRED BOILERS



Flush Jacket.

boiler number		gross I=B=R output Mbh	I=B=R burner capacity lbs/hr	net I=B=R rating		net rating sq ft water	Trade Price	chimney size	approx. shipping weight
STEAM	WATER			sq ft steam	Mbh				
Not adapted for Built-in Water Heater (see options below)									
SC-207(T)	WC-207(T)	276	30	863	207.1	1380	\$607.00	8x12x25	2150
SC-208(T)	WC-208(T)	335	37	1047	251.3	1675	684.00	8x12x25	2313
SC-209(T)	WC-209(T)	396	43	1238	297.1	1980	761.00	12x12x30	2628
SC-2010(T)	WC-2010(T)	452	50	1413	339.1	2261	838.00	12x12x30	2821
SC-2011(T)	WC-2011(T)	508	56	1588	381.1	2541	916.00	12x12x35	3134
SC-2012(T)	WC-2012(T)	564	62	1763	423.1	2821	994.00	12x16x40	3309
SC-2013(T)	WC-2013(T)	620	68	1938	465.1	3101	1071.00	12x16x40	3641

Suffix "T" denotes boiler arranged for but less built-in heater.

Standard equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings.

For Water: Pressure and temperature gauge, ASME relief valve.

Optional equipment:

Boilers arranged for but less Built-in heater: If desired add suffix letter "T" to boiler and add \$6.00 to Trade Price of boiler with standard equipment.

Built-in water heaters are available for use with Exbrook "T" type boilers only.

Cover plate for water heater opening will be furnished if specified on order for "T" type boiler at added Trade Price of \$4.25.

For low water cut-off for Exbrook steam boilers, see page 30.

Below are the ratings and Trade Prices for Built-in heaters available for Exbrook "T" type Stoker boilers.

Heater No.	Heater Type	Heater Ratings gals. capacity	Trade Price	approx. shipping weight
591	tank	120	\$32.50	35
592	tank	200	46.50	53

Ordering Examples:

- Boiler for steam with standard equipment:
1 SC-209 boiler
- Boiler for water and arranged for built-in heater:
1 WC-2011-T boiler
1 Heater opening cover plate

Notes:

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

AMERICAN-Standard HYDRONIC HEATING

STOKER FIRED BOILERS
STEAM AND WATER

NO. 3 REDFLASH STOKER FIRED BOILERS

Jacketed and unjacketed.

boiler number		gross output Mbh	firing rate pounds per hour	net installed rating			unjacketed		jacketed	
STEAM	WATER			sq ft steam	Mbh	sq ft water	Trade Price	approx. shipping weight	Trade Price	approx. shipping weight
3-SC-8	3-WC-8	706	78	2207	529.6	3531	\$1135.00	3652	\$1227.00	3827
3-SC-9	3-WC-9	798	88	2494	598.6	3991	1260.00	4041	1356.00	4224

Standard equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings.

For Water: Pressure and temperature gauge, ASME relief valve.

Optional equipment:

External water heater tapings available at following added charges: \$2.00 per section tapping and \$2.00 per jacket punching.

Ordering Examples:

Boiler for steam with jacket with standard equipment:
1 3-SC-9 jacketed boiler

A-7 STOKER FIRED BOILERS

Jacketed and unjacketed.

Tested and equipped for 50 lbs. water working pressure.



boiler number		gross I=B=R output Mbh	I=B=R burner capacity lbs/hr	net I=B=R rating		net rating sq ft water	chimney size	unjacketed		jacketed	
STEAM	WATER			sq ft steam	Mbh			Trade Price	approx. shipping weight	Trade Price	approx. shipping weight
A-705-SC	A-705-WC	866	95	2707	649.7	4331	16 x 16 x 28	\$1260.00	3882	\$1341.00	4054
A-706-SC	A-706-WC	1012	111	3163	759.2	5061	16 x 16 x 30	1380.00	4518	1473.00	4693
A-707-SC	A-707-WC	1196	131	3738	897.2	5981	16 x 20 x 36	1555.00	5149	1660.00	5332
A-708-SC	A-708-WC	1376	151	4340	1041.6	6944	16 x 20 x 42	1725.00	5720	1842.00	5929
A-709-SC	A-709-WC	1570	172	5013	1203.1	8020	16 x 20 x 45	1877.00	6330	2006.00	6545
A-710-SC	A-710-WC	1760	194	5672	1361.2	9075	20 x 20 x 50	2055.00	6990	2196.00	7209
A-711-SC	A-711-WC	1956	215	6328	1518.6	10125	20 x 20 x 55	2227.00	7556	2380.00	7817
A-712-SC	A-712-WC	2148	236	6949	1667.7	11118	20 x 20 x 60	2397.00	8208	2562.00	8506
A-713-SC	A-713-WC	2340	257	7570	1816.8	12112	20 x 24 x 70	2567.00	8912	2744.00	9182
A-714-SC	A-714-WC	2532	278	8191	1965.8	13105	20 x 24 x 80	2739.00	9616	2928.00	9886

Standard equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings.

For Water: Pressure and temperature gauge, ASME relief valve for 50 lbs.

Optional equipment:

Steel pedestal bases for installation under the regularly furnished 12" base for greater base heights, will be furnished when specified on order at the following added charges:

section size	base heights	trade price
5 thru 7	8"	\$46.00
8 thru 14	10"	76.00

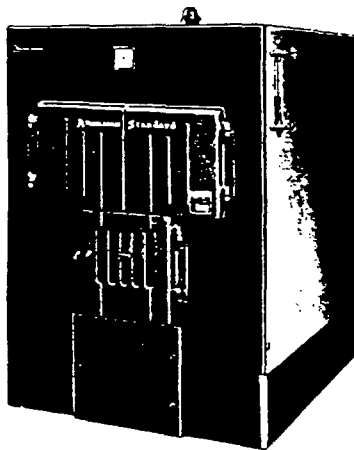
For low water cut-off for A-7 steam boilers, see page 30.

Ordering Examples:

Boiler for water with jacket with optional equipment.
1 A-708-WC jacketed boiler
1 8" steel pedestal base

Notes:

For complete information on boiler ratings, see page 2.
For discount on repairs, see page 2.



04674

HAND FIRED BOILERS
STEAM AND WATER

AMERICAN-Standard
HYDRONIC HEATING

SEVERN HAND FIRED BOILERS

Flush jacket.

boiler number		gross output Mbh	net installed rating			Trade Price	approx. shipping weight
STEAM	WATER		sq ft steam	Mbh	sq ft water		
S-17	W-17	194	353	84.7	565	\$393.00	1243
S-21	W-21	244	453	108.7	725	456.00	1413
S-25	W-25	296	553	132.7	885	522.00	1521
S-29	W-29	328	630	151.3	1009	574.00	1686
S-33	W-33	364	710	170.5	1137	632.00	1783
S-37	W-37	396	783	187.9	1253	681.00	1956

Standard Equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings, automatic damper regulator and firing tools.

For Water: Pressure and temperature gauge, ASME relief valve, automatic damper regulator and firing tools.

Built-in Heaters:

If 2½" right or left side tapping in back section for Built-in screw-in heaters No. 701, 702 or 703 is desired specify on order and add \$2.00 per tapping to Trade Price of boiler.

Below are the ratings and Trade Prices of Built-in heaters available for Severn hand fired steam boilers.

Heater No.	Heater Type	Heater ratings gals. capacity	Trade Price	approx. shipping weight
701	tank	60	\$8.50	5
702	tank	40	8.00	4
703	tank	100	9.00	7

Note: Built-in water heaters are not recommended for hand fired water boilers.

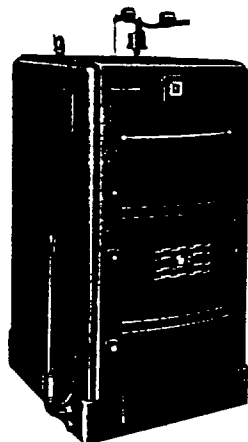
Ordering Example:

Boiler for steam with built-in heater:
1 S-25 boiler with 2½" tapping
on right hand side of back section
1 702 heater

Notes:

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.



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AMERICAN-Standard HYDRONIC HEATING

HAND FIRED BOILERS
STEAM AND WATER

NO. 2 REDFLASH HAND FIRED BOILERS

Jacketed and unjacketed.

boiler number		gross output Mbh	net installed rating			unjacketed		jacketed	
STEAM	WATER		sq ft steam	Mbh	sq ft water	Trade Price	approx. shipping weight	Trade Price	approx. shipping weight
2-S-7	2-W-7	464	940	225.7	1505	\$ 707.00	2293	\$ 775.00	2390
2-S-8	2-W-8	536	1111	266.7	1778	785.00	2466	857.00	2572
2-S-9	2-W-9	606	1281	307.5	2050	863.00	2782	939.00	2897
2-S-10	2-W-10	676	1453	348.8	2325	942.00	2999	1022.00	3122
2-S-11	2-W-11	744	1623	389.5	2597	1021.00	3313	1105.00	3446
2-S-12	2-W-12	812	1794	430.5	2870	1099.00	3503	1187.00	3644

Standard Equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings, automatic damper regulator and firing tools.

For Water: Pressure and temperature gauge, ASME relief valve, automatic damper regulator and firing tools.

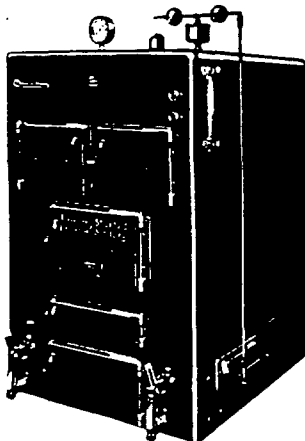
Ordering Example:

Boiler for steam less jacket with standard equipment:
1 2-S-9 boiler unjacketed

NO. 3 REDFLASH HAND FIRED BOILERS

Jacketed and unjacketed.

boiler number		gross output Mbh	net installed rating			unjacketed		jacketed	
STEAM	WATER		sq ft steam	Mbh	sq ft water	Trade Price	approx. shipping weight	Trade Price	approx. shipping weight
3-S-6	3-W-6	696	1503	360.6	2404	\$ 963.00	3243	\$1047.00	3397
3-S-7	3-W-7	814	1799	431.8	2879	1107.00	3698	1195.00	3870
3-S-8	3-W-8	932	2100	504.1	3360	1251.00	4110	1343.00	4285
3-S-9	3-W-9	1046	2400	576.0	3840	1395.00	4549	1491.00	4732



Standard Equipment:

For Steam: Steam gauge, ASME safety valve, gauge glass and trimmings, automatic damper regulator and firing tools.

For Water: Pressure and temperature gauge, ASME relief valve, automatic damper regulator and firing tools.

Note: Buckwheat coal grate bars will be furnished at no additional charge when specified on order.

Ordering Example:

Boiler for water with jacket with standard equipment:
1 3-W-7 boiler jacketed

Notes:

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.

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HAND FIRED BOILERS
STEAM AND WATER

AMERICAN-Standard
HYDRONIC HEATING

A-7 HAND FIRED BOILERS

Jacketed and unjacketed.

Tested and equipped for 50 lbs. water working pressure.



boiler number		gross I=B=R output Mbh	net I=B=R		net rating sq ft water	chimney size	unjacketed		jacketed	
STEAM	WATER		sq ft steam	Mbh			Trade Price	approx. shipping weight	Trade Price	approx. shipping weight
A-705-S	A-705-W	1122	2606	625.4	4169	16 x 16 x 40	\$1393.00	4294	\$1474.00	4466
A-706-S	A-706-W	1298	3101	744.3	4962	16 x 20 x 45	1519.00	5006	1612.00	5181
A-707-S	A-707-W	1510	3725	894.0	5960	20 x 20 x 50	1696.00	5738	1801.00	5921
A-708-S	A-708-W	1708	4342	1042.1	6947	20 x 20 x 55	1877.00	6392	1994.00	6601
A-709-S	A-709-W	1910	5008	1202.0	8013	20 x 20 x 60	2006.00	7199	2135.00	7334
A-710-S	A-710-W	2108	5681	1363.5	9090	20 x 24 x 65	2164.00	7858	2305.00	8077
A-711-S	A-711-W	2288	6326	1518.2	10122	20 x 24 x 70	2336.00	8506	2489.00	8767
A-712-S	A-712-W	2456	6947	1667.3	11115	24 x 24 x 75	2496.00	9231	2661.00	9529

Standard equipment:

For Steam: Steam gauge, ASME safety valve. Gauge glass and trimmings, automatic damper regulator and firing tools.

For Water: ASME relief valve for 50 lbs. Automatic damper regulator and firing tools. Pressure and temperature gauge.

Ordering Example:

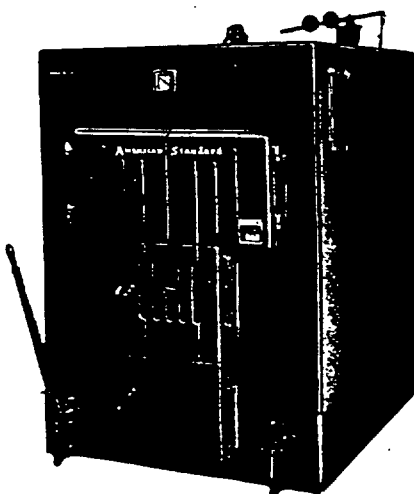
Boiler for water with jacket with standard equipment:

1 A-706-W boiler jacketed

Notes:

For complete information on boiler ratings, see page 2.

For discount on repairs, see page 2.



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AMERICAN-Standard

HYDRONIC HEATING

RADIATORS RADIATOR ACCESSORIES

ARCO RADIATORS



width	height, inches	sq ft per section	Trade Price per sq ft
6 tube	32	3.7	\$1.25
3 tube	25	1.6	1.25
4, 5, 6 tube	25	2.0, 2.4, 3.0	1.18
4, 5 tube	22	1.8, 2.1	1.23
4, 6 tube	19	1.6, 2.3	1.25

Arco Radiators are regularly furnished with two and one-half inch (2½") legs but can be supplied on Special Order with four and one-half inch (4½") legs, or without legs, at no extra charge.

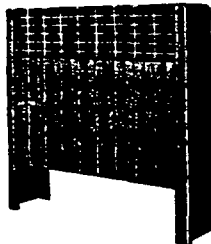
Arco Radiators sold only in even number of sections up to a maximum of 56 sections.

For purpose of estimating shipping weights, use 4½ pounds per sq. ft.

Ordering Example:

1-12 Section 25" Arco 4 Tube Legless ½ x ½

SUNRAD® RADIATORS



type	sq ft per section	Trade Price per sq ft
M 5 x 20	2.25	\$1.49
M 7½ x 23	3.40	1.56

Sunrad Radiators are regularly furnished with two and three-quarter inch (2¾") legs but can be supplied on special order without legs, at no extra charge.

Sunrad Radiators sold in even number of sections from 4 to 30 sections, and in odd number of sections with center leg from 31 to a maximum of 45 sections.

Important: Increase size 5% for recessed installation—¾" air space top and sides, ½" at back. Increase size 15% for tightly recessed installation—no clearance top or sides, ½" air space at back.

Sunrad Grilles

Inlet—Stamped Lattice Type. per section \$0.19

Special No. 16 Gauge with Locking Device.
Price on application

For purposes of estimating shipping weights, use 6 pounds per sq ft for M5 x 20.

use 6½ pounds per sq ft for M7½ x 23.

Ordering Example:

1-10 Section M5 x 20 Sunrad T-4 ½ x ½

1-Type M Sunrad Grille for above.

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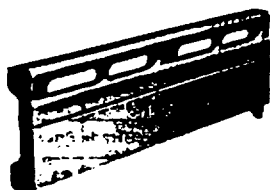
RADIATOR ACCESSORIES

	Trade Price each		Trade Price each
Arco Brackets:		Nipples, Plugs, Bushings, etc.:	
For 3, 4, 5, 6 tube, with Wall Plate.	\$0.83	¾", 1", 1¼", 1½" Plugs, Bushings.	\$0.23
Arco Radiator Pedestals:		¾", 1", 1¼" Slip Nipples.	0.23
½" and 1"	0.32	⅛" Air Vent Plugs.	0.01
1½"	0.41	Radiator Rod Nuts.	0.01
Sunrad Brackets:		Radiator Rods. per section	0.01
For M5 x 20 and M7½ x 23.	0.65	Above items available for use only with our Radiator products.	

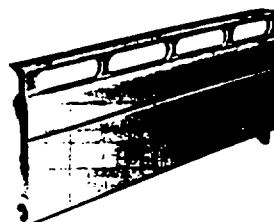
BASEBOARD PANELS

AMERICAN-Standard HYDRONIC HEATING

RADIANTRIM BASEBOARD PANELS



New Model 8
Steam Rating per lineal foot 2.75 sq ft



Model 10
Steam Rating per lineal foot 3.4 sq ft

SEE CURRENT LITERATURE FOR APPROVED I=B=R STEAM AND HOT WATER RATINGS

per lineal foot	per square foot
Trade Price— \$3.08	\$1.12

New Model 8 Radiantrim Panel lengths (2½ ft to 30 ft) are made up from the following sections:

1½ ft Left hand end section	1 ft Right hand end section
2 ft Left hand end section	2 ft Right hand end section
2 ft Center section	

Assembly length with legs and tappings at each end:
2 ft Double end section

New Model 8 Accessories Trade Price

Extension Panel and Brackets (Two 6 ft lengths per box)	\$8.40
*Extension Panel Retaining Bracket	0.22
Extension Panel Cover Strip	0.53
Assembly Clamp	7.70
Short — Compression Corner Connection	2.00
Long — Compression Corner Connection	2.25
*Retaining Block	0.15
*Adjustable Leg	0.20
*Tie Bolt	0.06

*These items are regularly furnished as required with New Model 8 Radiantrim Panels and Accessories. Prices are shown for repair or replacement purposes.

Packed in quantity of 10 per box Trade Price (Available only in this minimum quantity) per box of 10

Inverted Corner Cover	\$10.50
Extended Inverted Corner Cover	17.50
Projecting Corner Cover	14.20
Valve Enclosure (all R.H. or L.H.)	12.35
End Box (all R.H. or L.H.)	7.00

For purpose of estimating shipping weights, use 4¾ pounds per sq. ft., 12.16 pounds per lineal foot.

Ordering Example:

- 1—7 ft. New Model 8 Radiantrim Panel.
- 1—Box of New Model 8 Inverted Corner Covers.

per lineal foot	per square foot
Trade Price— \$3.81	\$1.12

Model 10 Radiantrim Panel lengths (2½ ft to 30 ft) are made up from the following sections:

1½ ft Left hand end section	1 ft Right hand end section
2 ft Left hand end section	2 ft Right hand end section
2 ft Center section	

Assembly length with legs and tappings at each end:
1½ ft Double end section 2 ft Double end section

Model 10 Accessories Trade Price

Extension Panel and Brackets (Two 6 ft lengths per box)	\$13.10
*Extension Panel Retaining Bracket	0.22
Extension Panel Cover Strip	0.53
Assembly Clamp	7.70
Short — Compression Corner Connection	2.00
Long — Compression Corner Connection	2.25
*Retaining Block	0.15
*Adjustable Leg	0.20
*Tie Bolt	0.06

*These items are regularly furnished as required with Model 10 Radiantrim Panels and Accessories. Prices are shown for repair or replacement purposes.

Packed in quantity of 10 per box Trade Price (Available only in this minimum quantity) per box of 10

Inverted Corner Cover	\$13.10
Extended Inverted Corner Cover	23.60
Projecting Corner Cover	16.60
Valve Enclosure (all R.H. or L.H.)	18.35
End Box (all R.H. or L.H.)	9.80

For purpose of estimating shipping weights, use 4¾ pounds per sq. ft., 16.15 pounds per lineal foot.

Ordering Example:

- 1—7 ft. Model 10 Radiantrim Panel.
- 1—Box of Model 10 Right Hand Valve Enclosures.

EXTRA RADIANTRIM ACCESSORY BAGS

Bag No.	For	Trade Price	Bag No.	For	Trade Price
0	Double Leg Section	\$.65	3	12½'-18' Panel Length	\$2.65
1	2½'-6' Panel Length	.80	4	18½'-24' Panel Length	3.50
2	6½'-12' Panel Length	1.80	5	24½'-30' Panel Length	4.50

Sufficient quantities of these bags are regularly furnished with Radiantrim Panels. Prices shown are for extra bags as may be required.

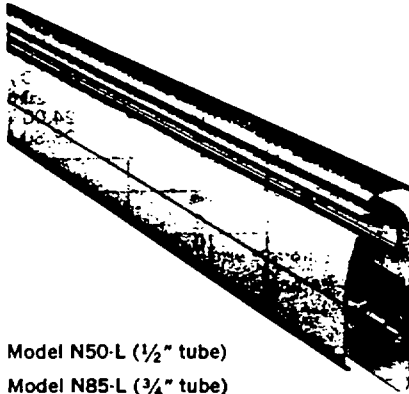
04679

AMERICAN-Standard

HYDRONIC HEATING

HEATRIM PANELS

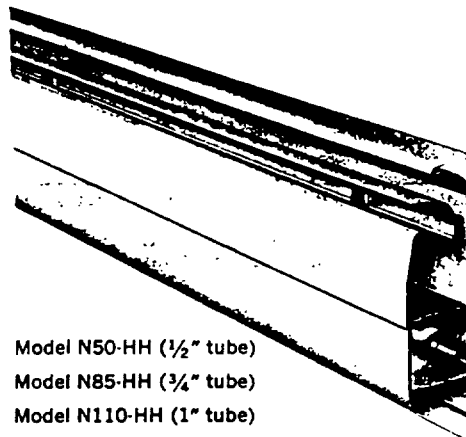
HEATRIM BASEBOARD PANELS



Model N50-L ($\frac{1}{2}$ " tube)

Model N85-L ($\frac{3}{4}$ " tube)

Model N110-L (1" tube)



Model N50-HH ($\frac{1}{2}$ " tube)

Model N85-HH ($\frac{3}{4}$ " tube)

Model N110-HH (1" tube)

SEE CURRENT LITERATURE FOR APPROVED I=B=R HOT WATER RATINGS

COMPLETE UNITS:		approx. shipping weight	Trade Price
Model N85-L —Packaged in 3', 4', 5', 6', 7' and 8' lengths—completely assembled (package contains element, one-piece back and top section, front panel damper, snap-in support brackets, element slide cradles and 1 set damper joining pieces). Finished with white prime coat of paint. Ordering Example: 1—N85-L, 3 ft. length, Heatrims unit.	per 3 ft. length	9	\$ 5.85
	per 4 ft. length	11	7.80
	per 5 ft. length	14	9.75
	per 6 ft. length	18	11.70
	per 7 ft. length	20	13.65
	per 8 ft. length	22	15.60
	*per lineal foot	2 $\frac{1}{2}$	1.95
Model N85HH —Packaged in 3', 4', 5', 6', 7' and 8' lengths—completely assembled (package contains element, one-piece back and top section, front panel, damper, snap-in support brackets, element slide cradles and 1 set joining pieces). Finished with white prime coat of paint. Ordering Example: 1—N85-HH, 7 ft. length, Heatrims unit.	per 3 ft. length	10	7.35
	per 4 ft. length	13	9.80
	per 5 ft. length	16	12.25
	per 6 ft. length	20	14.70
	per 7 ft. length	23	17.15
	per 8 ft. length	26	19.60
	*per lineal foot	3 $\frac{1}{3}$	2.45
HEATING ELEMENTS ONLY:			
Model N50 ($\frac{1}{2}$ " tube)—Individually boxed, packaged six equal lengths per bundle. Ordering Example: 1—Bundle N50, 3 ft. lengths, Heatrims elements.	per bundle of six 3' lengths	10	16.20
	per bundle of six 4' lengths	13	21.60
	per bundle of six 5' lengths	17	27.00
	per bundle of six 6' lengths	22	32.40
	per bundle of six 7' lengths	25	37.80
	per bundle of six 8' lengths	28	43.20
	*per lineal foot	$\frac{1}{2}$	.90
Model N85 ($\frac{3}{4}$ " tube)—Individually boxed, packaged six equal lengths per bundle. Ordering Example: 1—Bundle of N85, 5 ft. lengths, Heatrims elements.	per bundle of six 3' lengths	12	18.00
	per bundle of six 4' lengths	16	24.00
	per bundle of six 5' lengths	19	30.00
	per bundle of six 6' lengths	24	36.00
	per bundle of six 7' lengths	27	42.00
	per bundle of six 8' lengths	30	48.00
	*per lineal foot	$\frac{1}{2}$	1.00
Model N110 (1" tube)—Individually boxed, packaged six equal lengths per bundle. Ordering Example: 1—Bundle of N110, 8 ft. lengths, Heatrims elements.	per bundle of six 3' lengths	13 $\frac{1}{2}$	21.60
	per bundle of six 4' lengths	18	28.80
	per bundle of six 5' lengths	22 $\frac{1}{2}$	36.00
	per bundle of six 6' lengths	27	43.20
	per bundle of six 7' lengths	31 $\frac{1}{2}$	50.40
	per bundle of six 8' lengths	36	57.60
	*per lineal foot	$\frac{3}{4}$	1.20

*For comparative and estimating purposes only.

HEATRIM PANELS AND ACCESSORIES

AMERICAN-Standard HYDRONIC HEATING

HEATRIM BASEBOARD PANELS

ENCLOSURES ONLY:

Model L—Multiple packaged in 3', 4', 5', 6', 7', 8', 10' and 12' lengths unassembled—three equal lengths per box (package contains 3 one-piece back and top sections, 3 front panels, 3 dampers, loose snap-in support brackets, element slide cradles and 2 sets joining pieces). Finished with white prime coat of paint.

Ordering Example:

1—Box 5 ft. lengths Model L Enclosure only.

	approx. shipping weight	Trade Price
per box of three 3' lengths	21	\$ 7.20
per box of three 4' lengths	27	9.60
per box of three 5' lengths	34	12.00
per box of three 6' lengths	41	14.40
per box of three 7' lengths	48	16.80
per box of three 8' lengths	54	19.20
per box of three 10' lengths	68	24.00
per box of three 12' lengths	82	28.80

*per lineal foot	2	.80
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Model L—Individually packaged in 3', 4', 5', 6', 7' and 8' lengths unassembled. (Package contains one-piece back and top section, front panel, damper, loose snap-in support brackets, element slide cradles and 1 set joining pieces). Finished with white prime coat of paint.

Ordering Example:

1—7 ft. length Model L Enclosure only.

per 3 ft. length	8	2.70
per 4 ft. length	10	3.60
per 5 ft. length	12	4.50
per 6 ft. length	14	5.40
per 7 ft. length	17	6.30
per 8 ft. length	19	7.20

*per lineal foot	2	.90
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Model HH—Multiple packaged in 3', 4', 5', 6', 7' and 8' lengths unassembled—three equal lengths per box (package contains 3 one-piece back and top sections, 3 front panels, 3 dampers, loose snap-in support brackets, element slide cradles and 2 sets joining pieces). Finished with white prime coat of paint.

Ordering Example:

1—Box 4 ft. lengths Model HH Enclosure only.

per box of three 3' lengths	24	12.06
per box of three 4' lengths	30	16.08
per box of three 5' lengths	38	20.10
per box of three 6' lengths	46	24.12
per box of three 7' lengths	52½	28.14
per box of three 8' lengths	59	32.16

*per lineal foot	2½	1.34
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Model HH—Individually packaged in 3', 4', 5', 6', 7' and 8' lengths unassembled. (Package contains one-piece back and top section, front panel, damper, snap-in support brackets, element slide cradles and 1 set joining pieces). Finished with white prime coat of paint.

Ordering Example:

1—3 ft. length Model HH Enclosure only.

per 3 ft. length	8	4.35
per 4 ft. length	11	5.80
per 5 ft. length	14	7.25
per 6 ft. length	16	8.70
per 7 ft. length	17½	10.15
per 8 ft. length	21	11.60

*per lineal foot	2½	1.45
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HEATRIM BASEBOARD PANEL ACCESSORIES

MODEL L ENCLOSURE ACCESSORIES:

Inverted Corner Cover—one-piece front and top section.....	packed per box of 10	3	\$ 8.00
Inverted Corner Cover—hinged front and top section.....	packed per box of 10	3	10.50
Inverted Corner Cover—back section only.....	packed per box of 10	4	4.50
Projecting Corner Cover.....	packed per box of 10	6	10.00
Valve Enclosure—6" wide.....	packed all right hand or all left hand per box of 10	12	17.50
End Cover—4" wide.....	packed all right hand or all left hand per box of 10	10	12.50
End Cap—1½" wide.....	packed all right hand or all left hand per box of 10	5	5.00
Wall End Piece—¾" wide.....	packed per box of 10	4	3.00
Filler Pieces—7" wide.....	packed per box of 10	10	6.50
Filler Pieces—14" wide.....	packed per box of 5	9	6.00
Joining Pieces—2" wide.....	packed per box of 20 sets	5	5.00
Return Tubing Wire Hangers—for ½" and ¾" tubing only.....	packed per bag of 50		2.00
Connecting Tubing Wire Hangers—for ½" and ¾" tubing only.....	packed per bag of 50		2.00
Extra Snap-in support bracket with slide cradle.....	packed per box of 20 sets		7.00

Note: Finished with white prime coat of paint.

MODEL HH ENCLOSURE ACCESSORIES:

Inverted Corner Cover—one-piece front and top section.....	packed per box of 10	4	8.00
Inverted Corner Cover—hinged front and top section.....	packed per box of 10	4	10.50
Inverted Corner Cover—back section only.....	packed per box of 10	6	4.50
Projecting Corner Cover.....	packed per box of 10	7	11.50
Valve Enclosure—6" wide.....	packed all right hand or all left hand per box of 10	16	18.00
End Cover—4" wide.....	packed all right hand or all left hand per box of 10	12	12.50
End Cap—1½" wide.....	packed all right hand or all left hand per box of 10	6	8.00
Wall End Piece—¾" wide.....	packed per box of 10	6	4.00
Filler Pieces—14" wide.....	packed per box of 5	12	7.75
Joining Pieces—2" wide.....	packed per box of 20 sets	6	7.00
Return Tubing Wire Hangers—for ½", ¾" and 1" tubing.....	packed per bag of 50		2.00
Connecting Tubing Wire Hangers—for ½", ¾" and 1" tubing.....	packed per bag of 50		2.00
Extra Snap-in support bracket with slide cradle.....	packed per box of 20 sets		7.00

Note: Finished with white prime coat of paint.

*For comparative and estimating purposes only.

NOTE: Add 25% to accessory unit price when ordered in less than quantities indicated above.

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AMERICAN-Standard

HYDRONIC HEATING

CONVECTORS

ARCO CONVECTORS

SPECIAL SERVICE LINE when sold in combination with standard cabinets

COMBINATION PRICE:

The actual output in square feet of catalog rating—Steam (215°F) obtained with the cabinet heights furnished determines the price of convectors and cabinets sold in combination.

The total price of each order equals the amount of catalog square feet ordered multiplied by the price per square foot, plus the unit extra charge multiplied by the total number of units ordered.

SEE CURRENT LITERATURE FOR STEAM AND HOT WATER RATINGS

cabinet type	description	Trade Price		cabinet type	description	Trade Price	
		per sq ft	unit extra charge			per sq ft	unit extra charge
F	Floor Type—free standing	\$1.35	\$17.10	PR	Partially recessed— $\frac{1}{2}$ ", $1\frac{1}{2}$ ", $2\frac{1}{2}$ ", 3", 5", 7" flanged edges	\$1.34	\$19.75
FG	Floor Type—free standing—inlet grille	1.39	17.10	PRG	Partially recessed— $\frac{1}{2}$ ", $1\frac{1}{2}$ ", $2\frac{1}{2}$ ", 3", 5", 7" flanged edges—inlet grille	1.38	19.75
W	Wall Hung—flat top	1.35	17.10	PRGB	Partially recessed— $\frac{1}{2}$ ", $1\frac{1}{2}$ ", $2\frac{1}{2}$ ", 3", 5", 7" flanged edges—inlet grille—with bottom overlap	1.38	22.90
FS	Free Standing—sloping top	1.42	17.95	PFG	Plaster Front—fully recessed—outlet and 3 side inlet grille, $\frac{3}{4}$ " plaster offset	1.48	23.30
FSG	Free Standing—sloping top—inlet grille	1.45	17.95	PFGB	Plaster Front—fully recessed—outlet and 4 side inlet grille, $\frac{3}{4}$ " plaster offset	1.48	25.30
S	Wall Hung—sloping top	1.35	17.10				
FR	Fully recessed— $\frac{1}{16}$ " beveled edges	1.34	18.15				
FRG	Fully recessed— $\frac{1}{16}$ " beveled edges—inlet grille	1.38	18.15				
FRGB	Fully recessed— $\frac{1}{16}$ " beveled edges—inlet grille with bottom overlap	1.38	21.30				

Note: Where more than 20% of the convectors on a given order are in the No. 4 depth, add \$.08 per sq. ft. (EDR) to the Trade Price of the No. 4 depth unit only.

Standard Cabinets are furnished in:

Prime painted sheet steel—reinforced, No. 18 gauge front and No. 20 gauge back, ends and top, rounded corners, streamline front discharge grille, and open bottom inlet arch, in heights, lengths and depths to accommodate convectors listed in current literature

For illustrations of cabinets, see page 42.

For cabinet extras, see page 45

Ordering Example:

1—F-458-20 Arco Convector Unit X-4 $\frac{3}{4}$ x $\frac{1}{2}$

For estimating shipping weights of Arco Convector Units use:

1½ pounds per square foot for cabinet portion.

3½ pounds per square foot for element portion.

ARCO CONVECTOR — steam or water ELEMENTS ONLY (when sold less cabinets)

convector length inches	No. 4 $3\frac{3}{4}$ " depth			No. 6 $5\frac{5}{8}$ " depth			No. 8 $7\frac{7}{8}$ " depth			No. 10 $9\frac{1}{2}$ " depth		
	unit no.	approx. shipping weight	Trade Price	unit no.	approx. shipping weight	Trade Price	unit no.	approx. shipping weight	Trade Price	unit no.	approx. shipping weight	Trade Price
18	418	39	\$12.41	618	57	\$18.28	818	71	\$23.02	1018	84	\$27.76
23	423	50	16.02	623	73	23.57	823	92	29.79	1023	110	35.88
28	428	61	19.62	628	90	28.90	828	113	36.57	1028	136	44.11
33	433	72	23.25	633	106	34.30	833	134	43.33	1033	162	52.23
38	438	83	26.86	638	123	39.62	838	155	49.99	1038	188	60.47
43	443	94	30.36	643	139	44.92	843	176	56.75	1043	213	68.60
48	448	105	33.95	648	146	50.22	848	197	63.53	1048	238	76.83
53	453	107	37.57	653	172	55.51	853	218	70.30	1053	264	85.06
58	458	128	41.19	658	189	60.82	858	239	77.07	1058	289	93.20
63	463	139	44.79	663	206	66.22	863	260	83.82	1063	314	101.30

Ordering Example:

1—418 Arco Cast Iron Element only—No Cabinet X-4 $\frac{1}{2}$ x $\frac{1}{2}$

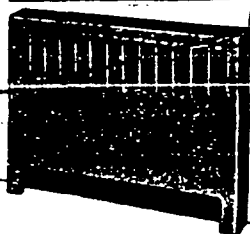
Arco Convectors in lengths and depths indicated above are Standardized Sizes when sold with or without cabinets

For sizes not listed above—price on application.

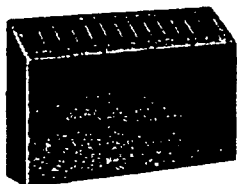
AMERICAN-Standard

HYDRONIC HEATING

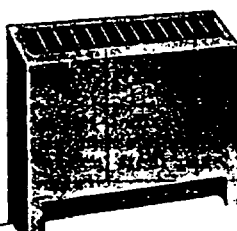
CONVECTORS



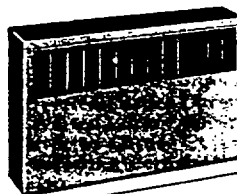
Type K (Stock Model)
Type F (Special Service)



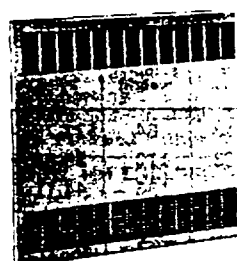
Type S



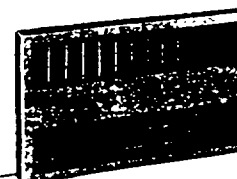
Type FS



Type W



Type FR



Type PR

MULTIFIN CONVECTORS

Combination Prices

The actual output in square feet of catalog rating—Steam (215°F.) obtained with the cabinet heights furnished determines the price of convectors and cabinets sold in combination.

The total price of each order equals the amount of catalog square feet ordered multiplied by the price per square foot, plus the unit extra charge multiplied by the total number of units ordered.

SEE CURRENT LITERATURE FOR STEAM AND HOT WATER RATINGS

cabinet type	description	Trade Price	
		per sq ft	unit extra charge

Stock Model

K	Floor Type—free standing.....	\$0.40*	\$11.10
---	-------------------------------	---------	---------

*Note: Price shown for estimating purposes only. For expanded prices, see page 44. For cabinet extras, see page 45.

Special Service

F	Floor Type—free standing.....	\$.45	\$13.00
FG	Floor Type—free standing—inlet grille.....	.48	13.00
W	Wall Hung—flat top.....	.44	13.00
FS	Free Standing—sloping top.....	.43	13.75
FSG	Free Standing—sloping top—inlet grille.....	.46	13.75
S	Wall Hung—sloping top.....	.40	13.00
FR	Fully recessed— $\frac{3}{16}$ " beveled edges.....	.47	13.75
FRG	Fully recessed— $\frac{3}{16}$ " beveled edges—inlet grille.....	.50	13.75
FRGB	Fully recessed— $\frac{3}{16}$ " beveled edges—inlet grille with bottom overlap.....	.50	16.75
PR	Partially recessed— $\frac{1}{2}$ ", $1\frac{1}{2}$ ", $2\frac{1}{2}$ ", 3", 5", 7" flanged edges.....	.51	16.00
PRG	Partially recessed— $\frac{1}{2}$ ", $1\frac{1}{2}$ ", $2\frac{1}{2}$ ", 3", 5", 7" flanged edges—inlet grille.....	.54	16.00
PRGB	Partially recessed— $\frac{1}{2}$ ", $1\frac{1}{2}$ ", $2\frac{1}{2}$ ", 3", 5", 7" flanged edges—inlet grille—with bottom overlap.....	.54	20.00
PFG	Plaster Front—fully recessed—outlet and 3 side inlet grille, $\frac{3}{4}$ " plaster offset.....	.50	14.50
PFGB	Plaster Front—fully recessed—outlet and 4 side inlet grille, $\frac{3}{4}$ " plaster offset.....	.50	16.50

Note: Where more than 20% of the special service convectors on a given order are in the No. 4 depth, add \$.08 per sq ft (EDR) to the Trade Price of the No. 4 depth units only.

Note: For cabinet extras, see page 45.

For estimating purposes only, the following approximate shipping weights per sq ft may be used for Multifin convectors:

Multifin stock model — 1.13 pounds. Also see page 44.

Multifin cabinets (less element) — $1\frac{1}{2}$ pounds.

Multifin cabinets (with element):

Types F, FR, PR — $1\frac{1}{2}$ pounds.

Types FS, W — $1\frac{1}{2}$ pounds.

Type S — $1\frac{1}{2}$ pounds.

Ordering Examples:

Stock Model Multifin with an optional feature:

1 K-840-24 Multifin with Metal Trim Strips.

Special Service Multifin with an optional feature:

1 PR-640-32- $2\frac{1}{2}$ Flange, Multifin with Knob Damper.

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AMERICAN-Standard

HYDRONIC HEATING

CONVECTORS

MULTIFIN CONVECTORS — continued

BATHROOM MULTIFIN CONVECTORS

unit no.	Type "BT" (top outlet) sq. ft. output	Type "BF" (front outlet) sq. ft. output	Trade Price
416-13	5.3	4.6	\$14.80
420-13	6.9	6.0	15.60
424-13	8.5	7.4	16.40
416-15	6.3	5.4	15.20
420-15	8.2	7.1	16.20
424-15	10.1	8.8	17.20

Note: Heights indicated are nominal. Actual height is 5" less.
Knob damper available on 15" high front outlet grille ("BF") units only.
For damper price see cabinet extras, page 45.

Ordering Example: BF-416-15 Multifin Convactor with Knob Damper.

Elements only (when sold less cabinets) — steam or water

No. 4 depth				No. 6 depth			No. 8 depth			No. 10 depth		
convactor length inches	unit no.	approx. shipping weight	Trade Price	unit no.	approx. shipping weight	Trade Price	unit no.	approx. shipping weight	Trade Price	unit no.	approx. shipping weight	Trade Price
20	420	8	\$ 8.60	620	13	\$10.60	...	...	...	...	...	...
24	424	10	9.30	624	16	11.60	...	...	...	...	...	...
28	428	12	10.00	628	19	12.75	...	...	...	...	...	...
32	432	14	10.80	632	22	13.60	832	27	\$17.00	...	...	...
36	436	16	11.80	636	25	14.75	836	31	18.40	1036	41	\$22.75
40	440	18	12.60	640	28	15.85	840	35	19.85	1040	46	24.50
44	444	20	13.55	644	31	17.00	...	...	...	...	...	...
48	448	22	14.25	648	34	18.20	848	43	22.65	1048	56	27.85
56	456	26	15.85	656	40	20.20	856	51	25.30	1056	66	31.05
64	464	30	17.60	664	46	22.60	864	59	28.10	1064	76	34.80

Note: Elements only are furnished less floor supports.

Multifin elements for special one-pipe steam header application—not available.

Ordering Example: 1—420 Multifin Element only—no cabinet.

Ratings:

Ratings of Multifin Convectors have been determined in accordance with the method of testing and rating outlined in Commercial Standard Code CS140-47 and amendments and said ratings have been approved by the Convactor Rating Committee.

Standard Cabinets:

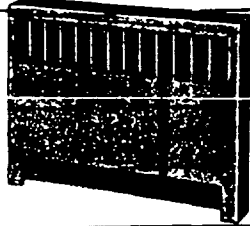
Standard cabinets are furnished in prime painted sheet steel—reinforced, No. 18 gauge front and No. 20 gauge back, ends and top, rounded corners, streamline front discharge grille, and open bottom inlet arch, in heights, lengths and depths to accommodate convectors as currently catalogued.

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AMERICAN-Standard

HYDRONIC HEATING

CONVECTORS



MULTIFIN CONVECTORS

TYPE K — STOCK MODEL — FREE STANDING

Expanded prices

For use on two-pipe steam and hot water systems only.

cabinet length inches	No. 4 depth (4 1/4" cabinet)				No. 6 depth (6 1/4" cabinet)				No. 8 depth (8 1/4" cabinet)				No. 10 depth (10 1/4" cabinet)			
	unit no.	sq ft output	approx. shipping weight	Trade Price	unit no.	sq ft output	approx. shipping weight	Trade Price	unit no.	sq ft output	approx. shipping weight	Trade Price	unit no.	sq ft output	approx. shipping weight	Trade Price
20" cabinet height																
20	420-20	10.6	18	\$15.34	620-20	14.9	21	\$17.06	....	....	....	....	....	....	....	....
24	424-20	13.0	20	16.30	624-20	18.4	24	18.46	....	....	....	....	....	....	....	....
28					628-20	22.0	27	19.90	....	....	....	....	....	....	....	....
32					632-20	25.5	29	21.30	832-20	31.7	33	\$23.78	....	....	....	....
36					636-20	29.0	33	22.70	836-20	36.0	37	25.50	1036-20	45.5	42	\$29.30
40					640-20	32.5	34	24.10	840-20	40.4	39	27.26	1040-20	51.2	48	31.58
44					644-20	36.1	37	25.54	....	....	....	....	....	....	....	....
48					648-20	39.6	40	26.94	848-20	49.2	46	30.78	1048-20	62.3	52	36.02
56					656-20	46.7	45	29.78	856-20	58.0	51	34.30	1056-20	73.4	58	40.46
64					664-20	53.8	52	32.62	864-20	66.9	59	37.86	1064-20	84.5	64	44.90
24" cabinet height																
20	420-24	12.1	20	15.94	620-24	17.2	23	17.98	....	....	....	....	....	....	....	....
24	424-24	14.9	22	17.06	624-24	21.2	26	19.58	....	....	....	....	....	....	....	....
28	428-24	17.8	25	18.22	628-24	25.4	30	21.26	....	....	....	....	....	....	....	....
32					632-24	29.5	33	22.90	832-24	35.6	38	25.34	....	....	....	....
36					636-24	33.5	35	24.50	836-24	40.5	40	27.30	1036-24	49.0	45	30.70
40					640-24	37.6	38	26.14	840-24	45.5	44	29.30	1040-24	55.2	52	33.18
44					644-24	41.7	42	27.78	....	....	....	....	....	....	....	....
48					648-24	45.7	44	29.38	848-24	55.4	50	33.26	1048-24	67.1	62	37.94
56					656-24	53.9	50	32.66	856-24	65.2	55	37.18	1056-24	79.0	64	42.70
64					664-24	62.2	57	35.98	864-24	75.3	63	41.22	1064-24	91.0	71	47.50
32" cabinet height																
20					620-32	18.7	29	18.58	....	....	....	....	....	....	....	....
24					624-32	23.1	32	20.34	....	....	....	....	....	....	....	....
28					628-32	27.7	36	22.18	....	....	....	....	....	....	....	....
32					632-32	32.1	40	23.94	832-32	40.9	45	27.46	....	....	....	....
36					636-32	36.5	43	25.70	836-32	46.5	48	29.70	1036-32	53.1	54	33.10
40					640-32	41.0	48	27.50	840-32	52.2	56	31.98	1040-32	59.5	59	35.86
44					644-32	45.4	56	29.26	....	....	....	....	....	....	....	....
48					648-32	49.8	58	31.02	848-32	63.6	65	36.54	1048-32	72.3	69	41.22
56					656-32	58.7	67	34.58	856-32	74.9	73	41.06	1056-32	85.1	76	46.58
64					664-32	67.8	71	38.22	864-32	86.5	76	45.70	1064-32	97.9	84	51.98

Plugs and bushings are not regularly furnished with Multifin Convectors, but are available for separate sale at prices shown on page 37.

Note: For stock model cabinet extras, see page 45.

Ordering Example:
1-K-636-32 Multifin.

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AMERICAN-Standard

HYDRONIC HEATING

CONVECTORS

CABINET EXTRAS FOR MULTIFIN AND ARCO CONVECTORS

CABINET EXTRAS—STOCK MODEL MULTIFIN ONLY

	Trade Price
1. Knob operated damper	each \$4.00
2. Metal trim strips:	
20" to 36" long	each 3.05
40" to 64" long	each 3.55
3. Snap-on inlet grille	each 2.80
*4. Air chamber with extended tube, manual vent	each 3.50
*5. Air chamber with Dole No. 20JR auto-vent	each 3.50

*Note: Items also available for special service multifin.

SPECIAL SERVICE CABINET EXTRAS—MULTIFIN AND ARCO CONVECTORS

	Trade Price		Trade Price
1. Knob Operated Dampers: (Standard Knob Type)		7. Metal trim strips:	
For all types except Type "S"	each \$4.00	For recessing Types "F" and "FG" Multifin	
For Type "S" only	each 4.20	Convectors only	
Institutional damper (with Allen head screw		Catalogued heights and lengths up to 36"	each \$3.05
flush with cabinet)		Catalogued heights and lengths 40" to 64"	each 3.55
For all types except Type "S"	each 4.20	Note: Any special height or length	price on application
For Type "S" only	each 4.50	8. Sound deadening material (approximately 1/4"	
2. Access Doors (in standard locations 1, 2, 3, 4, 7 or		thick)	
8 as shown in current literature)		Inside front panel only	per cabinet 5.80
Hinged type with slotted head cam		Inside complete cabinet	per cabinet 7.20
operator	each 4.00	9. Sealing strip for standard length "FR," "FRG"	
Hinged type with Allen head cam		and "FRGB" cabinets only (1/4" x 3/4" Polyure-	
operator	each 4.80	thane)	per cabinet 2.00
Note: Access doors in other than standard location		10. Snap-on inlet grille	each 2.80
price on application		For Types "F," "FS," "FR" and "PR" Multifin	
3. Special front fasteners (other than slotted head		Convectors only.	
screws)		11. End Pockets (provides additional length for valve	
Phillips or Allen head screws	per cabinet .35	housing—specify right or left hand)	
Cam locks for "F" and "FG" (Multifin and Arco)		4" end pocket with No. 18 gauge vertical baffle	
Cam locks for "S" and "W" (Multifin only)		per end pocket	2.90
per cabinet	7.20	6" end pocket with No. 18 gauge vertical baffle	
Cam locks for "FR," "FRG," "FRGB" and		per end pocket	3.60
"PR," "PRG," "PRGB"	per cabinet 9.60	8" end pocket with No. 18 gauge vertical baffle	
4. Heavier gauge cabinets—Trade Price per sq. ft. of		per end pocket	3.60
cabinet output:		End Pockets over 8", use 8" end pocket price, plus \$.60	
		per inch or fraction thereof.	
		12. Multifin front panels only:	
		35% of complete convector unit price (based on No. 6	
		depth)	
		13. Arco front panels only:	
		20% of complete convector unit price (based on No. 6	
		depth)	
		14. Multifin Cabinet only: (no element)	
		70% of complete convector unit price	
		15. Arco Cabinet only: (no element)	
		50% of complete convector unit price	
		16. Knockouts:	
		Are optional—Furnished only on request—Price on ap-	
		plication.	

MINIMUM CABINET HEIGHTS WITH DAMPERS

Type cabinet	Multifin	Arco Cast Iron
F, FG	20" For all depths	24" For all depths
W	20" For all depths	24" For all depths
FS, FSG	20" For all depths	24" For all depths
S	20" For all depths	24" For #4, #6, #8 depths—32" For #10 depth
FR, FRG, FRGB	20" For all depths	20" For all depths
PR, PRG, PRGB	20" For all depths	20" For all depths
BF	15" For #4 depth	Not Available

Cabinet heights shown for types W, S and BF are nominal heights, actual heights are 5" less.

Cabinet heights for Arco Cast Iron convectors applicable to X-4 (underneath) connections only.

AMERICAN-Standard

HYDRONIC HEATING

TERMS

TRADE PRICE BOOK

Illustrations and descriptions of Plate Numbers listed in this price book will be found in the current American-Standard Hydronic Products Catalog and literature. Items illustrated in product literature and not included in this price book are discontinued. The illustrations in this price book although actual representations of certain product in the line, do not necessarily show sizes and details of all products in the line.

This book contains suggested Trade Prices for certain Hydronic Heating products sold by American Radiator & Standard Sanitary Corporation ("American-Standard") through its Plumbing and Heating Division. (American-Standard acting through that Division is hereinafter referred to as the "Seller"). The Seller assumes no obligation to sell to anyone at any price any of the items listed herein.

This Price List has been prepared for the convenience of American-Standard distributors and their trade customers only. The trade prices shown represent fixed markups over distributor prices to reflect reasonable selling and distribution expense and do not purport to represent actual prices prevailing in any particular market.

All prices herein set forth supersede all prior price lists and are subject to change without notice. The Seller may also, from time to time, discontinue without notice the sale of any of the products listed herein.

INVOICE MINIMUM

An order for items included in this price book for which invoice prices aggregate less than \$3.00 net will be billed at \$3.00.

TERMS AND CONDITIONS APPLYING TO ALL SALES OF GOODS BY AMERICAN-STANDARD THROUGH ITS PLUMBING AND HEATING DIVISION TO ITS DISTRIBUTORS

All sales of goods by American-Standard through its Plumbing and Heating Division are made subject to terms and conditions printed below, in its bulletins and on its acknowledgment of order, invoice and quotation forms. These terms and conditions are as follows:

PRICE

Goods sold by the Seller will be billed to the Buyer according to the prices and terms contained in its current bulletins and price books. In the case of orders for goods for which no price is currently in effect, the price will be determined by the Seller and set forth in the invoice issued after shipment of the goods.

Taxes. Any tax or other Government charge now or hereafter levied upon the production, sale, use or shipment of goods ordered or sold, will be charged to and paid for by the Buyer.

DELIVERY

Transportation Risks. Delivery to the initial carrier shall constitute delivery to the Buyer. The Seller's responsibility ceases upon delivery in good order to such carrier, and all goods are shipped at the Buyer's risk. The Buyer is urged to examine all deliveries carefully before signing transportation receipts. If goods are visibly damaged, the Buyer should insist that written confirmation of the damage be noted on the freight bill or dray ticket by the agent of the carrier. If damage is discovered after unpacking, the carrier should be notified at once, so that inspection can be made and the claimed damage substantiated by the carrier.

Interference with Delivery. The Seller has no obligation to deliver goods against any order until it has accepted the order by issuance of its acknowledgment of order. In any event, the Seller will not be liable for any delay or failure in the delivery or shipment of goods against an accepted order or for any damages suffered by reason thereof, when such delay or failure is, directly or indirectly, due to accident (in manufacture or otherwise), fire, flood, riot, war, embargo, labor stoppages, inadequate transportation facilities, shortage of material or supplies, delay or default on the part of its vendors, regulation by Government authority, or any like or dissimilar cause or causes beyond its control.

WARRANTY

Except where a different express written warranty has been issued with respect to particular products, no warranty, express or implied, is extended by the Seller to any person or persons other than its distributors and other direct Buyers. The Seller warrants only, and only to direct Buyers, that it will furnish by freight a replacement for, or at its option repair, any product of its manufacture or part or portion thereof, proved to its satisfaction to be defective in material or workmanship under normal use and service within one year after installation. The Seller will not be responsible for any damages whatsoever, or for labor expense, in connection with such replacement or repair.

This warranty is in lieu of all other warranties, express or implied, and of all other obligations or liabilities, on the part of the Seller. The Seller neither assumes nor authorizes any other person to assume for it any other liabilities in connection with the sale of its products except in the case of express warranties which may be issued by it in writing from time to time with respect to particular products.

Goods of other manufacturers sold by the Seller are not warranted except by express warranties which may be issued in writing from time to time, with respect to particular products or particular sales, but the Seller will endeavor to secure for its direct Buyers the benefits of warranties extended by the manufacturers of such goods sold but not manufactured by the Seller.

CONTRACT WITH BUYER

Acceptance of Orders. Orders will be accepted only by the Seller's usual acknowledgment of order containing terms and conditions applicable thereto. No terms and conditions appearing in a Buyer's order that are at variance with the Seller's terms and conditions shall be binding upon the Seller unless specifically agreed to by it in writing. Unless the Seller specifically so agrees in writing in acknowledging any order, any terms and conditions appearing in a Buyer's order contrary to those stated herein and in such acknowledgment of order are to be deemed waived by the Buyer. Receipt by the Buyer of the acknowledgment of order without prompt objection to the terms and conditions therein and herein set forth, constitutes acceptance by the Buyer of such terms and conditions.

Cancellation of Orders. After the Seller's acknowledgment of order has been issued, an order may be modified or cancelled only upon written agreement by the Seller. Orders for goods other than those of standard manufacture will not be cancelled after a commitment has been made or production scheduled.

Credit for Returned Goods. Merchandise may not be returned for credit unless the Seller has agreed to accept it. Where returns are accepted, a deduction of 10% will be made for rehandling. All transportation costs for returned goods must be paid by the Buyer. In any event, only salable merchandise of standard manufacture may be returned for credit.

Credit Approval. Buyers' orders are accepted subject to credit investigation and approval, and delivery may be withheld or shipment stopped in transit on accepted orders without any liability on the Seller's part, if, in its opinion, the Buyer's ability to pay for the merchandise on these terms and conditions is in doubt.

SHORTAGES OR VARIANCES

No claims for variances from or shortages in orders will be considered unless presented within 60 days after receipt of goods.

PRODUCT AND PACKAGING CHANGES

Factors beyond the control of the Seller and the need for continuing improvement of product require the making of changes from time to time in products and their packaging. The right is reserved to make reasonable changes of any kind without notice and to deliver revised designs or models of goods against any order, unless on the face of the acknowledgment of order this right is specifically waived.

The Seller shall have no responsibility whatever with respect to changes made by the manufacturer in products (or their packaging) sold but not manufactured by the Seller.

SHIPPING WEIGHTS

The shipping weights given herein are approximate, for Buyers' convenience only, and are not guaranteed.

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION
PLUMBING AND HEATING DIVISION

AMERICAN-Standard
HYDRONIC PRODUCTS

MEMORANDUM



AMERICAN-Standard

PLUMBING AND HEATING DIVISION

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 WEST 40TH STREET • NEW YORK, N.Y. 10018

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