

ElectriFLEX HD™ (Heavy-Duty) Commercial Electric Water Heater

Features

- **Vitraglas® Lining with Microban®**—An exclusively engineered enamel formula that provides superior tank protection from the corrosive effects of water; and with Microban® antimicrobial product protection to help prevent the growth of bacteria, mold and mildew on the surface of the tank lining.
- **Hydrojet® Total Performance System**—Sediment reducing device that minimizes temperature build-up in tank.

Additional Details

- **Immersion Thermostats** —Designed to provide outlet water at a thermostatically controlled temperature greater than 180°F (82°C).
- **UL Approved Field Conversion Kits**—Change kW and/or voltage in the field (see options on following page). All models are shipped from the factory standard Three Phase, and can be field converted to Single Phase without a conversion kit.
- **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.
- **Water Connections**—1½" (38mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **Elements**—Screw in style low watt density incoloy sheathed elements standard. These elements are durable and resistant to lime buildup.
- **Two Protective Anode Rods**—Provide added protection against corrosion for long-term, trouble-free service.
- **Hand Hole Cleanout**—Allows inspection of tank interior and facilitates the removal of sediment deposits.
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design.
- **T&P Relief Valve**—Installed.
- **Completely Pre-wired**—With pressure lug terminal block eliminating need for splicing or taping of wires.
- **Voltages Available**—208v, 240v, 277v, 380v, 415v, 480v and 600v.
- **Internal Fusing**—Standard on all models.
- **ASME Construction Available.**
- **NSF 5 Kits Available.**



Photo is of CEHD50(kW)3*CF



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. See complete copy of the warranty included with the heater for limitations.

Microban® antimicrobial product protection helps prevent the growth of bacteria, mold and mildew that may affect the product. The built-in antimicrobial properties do not protect users or others from disease-causing organisms. Microban® is a registered trademark of Microban Products Company.

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SPECIFICATIONS

These water heaters meet or exceed all or portions of (where applicable) the minimum efficiency requirements of ASHRAE Standard 90.1 (latest edition). C.E.C. Listed.

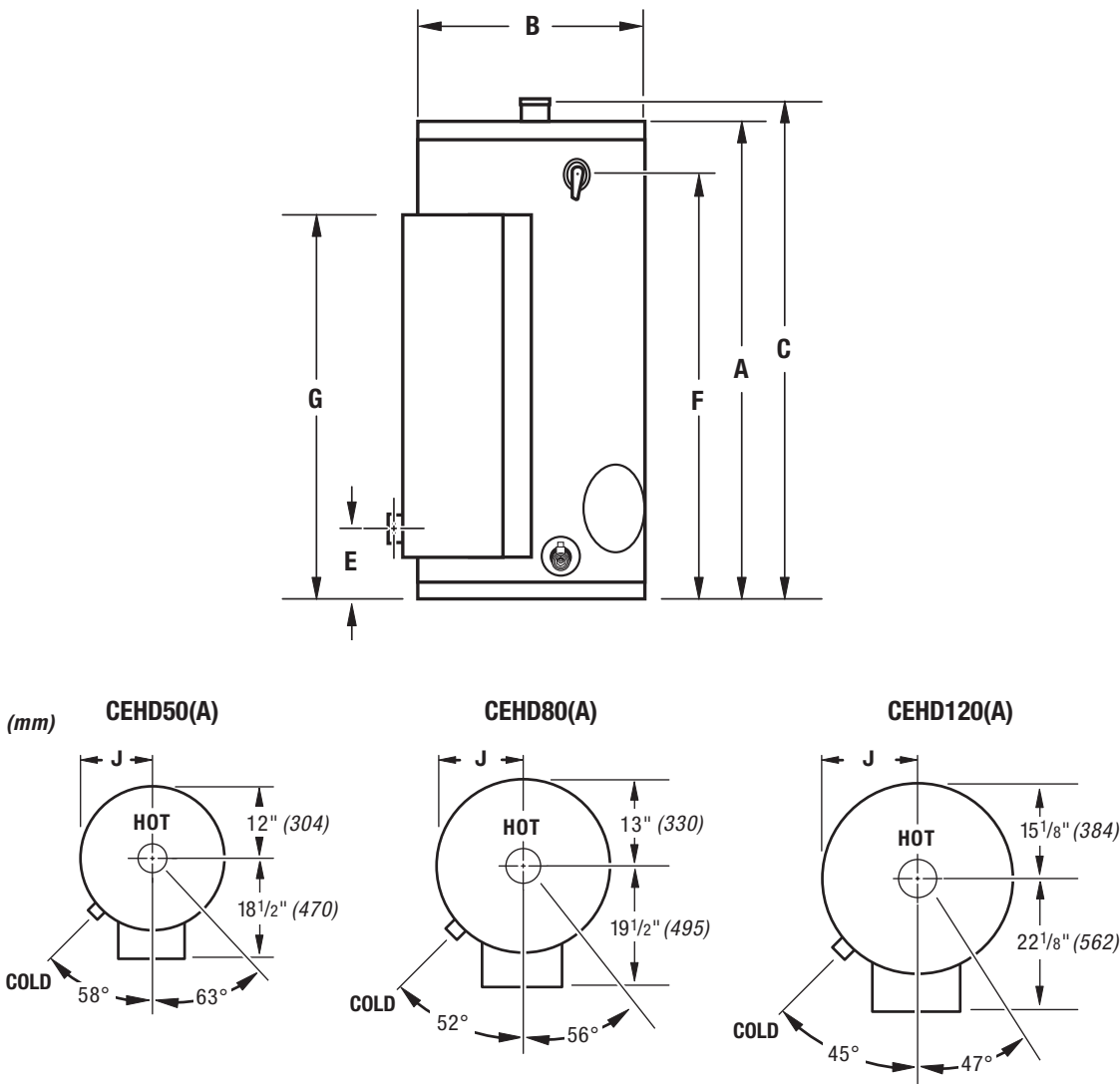
Model Number	Rated Nominal Capacity		Min. - Max. kW Input Range	A Floor to Top of Heater	B Jacket Dia.	C Floor to Hot Water Conn.	E Floor to C/L of Cold Water Conn.	F Floor to T&P Conn.	G Floor to Top of Control Box	J C/L of Hot Water Conn.	Water Conn. NPT	Approx Shipping Weight lbs.	
	U.S. Gal.	Imp. Gal.		in.	in.	in.	in.	in.	in.	in.	in.	Std.	ASME
CEHD50(A)(kW)3*CF	50	42	12.3 - 54	50 7/16	24	52 5/8	6 15/16	40 11/16	49 1/8	12	1 1/2	270	302
CEHD80(A)(kW)3*CF	80	67	12.3 - 54	61 1/4	26	65 1/2	7	52 3/16	49 1/8	13	1 1/2	335	378
CEHD120(A)(kW)3*CF	119	100	12.3 - 54	64 11/16	30 1/4	66 3/4	6 15/16	54 3/4	50 5/8	15 1/8	1 1/2	430	485

Model Number	Rated Nominal Capacity		Min. - Max. kW Input Range	A Floor to Top of Heater	B Jacket Dia.	C Floor to Hot Water Conn.	E Floor to C/L of Cold Water Conn.	F Floor to T&P Conn.	G Floor to Top of Control Box	J C/L of Hot Water Conn.	Water Conn. NPT	Approx Shipping Weight kg.	
	Liters			mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	Std.	ASME
CEHD50(A)(kW)3*CF	189		12.3 - 54	1281	610	1337	176	1033	1248	308	38	122	137
CEHD80(A)(kW)3*CF	303		12.3 - 54	1556	660	1664	178	1326	1248	330	38	152	171
CEHD120(A)(kW)3*CF	450		12.3 - 54	1643	768	1695	176	1391	1337	384	38	195	220

* = voltage and phase designator. Voltage and phase must be specified when ordering. Example: CEHD50243*CF, 240 Volt, 3 phase.

(A) ASME Construction available. For ASME construction add "A" to the model number. Example: CEHD50A243*CF.

(6, 9) Multiple element options available at 18 & 36 kW. 18 kW is available with either a 3 or 6-element configuration; 36 kW is available with 6 or 9-element. Example: CEHD50183*(6)CF or CEHD50363*(9)CF.



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SPECIFICATIONS

Model	Desired Input		Conversion Kit Part Numbers***							
	Total kW	Element kW	208 Volts	240 Volts	277 Volts	380 Volts	415 Volts	480 Volts	600 Volts*	
CEHD with 3 Elements	12.3	4.1	415-51043-138	415-51043-139	415-51043-140	—	—	415-51043-141	—	
	13.5	4.5	415-51043-129	415-51043-64	415-51043-114	415-51043-105	415-51043-95	415-51043-86	415-51043-04	
	15	5	415-51043-130	415-51043-122	415-51043-115	415-51043-106	415-51043-96	415-51043-87	415-51043-05	
	18	6	415-51043-131	415-51043-123	415-51043-116	415-51043-107	415-51043-97	415-51043-88	415-51043-06	
CEHD with 6 Elements	18	3	415-51043-142	415-51043-143	415-51043-144	415-51043-145	415-51043-146	415-51043-147	415-51043-148	
	24	4	415-51043-132	415-51043-67	415-51043-55	415-51043-108	415-51043-98	415-51043-19	415-51043-07	
	27	4.5	415-51043-133	415-51043-68	415-51043-117	415-51043-109	415-51043-99	415-51043-89	415-51043-08	
	30	5	415-51043-134	415-51043-124	415-51043-118	415-51043-110	415-51043-100	415-51043-90	415-51043-09	
CEHD with 9 Elements	36	6	415-51043-135	415-51043-125	415-51043-119	415-51043-111	415-51043-101	415-51043-91	415-51043-10	
	36	4	415-51043-149	415-51043-150	415-51043-151	415-51043-152	415-51043-153	415-51043-154	415-51043-155	
	45	5	415-51043-136	415-51043-126	415-51043-120	415-51043-112	415-51043-102	415-51043-92	415-51043-11	
	54	6	415-51043-137**	415-51043-127	415-51043-121	415-51043-113	415-51043-103	415-51043-93	415-51043-12	

3 element models may convert 12.3kW thru 18kW ONLY

6 element models may convert 18kW thru 36kW ONLY

9 element models may convert 36kW thru 54kW ONLY

* Only kW conversion is allowed for models rated 600V. Models rated 480V and below must not be converted to 600V.

** Only available as a three phase conversion kit.

*** Converting 3 Element Configurations (12.3-18kW)			*** Converting 6 or 9 element configurations (18-54kW)		
From	To	Transformer Required	From	To	Transformer Required
208/240/480 Volt	277/380/415 Volt	415-41994-02	208/240/480 Volt	277/380/415 Volt	415-41995-02
277/380/415 Volt	208/240/480 Volt	415-41994-01	277/380/415 Volt	208/240/480 Volt	415-41995-01
208/240/480 Volt	208/240/480 Volt	No Transformer Change Required	208/240/480 Volt	208/240/480 Volt	No Transformer Change Required
277/380/415 Volt	277/380/415 Volt	No Transformer Change Required	277/380/415 Volt	277/380/415 Volt	No Transformer Change Required

Input kW	Recovery GPH Temperature Rise °F									
	40	50	60	70	80	90	100	120	140	
12.3	127	102	85	73	64	57	51	42	36	
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	

Input kW	Recovery LPH Temperature Rise °C									
	23	28	34	40	45	50	56	67	78	
12.3	481	385	321	275	241	214	193	160	138	
13.5	530	424	352	303	265	235	212	178	151	
15	587	469	390	337	295	261	235	197	167	
18	704	564	469	401	352	314	280	235	201	
24	939	753	621	538	469	416	375	314	269	
27	1056	844	704	606	530	469	424	352	303	
30	1173	939	784	670	587	522	469	390	337	
36	1408	1128	939	806	704	625	564	469	401	
45	1760	1408	1173	1007	882	784	704	587	503	
54	2112	1692	1408	1208	1056	939	844	704	606	

Number of Elements												
Input kW	208V Phase		240V Phase		277V Phase	380V Phase	415V Phase	480V Phase		600V Phase		
	1	3	1	3	1	3	3	1	3	3		
12.3	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	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6	3/6		
24	6	6	6	6	6	6	6	6	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	6/9	6/9	6/9	6/9	6/9	6/9	6/9	6/9	6/9	6/9		
45	9	9	9	9	9	9	9	9	9	9		
54	9	9	9	9	9	9	9	9	9	9		

Full Load Current Amperes													
Input kW	208V Phase		240V Phase		277V Phase	380V Phase	415V Phase	480V Phase		600V Phase			
	1	3	1	3	1	3	3	1	3	3			
12.3	59.1	34.1	51.3	29.6	44.4	—	—	25.6	14.8	—			
13.5	64.9	37.5	56.2	32.5	48.7	21.0	19.0	28.1	16.2	13.0			
15	72.1	41.6	62.5	36.1	54.1	23.0	21.0	31.2	18.0	14.4			
18	86.5	50.0	72.0	43.4	64.0	28.0	25.0	37.5	21.6	17.3			
24	115.4	66.7	100.0	57.8	86.6	37.0	34.0	50.0	28.9	23.1			
27	129.8	75.0	112.5	65.0	97.4	41.0	38.0	56.2	32.5	26.0			
30	144.2	83.3	125.0	72.2	108.3	46.0	42.0	62.5	36.1	28.9			
36	173.0	100.0	150.0	86.7	129.9	55.0	50.0	75.0	43.3	34.6			
45	216.3	125.0	187.5	108.3	162.4	69.0	63.0	93.7	54.1	43.3			
54	259.6	150.0	225.0	130.0	194.9	83.0	75.0	112.5	65.0	52.0			

3 element models may convert 12.3kW thru 18kW ONLY

6 element models may convert 18kW thru 36kW ONLY

9 element models may convert 36kW thru 54kW ONLY

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 UL®, to provide outlet water at a thermostatically controlled temperature greater than 180°F (82°C) 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.

SAMPLE SPECIFICATION:

The water heater shall be a Bradford White ElectriFLEX HD™ 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 lined with Vitraglas® vitreous enamel with Microban® antimicrobial technology and have a bolted hand hole cleanout. The tank shall have _____ anode rods installed in separate tank head couplings. The heater shall have 3" (76mm) 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 UL® for 180°F (82°C) application, either with or without a separate storage tank, and comply with state and local codes and ordinances.

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



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