BRADFORD WHITE®
WATER HEATERS

Commercial ASME Electric Water Heaters

Photo is of
30A-36-3

The ASME Electric Models feature:

- **A.S.M.E. Code Tank Construction**—Standard.
- **Immersion Thermostats—**Immersion type for accurate temperature control from up to 180°F (82°C) with manual reset high limit control.
- **Factory Installed Hydrojet® Sediment Reduction System**—Cold water inlet sediment reducing device helps prevent sediment build up in the tank.
- **Vitraglas® Lining**—An exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C.
- **Water Connections—** Factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **Elements—**screw in style. Low watt density INCOLOY® material helps to minimize dry fire and prevents lime build up.
- **Insulation System—**Non-CFC foam covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Protective Magnesium Anode Rod**—Provides added protection against corrosion for long-term, trouble-free service.
- **Completely Pre-wired—**With pressure lug terminal block eliminating need for splicing or taping of wires.
- **Hand Hole Cleanout—**(20 (76L) thru 120 (454L) gallon models only).
- **T&P Relief Valve**—Installed.
- **Low Restriction Brass Drain Valve**—Durable tamper proof design.
- **NSF Construction Available on All Models**.

HLW

3 or 5-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.
For more information on warranty, please visit www.bradfordwhite.com
For products installed in USA, Canada, and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

ASME Electric Models

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

Model Number	Nominal Gal. Capacity U.S. Gal.	Nominal Gal. Capacity Imp. Gal.	Max. kW Input	A Floor to Top of Heater in.	B Jacket Dia. in.	C Floor to Hot Water Conn. in.	E Floor to C/L of Cold Water Conn. in.	F Floor to T&P Conn. in.	G Floor to Top of Control Box in.	Water Conn. NPT in.	Approx. Shipping Weight lbs.
6A-kW-3	6	5	3	17 1/8	16	18 1/4	6 1/8	18 1/16	17	3/4	83
12A-kW-3	12	10	9	28	16	29	6 1/8	28 15/16	28	3/4	118
20A-kW-3	20	17	18	27 5/8	20	28 1/2	6 1/8	28	27	3/4	145
30A-kW-3	30	25	36	38	20	39	6 1/8	40 1/4	38	3/4	180
40A-kW-3	40	33	36	48 1/4	20	49 1/4	6 1/8	50 1/2	38	3/4	220
50A-kW-3	48	40	81	48 3/4	24	49 1/4	7	40 3/4	46 1/2	1 1/2	270
80A-kW-3	78	65	81	60 1/4	26	61 3/4	7	52 1/4	46 1/2	1 1/2	335
120A-kW-3	119	100	81	64 11/16	30 1/4	66	7	54 13/16	50 1/4	1 1/2	430

Model Number	Nominal Liter Capacity	Max. kW Input	A Floor to Top of Heater mm.	B Jacket Dia. mm.	C Floor to Hot Water Conn. mm.	E Floor to C/L of Cold Water Conn. mm.	F Floor to T&P Conn. mm.	G Floor to Top of Control Box mm.	Water Conn. NPT mm.	Approx. Shipping Weight kg.
6A-kW-3	23	3	435	406	464	156	459	432	19	38
12A-kW-3	45	9	711	406	737	156	735	711	19	54
20A-kW-3	76	18	702	508	724	156	711	686	19	66
30A-kW-3	114	36	965	508	991	156	1022	965	19	82
40A-kW-3	152	36	1226	508	1251	156	1283	965	19	100
50A-kW-3	182	81	1238	610	1251	178	1035	1181	38	123
80A-kW-3	295	81	1530	661	1569	178	1327	1181	38	152
120A-kW-3	451	81	1643	766	1676	178	1392	1276	38	195

Voltage and phase must be specified when ordering. Example: 80A-18-3, 240 Volt, 3 phase.

Number of Elements (Fused Models)*

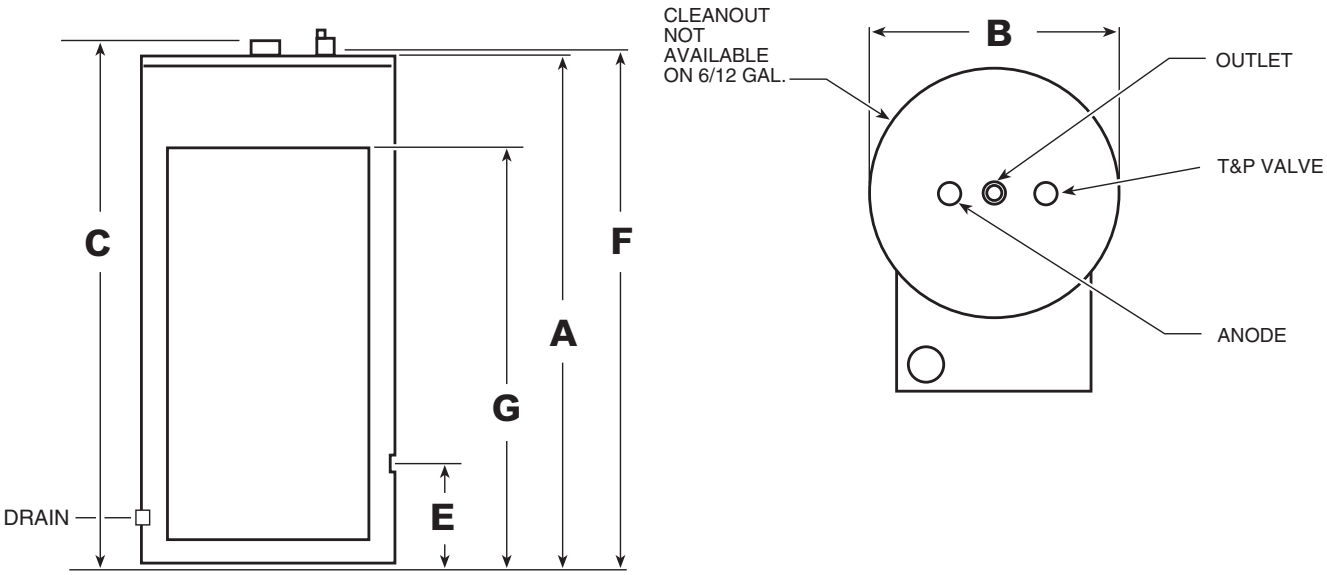
Input kW	208V Phase 1	208V Phase 3	240V Phase 1	240V Phase 3	277V Phase 1	380V Phase 3	415V Phase 3	480V Phase 1	480V Phase 3	600V Phase 3
3	1	1	1	1	1	1	1	1	1	1
6	3	3	3	3	3	3	3	3	3	3
9	3	3	3	3	3	3	3	3	3	3
12	3	3	3	3	3	3	3	3	3	3
13.5	3	3	3	3	3	3	3	3	3	3
15	3	3	3	3	3	3	3	3	3	3
18	3	3	3	3	3	3	3	3	3	3
24	4	6	4	6	4	6	4	4	6	6
27	6	6	6	6	6	6	6	6	6	6
30	6	6	6	6	6	6	6	6	6	6
36	6	6	6	6	6	6	6	6	6	6
45	9	9	9	9	9	9	9	9	9	9
54	9	9	9	9	9	9	9	9	9	9
81	9	9	9	9	9	9	9	9	9	9

Full Load Current Amperes (Fused Models)*

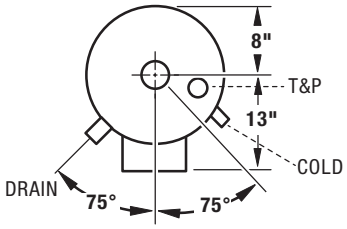
Input kW	208V Phase 1	208V Phase 3	240V Phase 1	240V Phase 3	277V Phase 1	380V Phase 3	400V Phase 3	415V Phase 3	480V Phase 1	480V Phase 3	600V Phase 3
3	14	14	13	13	11	5	8	N/A	6	6	2.8
6	29(2)	17	25(2)	14	22(2)	9	9	8	13(2)	7	6
9	43	25	38	22	33	14	13	13	19	11	9
12	58	33	50	29	43(2)	18	17	17	25(2)	14	12
13.5	65	37	56	32	49	21	20	19	28	16	13
15	72	42	63	36	54	23	22	21	31	18	14
18	87	50	75	43	65	27	26	25	38	22	17
24	115	67	100	58	87	36	35	33	50	29	23
27	130	75	113	65	97	41	39	38	56	32	26
30	144	83	125	72	108	46	43	42	63	36	29
36	173	100	150	87	130	55	52	50	75	43	35
45	216	125	188	108	163	68	65	63	94	54	43
54	260	150	225	130	195	82	78	75	113	65	52
81	389	225	338	195	292	123	117	113	169	97	78

ASME units with amperage draw of 120 amps or more require factory installed internal fusing. *If the number of elements on non-fused models is different, it is located in parentheses ( ), following the amp draw.

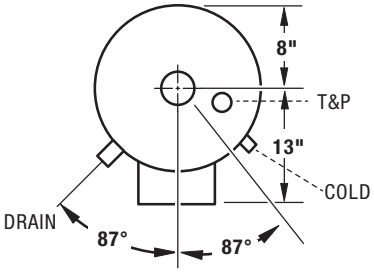
kW Input	Recovery GPH Temperature Rise °F 40	50	60	70	80	90	100	120	140
3	31	25	21	18	16	14	12	10	9
6	62	50	41	35	31	28	25	21	18
9	93	74	62	53	47	42	37	31	27
12	124	99	83	71	62	55	50	41	35
13.5	140	112	93	80	70	62	56	47	40
15	155	124	103	89	78	69	62	52	44
18	186	149	124	106	93	83	74	62	53
24	248	199	164	142	124	110	99	83	71
27	279	223	186	160	140	124	112	93	80
30	310	248	207	177	155	138	124	103	89
36	372	298	248	213	186	165	149	124	106
45	465	372	310	266	233	207	186	155	133
54	558	447	372	319	279	248	223	186	160
81	852	671	558	477	418	371	334	278	238



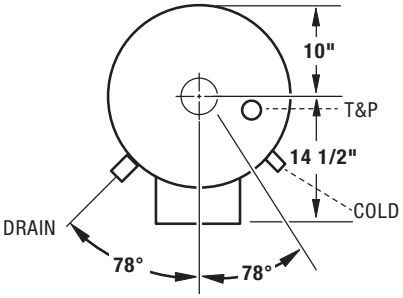
6A



12A



20A, 30A, 40A



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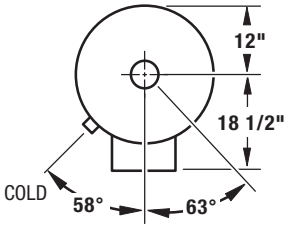

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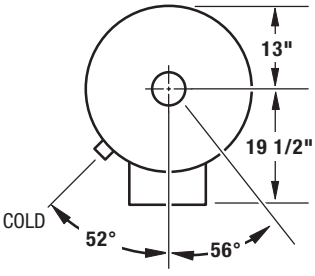
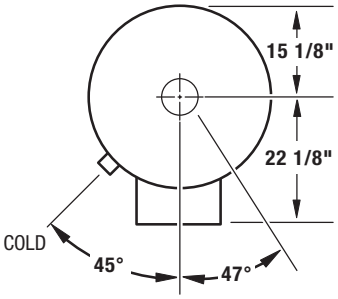


120A



Optional Components

- **High and Low Water Pressure Controls—**The Controls interrupt the electrical current to the contactor coil when the pressure settings are exceeded.
- **Low Water Level Control—**This Control will interrupt the electrical current to the contactor coil when a low water level condition is sensed inside the water heater tank. When the low water level condition is corrected the control will automatically sense the new situation and electrical current will again energize the contactor coil. Normal water heater operation will be resumed.
- **Alarm Horn—**The Alarm Horn is an option specified when the installation desires an audible signal to immediately sound an alert when the water heater operation is interrupted for certain faults. Referring to the control circuit wiring diagram, the alarm will activate when any one of the following events occur:
  - The Hi-Limit control has been tripped
  - The High Water Pressure Control senses excessive pressure
  - The Low Water Pressure Control senses insufficient pressure
  - The Low Water Level Control senses an insufficient quantity of water
- **Heating Element Sequencers—**Heating element sequencers are available in order to stage the activation of the heating elements thereby, reducing the inrush current to the water heater. The sequencers will control one or two contactor coils depending upon the water heater voltage, phase, and kW.
- **Electrical Door Lock—**An electrical door lock is offered in order to secure the access to the water heater control cabinet. This device will lock the control cabinet door when the 120VAC control circuit voltage is applied to it.
- **Temperature and Pressure Gauge—**Displays approximate temperature of the water and approximate pressure inside the tank.
- **BMS Relay**.

Sample Specification

The water heater shall be a Bradford White model with a rated storage capacity of not less than_____gallons (_____liters), a minimum kW input of _____kW (_____ BTU/Hr.), a minimum recovery of _____GPH (_____ LPH). The tank shall be Vitraglas® lined and have a bolted hand hole cleanout. The tank shall have _____magnesium anode rods installed in separate tank head couplings. The heater shall have 3" Non-CFC foam insulation, and come equipped with an ASME rated T&P relief valve, a cold water inlet Hydrojet® Sediment Reduction System. It shall be design certified by ETL for 180ºF (82ºC) application, either with or without a separate storage tank, and comply with state and local codes and ordinances.

General

All electric water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All models are design certified by ETL, for up to 180°F (82°C) application as an Automatic Storage Heater, and an Automatic Circulating Tank Heater. As an Automatic Storage Heater, all models are complete, self-contained water heating systems. It needs no separate storage tank, pump, wiring or elaborate piping network. When equipped with a mixing valve, it will supply 180°F (82°C) sanitizing and lower temperature general purpose hot water simultaneously. These models can be used either as a single unit or in multiples connected in series or parallel (recommended).

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

— BRADFORD WHITE IS —
AMERICAN STRONG
BRADFORD WHITE WATER HEATERS
Ambler, PA

For field service, contact your professional installer or local Bradford White sales representative.
Sales **800-523-2931** ■ Fax **215-641-1612**
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