HW COMMERCIAL GAS CIRCULATING WATER HEATER

HW-120M/160M/200M/225M

Burkay. Energy saving copper heat exchanger.

- Rustproof because water comes in contact with nothing but copper, brass or bronze
- Copper transfers heat eight times faster than ferrous metals yet offer remarkable structural strength without excessive weight
- Free from the effects of thermal shock
- Continuous coils of tightly wound copper tubing form a unique combustion chamber
- Water circulating thru the coils, around the flame, captures radiant heat which may otherwise be lost
- Developed especially for A.O. Smith water heaters using the very latest burner principles
- Water moving at 2 to 4 feet per second helps to prevent lime buildup and also scrubs extra heat from the copper coil combustion chamber
- Proven pilot ignition system provides flame failure response in less than one (1) second
- Redundant high limit controls and gas valves assure safe shutoff in the event of overheating or flame failure
- Requires 120V 60Hz, maximum inlet gas pressure of 14" WC and activation of heater by external temperature control
- Patented thermal balancer functions as a pump shutoff delay switch
- It allows the pump and heater to activate simultaneously but delays pump shut off for 120 ± 30 seconds after heater shuts down
- This allows the high temperature water to clear the heater thus utilizing all heat that had been generated plus educing the scale forming tendencies of motionless hot water
- Pressure relief valve 125 psi
- Main burner is factory adjusted for gas required
- Prefinished jacket with a bonderized coating followed by a baked on enamel finish
- All models are design-certified by CSA International, according to ANSI Z21.10.3 - CSA 4.9 standards governing Circulating Water Heaters
- Models are ASME certified and are design-certified by NSF International to NSF Sanitation 5
- Models meet the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1.
- Working pressure 160 psi

Low Lead Content

Certified to NSF/ANSI 61-G and 372

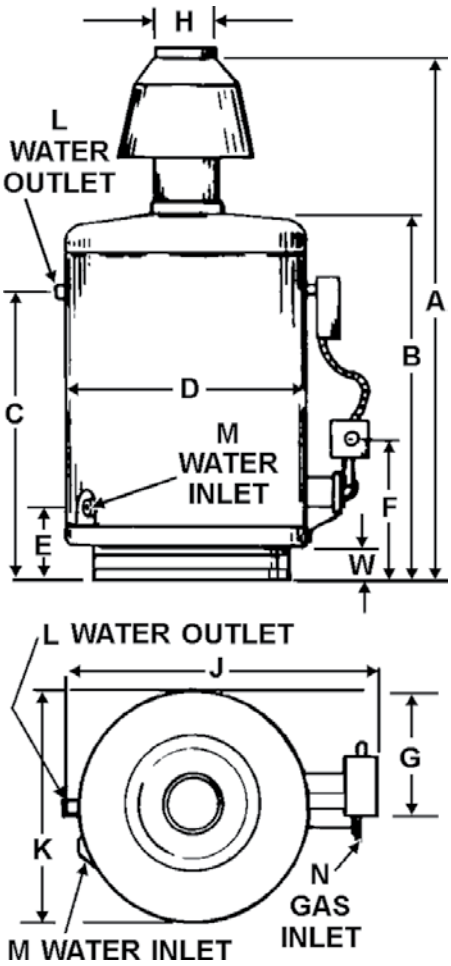
SAMPLE SPECIFICATION

Water Heater(s) shall be Model No. _____ as manufactured by A.O. Smith, or an approved equal. Heater(s) shall be gas-fired, as certified by CSA International, NSF capable of supplying _____ GPH at 100°F temperature rise when equipped to burn _____ gas, and bear the ASME code symbol. Heater(s) shall be reverse flow type having all non-ferrous waterways, and employing a copper finned heat exchanger and a tightly wound copper coil combustion chamber. Water heater(s) shall be equipped with an electric gas valve of the step-opening type, a 195° auto-reset fixed high limit control which will break the electric circuit on temperature rise, intermittent electronic ignition with one (1) second shutdown in the event of pilot flame failure, a gas pressure regulator properly set for the gas to be supplied, stainless steel main burners, and a coil limit switch for shutoff in event of excessive water temperature, thermal balancer (Models HW-200M and HW-225M), and a certified draft diverter. Certified for combustible flooring. Outer jacket shall be of baked enamel finish. Fully illustrated instruction manual to be included. Coil, heat exchanger and burner shall have a 5 year limited warranty as outlined in the written warranty.

TECHNICAL DETAILS & DIMENSIONS

HW

Dimensions in inches (mm)	Models			
	HWH-120	HWH-160	HWH-200	HWH-225
A	49-3/8 (1254)	50-1/8 (1273)	53-1/4 (1353)	60 (1524)
B	30-3/8 (772)	30-3/8 (772)	33-1/8 (841)	33-1/8 (841)
C	23-5/8 (600)	23-5/8 (600)	27-1/8 (689)	27-1/8 (689)
D	20-3/4 (527)	20-3/4 (527)	20-3/4 (527)	20-3/4 (527)
E	5-1/2 (140)	5-1/2 (140)	5-1/2 (140)	5-1/2 (140)
F	10 (254)	10 (254)	10 (254)	10 (254)
G	11-13/16 (300)	11-13/16 (300)	11-13/16 (300)	11-13/16 (300)
H	6 (152)	7 (178)	7 (178)	7 (178)
J	26-11/16 (678)	26-11/16 (678)	26-11/16 (678)	26-11/16 (678)
K	20-3/4 (527)	20-3/4 (527)	20-3/4 (527)	20-3/4 (527)
L	1-1/4 NPT	1-1/4 NPT	1-1/4 NPT	1-1/4 NPT
M	1 NPT	1 NPT	1 NPT	1 NPT
N	1/2 NPT	1/2 NPT	1/2 NPT	1/2 NPT
W	1-3/4 (44)	1-3/4 (44)	1-3/4 (44)	1-3/4 (44)
Approx. shipping weight lbs. (kg)	120 (54)	155 (70)	165 (75)	175 (79)



Model	Input rating BHT/hr Nat & Propane gas	Temperature rise - degrees F - gallons per hour										
		40	50	60	70	80	90	100	110	120	130	140
HW-120M	120,000	300	240	200	171	150	133	120	109	100	92	86
HW-160M	160,000	385	380	257	220	193	171	154	140	128	118	110
HW-200M	199,000	487	389	324	278	243	216	195	177	162	150	139
HW-225M	225,000 Nat. gas only	543	434	362	310	271	241	217	197	181	167	155

NOTE: To compensate for the effects of high altitude areas above 2,000 feet, input rating and therefore recovery ratings should be reduced approximately 4% for each 1,000 feet above sea level.

Data subject to change
ME/HW120-225/01