



WATER & GAS PRODUCTS

Energy Saver Gas Residential Water Heaters FSG, FSGL, FSGH, FSGT



APPROVAL RATINGS AND CERTIFICATION

All models comply with: ANSI Z21.10.1 or ANSI Z21.10.3
ASHRAE/IES 90.1b-1999
1990 NAECA
BOCA AND CEC

FSGH-30 & 40, FSG 50,75 & 100 comply with SCAQMD natural gas NOx rule 1121 or 1146.2 when ordered with suffix (SMR) R-99.

All models are approved for use in combined appliance applications.

FEATURES

Foam Insulation—Minimizes radiant heat loss.

Dip Tube—Carries inlet water deep into tank.

Thermostat—Designed for long service life. Safety shut-off provided. Propane models have built-in filter.

Glass-Lined Tank—Glass, specifically developed by A.O. Smith for water heaters, is fused to steel at 1,600°F., providing corrosion protection for years of dependable use.

Anode—Tank-mounted, screw-in anode for longer tank life.

Burner—All steel, multipoint burner for improved combustion efficiency. FSGT has a stainless steel burner. R99 models supplied with low NOx burner to meet SCAQMD regulations.

Drain valve—Non-metallic valves.

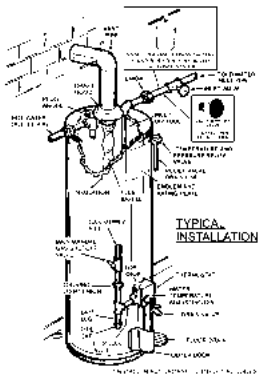
Factory Supplied Temperature & Pressure Relief Valve Standard.

Draft Diverter—Supplied with screw down anchor tabs for secure connection to the top cover.

Non-Linting Energy Saving Pilot
FSG-75 and 100 feature A.O. Smith's patented "crossfire" flue design for improved combustion efficiency.

6 YEAR LIMITED WARRANTY OUTLINE

If the tank should leak at any time during the first 6 years, under the terms of the warranty, then A.O. Smith will furnish a replacement heater. Installation, labor, handling and local delivery are extra. When used commercially, warranty is for 1 year. **THIS OUTLINE IS NOT A WARRANTY.** For complete information, consult the written warranty or A.O. Smith Water Products Company. Warranty does not apply to product installed outside of the United States of America or its territorial possessions and Canada.



TYPICAL INSTALLATION

Part No.	1st Hr. Rating Gals.	Energy Factor	Gal. Cap.	NATURAL GAS		PROPANE GAS		A Gal./Hr.* Recovery 90°F Rise	B Height Plus Diverter	C Height Less Diverter	Dia.	Approx. Ship Wt. (Lbs.)
				Vent Size	BTU Input Per Hr.	Gal./Hr.* Recovery 90°F Rise	BTU Input Per Hr.					
ENERGY SAVER MODELS												
FSG-30	56	.57	30	3"	32,000	32.7	30,000	30.7	59	55-1/4	15-3/4	105
FSG-40	65	.56	40	3"	32,000	32.7	30,000	30.7	57	53-1/4	18-1/4	119
**FSG-50	78	.55	50	3"	40,000	40.9	37,000	37.9	60-1/4	56-1/2	20-1/4	153
ENERGY SAVER LOWBOY MODELS												
FSGL-30	54	.57	30	3"	40,000	40.9	37,000	37.9	47-1/2	43-3/4	18-1/4	114
FSGL-40	65	.55	40	3"	40,000	40.9	37,000	37.9	51	47-1/4	20-1/4	131
ENERGY SAVER HIGH INPUT MODELS												
**FSGH-30	66	.56	30	3"	40,000	40.9	37,000	37.9	61-1/4	57-1/2	15-3/4	122
**FSGH-40	76	.55	40	3"	40,000	40.9	37,000	37.9	59-1/4	55-1/2	18-1/4	128
**FSGH-50	78	.53	50	3"	40,000	40.9	37,000	37.9	60-1/4	56-1/2	20-1/4	153
ENERGY SAVER VERY HIGH INPUT MODELS												
FSGT-40	77	.57	38	4"	50,000	51.2	41,000	48.1	59	54-3/4	20-1/4	130
FSGT-50	100	.54	48	4"	60,000	61.4	—	—	60-1/2	56-1/4	20-1/4	164
FSG-75	—	—	75	4"	76,000	79.8	76,000	79.8	61	57	25-1/2	271
FSG-100	—	—	100	4"	78,000	81.9	78,000	81.9	68-1/2	65	26-1/2	352

NOTE: To compensate for the effects of high altitude area above 2,000 feet, recovery capacity should be reduce approximately 4% each 1,000 feet above sea level. ALL DIMENSIONS IN INCHES.

* Recovery capacities are based on DOE method of test. (100°F rise for 75 & 100 gallon heaters).

** Natural gas input for R-99 models is 38,000 BTU/hr. Recovery capacity is 38.9 GPH at 90°F temp. rise.



WATER & GAS PRODUCTS

**Gas Tank-Type Water Heaters
Energy Saving-Atmospheric Models
Conservationist Models Provide Thermal Efficiency of 78% to 80%+**



BT-65, 80, 100
Standard Models are for light commercial applications.



Damper closes automatically when burner is off to save energy by keeping heat inside the tank. Cast iron or steel ring for extra durability.

There's an A.O. Smith gas atmospheric model for all applications—to handle the demands of large hotels/motels, car washes, institutions, etc.

FEATURES

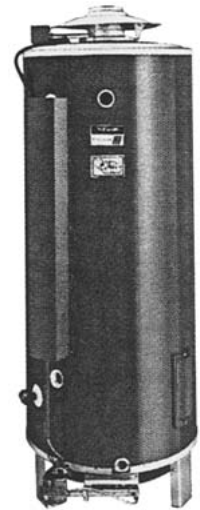
All Models (Standard)

- Foam insulation
- Anodic protection
- Three-year limited warranty
- Easy to install
- Handhole clean-out for easy maintenance
- All models meet ASHRAE/IES 90.1b-1992 requirements
- Fully automatic controls with safety shutoff
- Proven glass lining for years of clean hot water
- Factory installed T & P valve

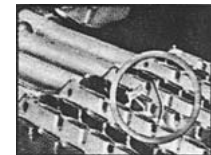
BTC Models (Conservationists)

Include all features of standard tank-type models plus:

- For medium to large applications
- ASME construction on selected models
- Low profile diverter with automatic fail safe flue damper
- Most BTC models are 80% plus thermal efficiency
- Covered control string
- Intermittent ignition device
- Soft light off gas valve
- Step-opening gas valve provides for soft ignition-ends nuisance pilot outage caused by flame roll out.
- Combustion chamber sight glass
- Allow visual observation of main burner and pilot flame for ease of servicing.



BTC-120 thru BTC-500
Conservationist Models offer inputs to 500,000 BTUs, and most models are over 80% efficient.



Eliminates the standing pilot. Pilot operates only when heat is called for. Provides flame failure response in one second.

Part No.	Gal. Cap.	Type of Gas	BTU Input Per Hr.	Recovery Cap. Temp Rise Degrees F-GPH			Vent Size	Ht.	Dia.	Ship Wt. (lbs.)
				40	100	140				
*BT-65	50	Nat. & Prop.	50,000	131	48	35	4	64-3/4	20-1/4	165
BT-80	75	Nat. & Prop.	75,000	169	68	48	4	61-1/8	25-1/2	291
BT-100	100	Nat.	75,000	169	68	48	4	68-3/4	26-1/2	366
BT-100	100	Prop.	75,000	169	68	48	4	68-3/4	26-1/2	366

*Recovery capacities based on 80% thermal efficiency.

Part No.	Gal. Cap.	Type of Gas	BTU Input Per Hr.	Recovery Cap. Temp Rise Degrees F-GPH			Vent Size	Ht. with Vertical Diverter	Dia.	Ship Wt. (lbs.)
				40	100	140				
BTC-120	75	Nat./Prop.	120,000	291	116	83	5	69-11/16	27-3/4	400
BTC-154	89	Nat./Prop.	154,000	373	149	107	6	76-11/16	27-3/4	470
BTC-179	86	Nat./Prop.	179,000	434	174	124	6	76-11/16	27-3/4	490
BTC-197	100	Nat./Prop.	197,000	478	191	136	6	84-7/8	27-3/4	530
BTC-199	84	Nat./Prop.	199,000	479	192	137	6	77	27-3/4	480
†BTC-200	100	Nat./Prop.	199,000	470	188	134	6	70-7/16	30-1/4	530
BTC-240	100	Nat./Prop.	*240,000	582	233	166	6	84-7/8	27-3/4	549
BTC-250	100	Nat.	250,000	606	242	173	6	72-7/16	30-1/4	630
BTC-251	84	Nat./Prop.	251,000	582	233	166	6	77	23-3/4	490
BTC-275	100	Nat.	275,000	667	257	190	6	72-7/16	30-1/4	630
BTC-305	75	Nat./Prop.	305,000	739	296	211	8	80-3/4	27-3/4	685
BTC-365	69	Nat./Prop.	365,000	885	354	253	8	80-3/4	27-3/4	763
BTC-400	100	Nat./Prop.	399,000	945	378	270	8	77-5/8	30-1/4	850
†BTC-500	69	Nat./Prop.	†500,000	1167	467	333	10	83-13/16	27-3/4	838

*230,000 Btu/hr. propane †Standard Conservationist. All dimensions in inches.



WATER & GAS PRODUCTS

Conservationist® Burkay Copper Coil Gas Water Heaters & Boilers Provides 80% Thermal Efficiency Plus Famous Burkay Reliability

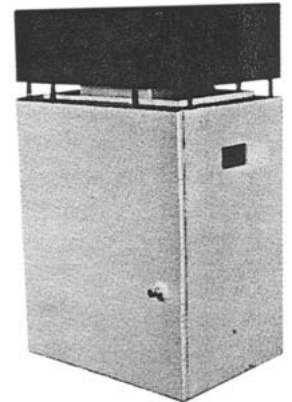


Models HW-300 thru 1340

These models are for indoor use in installations requiring higher inputs...up to 1,340,000 BTU's. They can be manifolded to unlimited fire power.

FEATURES

- All Non-Ferrous Waterways.** Unit is rust-proof because water comes in contact with nothing but copper, brass or bronze.
- Burkay Burner Maximizes Combustion Efficiency.** Patented design uses a cast iron burner ring with a flame spreader.
- Low Profile Diverter.** This special design allows maximum installation flexibility. All models furnished with a draft diverter design certified by the American Gas Association.
- Optimum Energy Transfer.** Copper heat exchanger has integral extruded fin copper tubes for maximum efficiency.
- Copper Wall Combustion Chamber.** Coils of tightly wound copper tubing form a unique and highly efficient combustion chamber.
- Exclusive A.O.Smith Dia-Scan™ Self-Diagnostic Module.** The Dia-Scan is optional on the Burkay Copper coil models. It monitors a wide range of boiler functions and, through LED indicators, continuously displays their operating status.

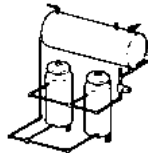


Models HWP-300 thru 670

These models are for outdoor use with inputs up to 670,000 BTU's. They may also be manifolded for higher input combinations.



Factory Assembled Systems Save Labor



A.O.Smith copper coil water heaters and boilers are available in our Ac-U-Temp factory assembled system: Sure-Temp®, a two-temperature booster recovery system.

These skid-mounted systems offer big savings on labor costs because they are easy to install. Hook up the gas, water, and electricity—and the job is done.

These systems comply with the ASHRAE/IES 90.1-1989 when manifolded with our horizontal or vertical TJV or THJ jacketed storage tanks.

All dimensions in inches

Part No.	BTU Input Per Hr. Net./Prop.		Temp Rise Degrees F.			Vent Size	Ht. to Flue	Width	Depth	Approx. Ship Wt. (lbs.)
			40	100	140					
HW-300	300,000	GPH	727	291	208	8	65	25-1/4	19-5/8	240
HWO-300		GPM	12.12	4.8	3.5		55-1/4		33	
HW-399	399,000	GPH	97	387	276	10	57-1/8	27	31-1/2	291
HWO-399		GPM	16.1	6.4	4.6		60-3/4		36	
HW-420	420,000	GPH	1078	407	291	10	57-1/8	27	31-1/2	291
HWO-420		GPM	17.1	6.8	4.8		60-3/4		36	
HW-520	520,000	GPH	1261	504	360	10	66-5/16	36	36-1/2	361
HWO-520		GPM	21.0	8.4	6.0		72		36	
HW-670	670,000	GPH	1624	649	464	12	67*	27	36-1/2	361
HWO-670		GPM	27.1	10.8	7.7		72		36	

*72" for propane gas



WATER & GAS PRODUCTS

**Energy Saver
Electric Residential Water Heaters
Models EES, EEH, EEST, ELF, & ELJF**

FEATURES

Code Compliance: H.U.D., .B.O.C.A., ASHRAE/IES 90.1 b-1992, and 1990 NAECA.

UL Certified to ANSI standards for Household Electric Storage Tank Water Heaters UL 174.

Thick Foam Insulation—Minimizes radiant heat loss.

Glass-Lined Tank—Glass, specifically developed by A.O. Smith ceramic research for water heater use, is fused to steel at 1,600°F, providing corrosion protection for years of dependable use. Proven reliable in millions of water heaters for over 50 years.

Dip Tube—Carries inlet water deep into tank.

Anode—Heavy duty, tank-mounted, screw-in anode for longer tank life.

Thermostat/High Limits—Combination

control provides sensitive temperature control and overheat protection. Factory preset at 120°F. Range is 90°F to 150°F. DEN and DEL models are available for 170°F requirements.

Electric Elements—Zinc-plated, copper sheath, screw-in type, direct immersion elements mean fast, efficient water heating. Phoenix™ elements available.

Element Specifications—Two 4500 watt, 240V, single phase elements, non-simultaneous with a recovery of 20.5 gph at 90°F temperature rise supplied as standard equipment on all models except 20-gallon or less, single element models (see table). DEN and DEL models are available in commercial voltages and temperature ranges.

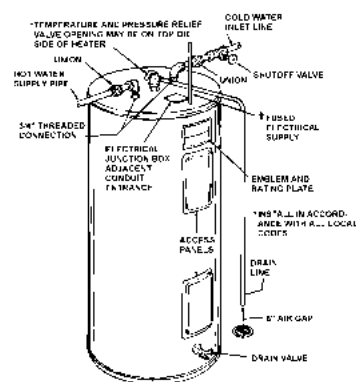
Non-Metallic Boiler Type Drain Valve (6 and 15-gallon models have a combination 3/4" inlet/drain fitting). A brass drain valve is available as an option on most models.

6 YEAR LIMITED WARRANTY OUTLINE

If the tank should leak at any time during the first 6 years, under the terms of the warranty, then A.O. Smith will furnish a replacement heater. Installation, labor, handling and local delivery are extra. When used commercially, warranty is for 1 year. **THIS OUTLINE IS NOT A WARRANTY.** For complete information, consult the written warranty or A.O. Smith Water Products Company. Warranty does not apply to product installed outside of the United States of America or its territorial possessions and Canada.



**Energy Saver
Electric Residential Water Heater**



† Overcurrent protection must be supplied in water heater circuit. Consult local code or NEC-1984 for proper installation.

All Fittings 3/4" NPT

TYPICAL INSTALLATION

Element Availability			
120V	Amps	240V	Amps
1,500	12.5	1,500	6.3
2,000	16.7	2,000	8.3
2,500	20.8	2,500	10.4
3,000	25.0	3,000	12.5
		4,000	16.7
		4,500	18.8
		5,000	20.8
		6,000	25.0

6-Year Part No.	Gal. Cap.	Element Wattage (Non-Simultaneous)		A Height	B Dia.	Approx. Ship. Wt. (Lbs.)
		Std. 240 Volts Upper/Lower	Max. 240 Volts Upper/Lower			
ENERGY SAVER MODELS						
EES-30	30	4500/4500	4500/4500	34-1/2	20-1/2	94
EES-40	40	4500/4500	6000/6000	44	20-1/2	115
EES-52	50	4500/4500	6000/6000	53-3/4	20-1/2	123
EES-66	66	4500/4500	6000/6000	59-3/4	21-3/4	172
EES-80	80	4500/4500	6000/6000	58-1/4	24	206
EES-120	120	4500/4500	6000/6000	61-3/4	29-1/2	336
ENERGY SAVER TALL MODELS						
EEST-30	30	4500/4500	6000/6000	45-1/4	18	94
EEST-40	40	4500/4500	6000/6000	59-1/4	18	114
EEST-52	55	4500/4500	6000/6000	58-3/4	19-1/2	132
ENERGY SAVER LOWBOY MODELS						
ELJF-6	6	—/1500*D	—/2500D	15-1/2	14-1/4	35
ELJF-15	15	—/1500*D	—/2500D	32-1/2	14-1/4	58
ELJF-20	19.9	—/2500*	—/6000	32-1/4	18	73
ELF-30	30	4500/4500	6000/6000	29-1/2	21-3/4	106
ELJF-30	30	4500/4500	6000/6000	31	21-3/4	106
ELJF-40	40	4500/4500	6000/6000	32-1/4	23-1/4	136
ELJF-50	50	4500/4500	6000/6000	32-1/4	25-1/4	171
ENERGY SAVER HIGH ENERGY FACTORY MODELS						
EEHT-40	40	4500/4500	6000/6000	60	18	120
EEH-52	52	4500/4500	6000/6000	54	21-3/4	131
EEH-66	66	4500/4500	6000/6000	60	24	181
EEH-80	80	4500/4500	6000/6000	60	25-1/4	220

* Single element models - Std. 120 volts. Maximum element wattage is 2500 W 6 & 15 gallon units.



WATER & GAS PRODUCTS

Energy Saver Point-of-Use Electric Residential Water Heaters Models ELSF-10, 15, 20, 30, 40

WATTS	120V	208V	240V	277V	480V
1,000	—	YES	—	YES	—
1,500	YES	YES	YES	YES	—
1,650	YES	—	—	—	—
2,000	YES	YES	YES	YES	—
2,500	YES	YES	YES	YES	YES
3,000	YES	YES	YES	YES	YES
3,500	—	YES	YES	—	—
4,000	—	YES	YES	YES	YES
4,500	—	YES	YES	YES	YES
5,000	—	YES	YES	—	YES
5,500	—	—	YES	—	YES
6,000	—	YES	YES	YES	YES

FEATURES

Code Compliance: H.U.D., .B.O.C.A., ASHRAE 90.1 b-1992, and 1990 NAECA.

UL Certified—To ANSI standards for Household Electric Storage Tank Water Heaters UL 174.

Thick Foam Insulation—Minimizes radiant heat loss.

Glass-Lined Tank—Glass, specifically developed by A.O. Smith for water heaters, is fused to steel at 1,600°F, providing corrosion protection for years of dependable service. Proven reliable in millions of water heaters for over 50 years.

Anode—Heavy duty, tank-mounted, screw-in anode for longer tank life.

Thermostat/High Limit—Combination control provides sensitive temperature control and overheat protection.

Electric Element—Zinc-plated, copper sheath, screw-in type, direct immersion element means fast, efficient water heating.

6 YEAR LIMITED WARRANTY OUTLINE

If the tank should leak at any time during the first 6 years, under the terms of the warranty, then A.O. Smith will furnish a replacement heater. Installation, labor, handling and local delivery are extra. When used commercially, warranty is for 1 year. **THIS OUTLINE IS NOT A WARRANTY.** For complete information, consult the written warranty or A.O. Smith Water Products Company. Warranty does not apply to product installed outside of the United States of America or its territorial possessions and Canada.

Element Specifications—Single element at 120/240 volts single phase standard—see table. For AMP draws greater than 30 AMPS see DEL models.

Side Located 3/4" Inlet/Outlet Connections—Alternate 3/4" outlet on the top for hot water or relief valve opening.



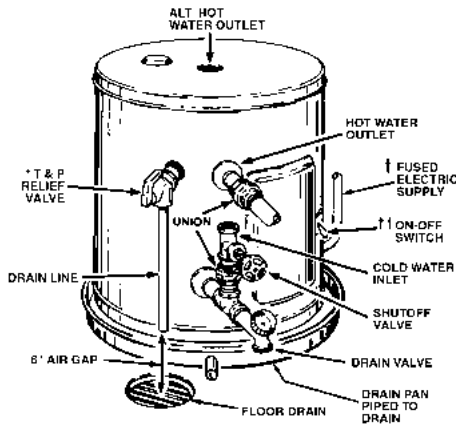
Energy Saver

Point of Use Electric Glass-Lined Water Heater

† Overcurrent protection must be supplied in water heater circuit. Consult local code or NEC—1984 for proper installation.

†† 10 gallon model
• Install in accordance with all local codes.

All Dimensions in Inches



TYPICAL INSTALLATION

6-Year Part No.	Gal. Cap.	Element Wattage		A Height	B Dia.	G	H	Approx. Ship. Wt. (Lbs.)
		Standard Watts/Volts	Maximum 120V 240V					
ENERGY SAVER SIDE CONNECT MODELS								
ELSF-10	10	1500/120V	3000 6000	18	18	3-1/2	12-1/2	51
ELSF-15	15	1500/120V	3000 6000	25-3/4	18	3-1/2	20-1/2	66
ELSF-20	19.9	2500/120V	3000 6000	22-1/4	21-3/4	3-1/2	15-3/8	84
ELSF-30	30	4500/240V	3000 6000	30-3/4	21-3/4	3-1/2	24	100
ELSF-40	40	4500/240V	3000 6000	32-1/4	23-1/4	3-1/2	25-1/4	131

1000 watts (1kw) raises 4.6 GPH 90°.

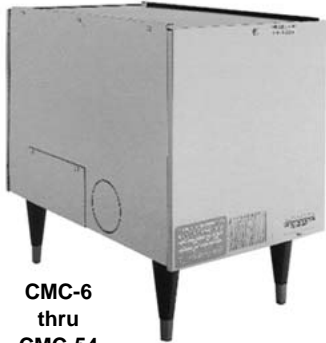
CAUTION: If building cold water supply has a backflow preventer, check valve or water meter with check valve, provisions for thermal expansion of water in the hot water system must be provided.



WATER & GAS PRODUCTS

**Heavy Duty Commercial Tank-Types
 Premium Electric Models**

Dura-Power® Premium Models Provide Inputs From 6 to 54 KW



**CMC-6
 thru
 CMC-54**



SU-6 thru SU-54
 CMC and SU models are for boosting 140° water to 180° for sanitizing dishwater in food service applications. Available for Deionized water.

FEATURES

Booster Models-180° Operation

- ASME Construction
- Glass-lined tank with anodic protection
- Simplified circuitry
 Color coded for ease of service.
- Heavy duty, medium watt density elements
 Lower surface temperature to minimize scale build-up and more surface to heat water.
- All stainless steel jacket
 Standard with CMC models, optional with SU models
- 208, 240 and 480 volt standard
- Models CMD and SUD available for deionized water
- Three-year limited warranty
- ASME Temperature & Pressure relief valve
- Low water cutoff (standard)

OPTIONS:

- Pilot light and switch • Stainless steel cabinet and leg kit
- Stainless steel or silicon bronze tank • Pressure reducing valve

DSE Models

- ASME construction
- Heavy duty, medium watt density elements
- Manual reset high limit
- R-16 foam insulation
- Magnetic contactors
- ASME Temperature & Pressure relief valve

OPTIONS:

- Stainless steel or silicon bronze tank • Pilot light and switch • Sequencing • Time clock • Low water cutoff • Handhole cleanout • T & P gauges • Circuit fusing • Alarm bell • Modulating step control



DSE-5 thru DSE 120
 These models are for larger applications and offer custom linings up to 120 gallons.

All dimensions in inches.

Part No.	Tank Cap. Gallons	Max. KW Input	Height	Diameter	Depth	Approx. Ship Wt. (lbs.)
DSE-5	5	3	20-1/2	16-1/4	21-1/2	82
DSE-10	10	6	26-1/4	18-3/4	24	106
DSE-20	20	18	27-1/4	20-1/2	27	130
DSE-30	30	24	35-1/4	20-1/2	27	150
DSE-40	40	36	45-3/4	20-1/2	27	190
DSE-50	50	45	54-3/4	20-1/2	27	221
DSE-65	65	54	50-1/2	24-1/2	30-1/4	267
DSE-80	80	54	49-1/4	26-1/2	32-1/4	285
DSE-100	100	54	58-1/4	28-1/2	32-1/4	354
DSE-120	119	54	63-1/4	28	33-3/4	420

All dimensions in inches.

Part No.	Tank Cap. Gallons	Dimensions in inches			Inlet/Outlet	Approx. Ship Wt. (lbs.)
		Height	Diameter	Depth		
CMC-6 thru 54	6	19-1/4	13	20-1/4	3/4	90
SU-6 thru 54	20	25	22-1/4	23	3/4	200

Your salesman can arrange water heater and boiler delivery on a lift-gate equipped truck saving your firm time and manpower



WATER & GAS PRODUCTS

Light Commercial Tank-Types Standard Electric Models

Dura-Power® Standard Models Provide Inputs From 6 to 54 KW

FEATURES

DEN/DEL Models

- Heavy duty, medium watt density elements. For lower surface temperature to minimize scale build-up and more surface to heat water. Zinc plated copper sheaths.
- Available voltages: 120, 208, 277, 240 and 480 volt
- Foam insulation
- Simultaneous and non-simultaneous operation
- Glass lined tank with anodic protection
- Simplified circuitry, color coded for ease of service
- Three-year limited warranty
- Temperature & Pressure relief valve

DRE/DVE Models

Includes all of the features above plus:

- Convertible to three-phase or single-phase (in field)
- DVE models have close differential immersion thermostats; DRE models are surface mounted
- Incoloy sheath elements with ceramic terminal blocks

OPTIONS: Manifold kits with gate valves. Thermostatic sequencing control. International voltages—380, 415, 480, 575 and 600.



DEL-6 thru DEL-50



DRE/DVE-52, 80, 120
Standard Models utilize a heavy duty, medium watt density elements to minimize scale build-up.

DEN-30 thru DEN-120

These models are for light commercial use and offer simultaneous or non-simultaneous operation.

All dimensions in inches.

Part No.	Tank Cap. Gallons	Height	Diameter	Approx. Ship Wt. (lbs.)
† *DEL-6	6	15-1/8	14-1/4	35
† *DEL-10	10	18-1/4	18	54
† *DEL-15	15	26	18	58
† DEL-20	20	22-1/4	21-3/4	73
*DEL-30	30	30-7/8	21-3/4	100
DEL-40	40	32-1/4	23-1/4	125
DEL-50	50	32-1/4	25-1/4	166
DEN-30	30	46-3/8	18	98
DEN-40	40	45-1/8	20-1/2	113
DEN-52	50	54-7/8	20-1/2	131
DEN-66	66	60-3/4	21-3/4	176
DEN-80	80	59-3/8	24	211
DEN-120	119	62-7/16	29-3/8	326

*Point of use heaters †Single element models

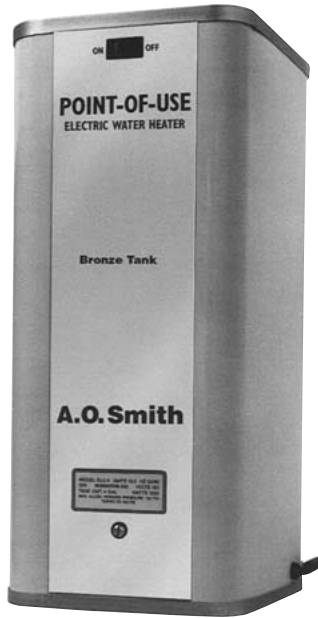
Part No.	Tank Cap. Gallons	Dimensions in inches			Inlet/Outlet	Approx. Ship Wt. (lbs.)
		Height	Diameter	Depth		
DVE/DRE-52	50	55-1/4	21-3/4	27-1/4	1-1/4	245
DVE/DRE-80	80	59-1/2	25-3/4	31-1/4	1-1/4	264
DVE-DRE-120	119	62-1/4	29-1/2	35-3/4	1-1/4	375

Lakeside carries the largest stock of A.O. Smith water heater parts and accessories in the state of Ohio. Water heater elements, relief valves and controls are always on hand.



WATER & GAS PRODUCTS

**Point-of-Use Water Heaters
ELC-2 thru ELC-4**



FEATURES

- Corrosion Resistant**—Non-ferrous, bronze storage tank provides reliable rust-free hot water.
- Thick Foam Insulation**—For maximum heat retention and minimum standby heat loss, tank is insulated with expanded polystyrene and jacketed in steel.
- Electric Element**—1500-watt screw-in heating element provides extra fast recovery rate. Easily replaceable.
- Uses Standard Electrical Outlet**—Requires only a standard electrical outlet, 110 to 120 volts.
- Compact Size**—Easy to install under sinks, cabinets, just about anywhere. Simply hook up water connection, install T & P valve and plug-in electrical cord.
- On/Off Switch**—Convenient on/off switch, 3-1/2 foot cord and grounded plug.

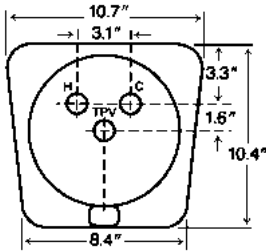
LIMITED WARRANTY OUTLINE
 Limited one-year tank and parts warranty. THIS OUTLINE IS **NOT** A WARRANTY. For complete information, consult the written warranty.

Warranty does not apply to product installed outside of the United States of America or its territorial possessions and Canada.

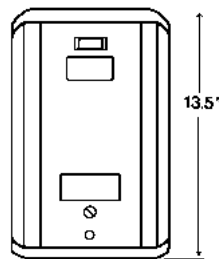
- OTHER FEATURES**
- Fully adjustable thermostat
 - Drain provides easy maintenance
 - Standard 3/4" relief valve opening provided
 - No anode required



Dimension (Model ELC-2)

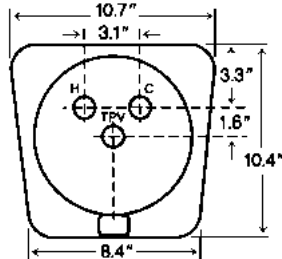


TOP VIEW

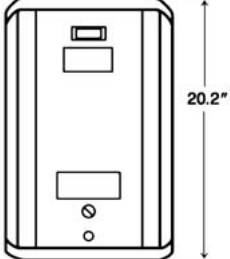


FRONT VIEW

Dimensions (Model ELC-4)



TOP VIEW



FRONT VIEW

Part No.	Tank Volume (gals.)	Heating Capacity Watts	Voltage	First Hour Rating (80°F Rise)	Overall Dimensions		
					Height	Dia.	Width
ELC-2	2-1/2	1500	110-120V	7 gph	13.5	10.4	8.4
ELC-4	4	1500	110-120V	8.3 gph	20.2	10.4	8.4



WATER & GAS PRODUCTS

Custom Small and Large Volume Storage Tanks
Designed For Storing Potable Water—Jacketed and Un-Jacketed

**MEETS
 ASHRAE/IES
 90.Ib-1992**

**UN-JACKETED
 STORAGE
 TANKS**



T-80 thru T-1000
HD-80 thru HD-12,500

These storage tanks are ideal for use with gas-fired copper heat exchanger equipment and other A.O. Smith hot water systems for storage of any potable water at temperatures of 180°F or lower. Sizes range from 80 to 12,500 gallons and custom models are available with special linings, heating coils (single- or double-wall), and accessories.

**JACKETED
 STORAGE
 TANKS**



TJH-200 thru TJH-1000

JACKETED/UNJACKETED FEATURES:

- **Glass-lined tank**-Interior surface is coated with glass and nickelous oxide for extra protection.
- **Horizontal or vertical mounting**- Except for TJ-80 (vertical only); and TL-500 (horizontal only).
- **Anodic protection**
- **Jacketed tanks are surrounded with high-density fiberglass insulation**- Meet new ASHRAE 90. Ib-1992 standard. TJV-120M models are fiberglass insulated.
- **ASME construction standard on TJV/TJH-jacketed tanks; 100, 125, 150, & 160 psi maximum working pressure available**
- **Five-year warranty**

OPTIONS:

- ASME construction (standard of TJV/TJH tanks)
- Flexible R-11 jackets for field installation
- Manholes/Handholes
- All-weather outdoor tanks
- Lifting lugs
- Military specifications.
- Tank cradles
- Manifold kits
- Factory mounted T & P gauges
- Extended warranties

HD CUSTOM-LINE STORAGE TANKS

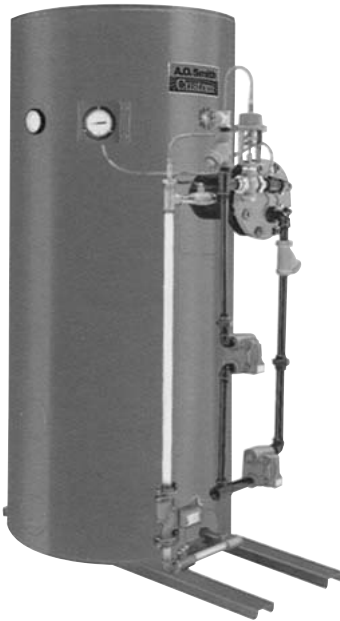
Custom-line tanks are available up to 12,500 gallons. These tanks are available in cement, epoxy, or glass-lined. For extremely severe or special applications, Black steel tanks, stainless and silicon-bronze are also available. ASME code construction is standard.

Desired temperatures in A.O. Smith Custom-Line hot water storage tanks can be maintained with special copper tube heating coils. These single- or double-wall copper tank heaters are designed for heating potable water with both steam or hot water. For more detailed information, see specification sheet A 412.1.



WATER & GAS PRODUCTS

Hot Water Generator Systems
Energy Source: Steam or Boiler Water



HWG Models

A complete packaged system ready for installation, saving time and labor. Operates on either steam or boiler water-vertical or horizontal.



Desired temperatures in A.O. Smith Custom-Line hot water storage tanks can be maintained with special copper tube heating elements. Available for use with steam or boiler water; single- or double-wall construction.

These new jacketed, insulated hot water generators are available for operation with steam or high temperature boiler water as an energy source. These skid-mounted water heater systems are completely assembled and packaged for use.

Packages include: pressure regulators, temperature regulators, steam traps, strainers and other custom items such as standard or optional features.

Tank and heat exchanger capacities will closely match those now available, 80 through 12,500 gallons and 0.9 through 214 square feet of heat transfer.

QUALITY FEATURES:

- Superior glass-lined tank • ASME Code (Section IV) constructed • All-bronze circulator • All-copper recirculation with two (2) bronze ball valves • Flush-mounted T & P gauges • National Board Stamped • 3" Fiberglass insulation • Galvanized baked enamel jacket • ASME T & P valve • Heating Coil Section VIII of ASME code

OPTIONAL EQUIPMENT:

STORAGE TANKS • 150#-160# psi working pressure • ASME section VIII construction • 4" X 6" handhole, 11" X 15" manhole • Cement, epoxy or galvanized linings.

WATER TO WATER • Pilot (spring, air, temperature) operated air temperature regulator • By-pass loop in boiler water line for regulator isolation.

STEAM TO WATER • Pilot (spring, air, temperature) operated temperature regulator • By-pass loop in steam line for temperature regulator • vacuum breaker

All Dimensions in Inches

Part No.	Gal. Cap.	Height	Dia.	Width
TJV-140	140	87	30	—
TJV-200	200	83	36	—
TJV-350	350	100	42	—
TJV-400	400	105	42	—
TJVT-500	500	100	—	48
TJV-500	500	84	—	54
TJV-750	750	116	—	54
TJV-1000	1000	148	—	54

All Dimensions in Inches

Part No.	Gal. Cap.	Height	Depth	Width
TJH-200	200	41	36	77
TJH-350	350	47	42	93
TJH-400	400	47	42	99
TJHT-500	500	53	48	94
TJH-500	500	59	54	79
TJH-750	750	59	54	111
TJH-1000	1000	59	54	143

Part No. & Approx. Capacity (U.S. Gals)	Approx. Over-All Dim. (in Dia. x Length)	Working Pressure (psi)	Approx. Ship Wt. (Lbs.)
TJ-80 STD	26-1/2 x 63-1/2	150	236
TJ-80 ASME	26-1/2 x 63-1/2	125	369
T-80 STD	20 x 62-1/8	150	170
T-80 ASME	20 x 61-5/8	125	204
T-120 STD	24 x 65	150	221
TJV-120 M	29-3/8 x 62	150	320
TJV-120 ASME	28 x 63-1/4	160	400
T-140 ASME	24 x 76-3/4	125	410
T-200 STD	30 x 72	150	442
T-200 ASME	30 x 72	125	447
T-350 STD	36 x 87-1/2	150	629
T-350 ASME	36 x 87-1/2	125	629
T-400 ASME	36 x 97-1/8	125	672
TL-500 ASME	36 x 121-3/4	125	841
TN-500 ASME	42 x 88	125	813
T-500 ASME	48 x 73	125	951
T-750 ASME	48 x 105-7/8	125	1287
T-1000 ASME	48 x 137-3/4	125	1655