

GOLD Xi™ SERIES - COMMERCIAL ELECTRIC WATER HEATERS

Designed for use as a recovery heater having its own storage tank or booster for supplying sanitizing rinse water for dishwashing.

FEATURES

Meets or exceeds the thermal efficiency and or standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/ISENA 90.1.

ADVANCED ELECTRONIC CONTROL - Plain English text and animated icons display detailed operational and diagnostic information. Fault or Alert messages appear if an operational issue occurs.

Immersion temperature control adjustable through a range of 90°F to 190°F.

iCOMM™ COMPATIBLE - Call 1.888.WATER02 for more information.



ECONOMY MODE OPERATION - Control system automatically lowers the Operating Set Point by a programmed value during user-defined time periods. Helps reduce operating costs during unoccupied or off-peak demand periods.

LINEAR SEQUENCING - Banks of heating elements (3 elements per bank) are energized according to adjustable (1 to 20°) differential set points for each bank. First bank on is the last bank off. Helps reduce current surge and provides accurate water temperature control.

GOLDENROD ELEMENTS - All DVE models ship standard with patented Goldenrod 24K gold plated elements. Goldenrod elements provide long life with superior scaling resistance.

GLASS-LINED TANK - Three sizes; 50, 80 and 119 gallon capacity. Tank interior is coated with glass specially developed by A. O. Smith for water heater use. Tanks rated at 150 psi working pressure; tested at 300 psi. Foam insulation reduces costly heat loss. ASME (optional) maximum working pressure is 150 psi.

POWER CIRCUIT FUSING - Protects elements and contactors from short circuits, overloading or line surges. Meets National Electric Code requirements (fusing required when current draw exceeds 48 amps).

STANDARD VOLTAGES - 208, 240 and 480V single-phase and three phase delta. Convertible from three-phase to single-phase (in field) and vice versa (except 208/54 kW). 277V single-phase also available.

TERMINAL BLOCK - Factory installed. Allows for easy service connection to block.

MAGNETIC CONTACTORS - Heavy duty; UL rated 100,000 cycles.

THREE YEAR LIMITED TANK WARRANTY - For complete warranty information, consult written warranty or contact A. O. Smith.

OTHER STANDARD FEATURES

Immersion style thermostats ■ Simplified circuitry, color coded for ease of service ■ Hinged control compartment door for quick, easy access ■ Two anode rods for maximum corrosion protection ■ Cabinet has bonderized undercoat with baked enamel finish ■ Top outlet, side inlet and relief valve openings ■ Nipple and brass drain valve ■ CSA certified and ASME rated T&P relief valve.

OPTIONS

MANIFOLD KITS WITH ISOLATION VALVES - Available for multiple installations. Two heaters 9003429205. Three heaters 9003430205. Four heaters 9003431205.

INTERNATIONAL VOLTAGES - 220, 380, 400, 415, 480, 575 and 600 volts three-phase available with Y connected elements.

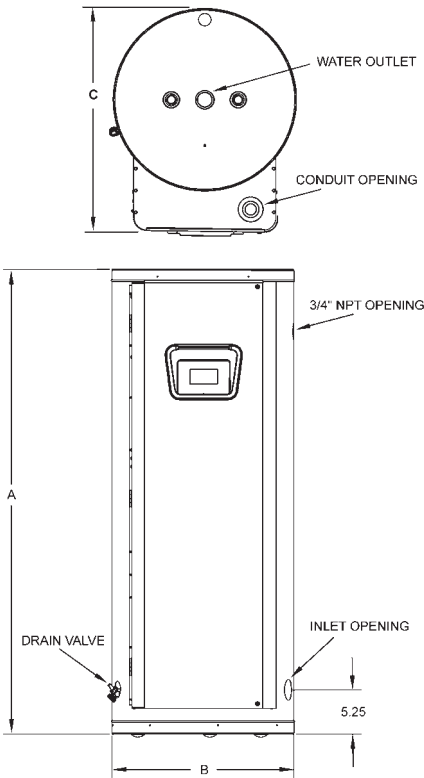
See Technical Data section in your A&E for service wiring and fuse selection.

MODELS DVE-52, 80, 120



ASME/CRN
(OPTIONAL)





RECOVERY RATE IN GALLONS PER HOUR AT TEMPERATURE RISE OF

Standard kW Input	BTU/ Hour	30°F 17°C	40°F 22°C	50°F 28°C	60°F 33°C	70°F 39°C	80°F 45°C	90°F 50°C	100°F 56°C	110°F 61°C	120°F 67°C	130°F 72°C	140°F 78°C
6	20,478	82	62	49	41	35	31	27	25	22	21	19	18
9	30,717	123	92	74	62	53	46	41	37	34	31	28	26
12	40,956	164	123	98	82	70	61	55	49	45	41	38	35
13.5	46,075	184	138	111	92	79	69	62	55	50	46	43	40
15	51,195	205	154	123	102	88	77	68	61	56	51	47	44
18	61,434	246	184	148	123	105	92	82	74	67	62	57	53
24	81,912	328	246	197	164	140	123	109	98	90	82	76	70
27	92,151	369	276	221	185	158	138	123	111	101	92	85	79
30	102,390	410	307	246	205	176	154	137	123	112	102	95	88
36	122,868	492	369	295	246	211	184	164	148	134	123	113	105
40.5	138,226	554	418	332	277	237	208	185	166	151	138	128	119
45	153,585	615	461	369	307	263	230	205	184	168	154	142	132
54	184,302	738	554	443	359	316	277	246	221	201	185	170	158

Figured at 1 kW (3413 BTU) = 4.1 Gallons at 100°F temperature rise.

Model Number	Tank Capacity		Dimensions						Inlet/Outlet (NPT)		Approx. Ship. Wt.	
			A		B		C					
	gal.	litre	in.	cm	in.	cm	in.	cm	in.	cm	lb	kg
DVE-52	50	189	55 3/4	142	21 3/4	55.2	27	68.6	1 1/4	3.2	265	120
DVE-80	80	300	60 1/4	153	25 1/2	64.8	31	78.7	1 1/4	3.2	280	127
DVE-120	119	450	62 1/4	158.1	29 1/2	75.0	35	88.9	1 1/4	3.2	390	177

kW Input	Model Numbers Tank Capacity in Gallons			Number Of Elements	Element Wattage	Full Load Current In Amperes						
	50	80	119			Single Phase			Three Phase			
						208V	240V	277V	480V	208V	240V	480V
6	DVE-52-6	DVE-80-6	DVE-120-6	3	2,000	28.8	25.0	21.7	12.5	16.7	14.4	7.2
9	DVE-52-9	DVE-80-9	DVE-120-9	3	3,000	43.3	37.5	**32.5	18.8	25.0	21.7	10.8
12	DVE-52-12	DVE-80-12	DVE-120-12	3	4,000	57.7	50.0	43.3	25.0	33.3	28.9	14.4
13.5	DVE-52-13.5	DVE-80-13.5	DVE-120-13.5	3	4,500	64.9	56.3	**48.7	28.1	37.5	32.5	16.2
15	DVE-52-15	DVE-80-15	DVE-120-15	3	5,000	72.1	62.5	54.2	31.3	41.6	36.1	18.0
18	DVE-52-18	DVE-80-18	DVE-120-18	3*	6,000	86.5	75.0	65.0	37.5	50.0	43.3	21.7
24	DVE-52-24	DVE-80-24	DVE-120-24	6	4,000	115.4	100.0	86.6	50.0	66.6	57.7	28.9
27	DVE-52-27	DVE-80-27	DVE-120-27	6	4,500	129.8	112.5	**97.5	56.3	74.9	65.0	32.5
30	DVE-52-30	DVE-80-30	DVE-120-30	6	5,000	144.2	125.0	108.3	62.5	83.3	72.2	36.1
36	DVE-52-36	DVE-80-36	DVE-120-36	6	6,000	173.1	150.0	130.0	75.0	99.9	86.6	43.3
40.5	DVE-52-40.5	DVE-80-40.5	DVE-120-40.5	9	4,500	194.7	168.8	**146.2	84.4	112.4	97.4	48.7
45	DVE-52-45	DVE-80-45	DVE-120-45	9	5,000	216.3	187.5	162.5	93.8	124.9	108.3	54.1
54	DVE-52-54	DVE-80-54	DVE-120-54	9	6,000	N/A	225.0	194.9	112.5	149.9	129.9	65.0

*208 volt models may contain three (3) additional elements. ** Elements available in incoloy only.

SUGGESTED SPECIFICATION

The heater(s) shall be Gold Xi Commercial Electric Model Number _____ as manufactured by A. O. Smith Water Products Company or equivalent. Heater(s) shall be rated at _____ kW _____ V _____ phase, 60 cycle AC listed by Underwriters' Laboratories and approved to the NSF Standard 5 by UL. Water heater shall have LCD display with built-in diagnostic and troubleshooting information. Tank(s) shall be (50, 80 or 119) gallon capacity with 150 psi working pressure and equipped with dual extruded high density anodes. All internal surfaces of the heater(s) exposed to water shall be glass-lined with an alkaline borosilicate composition that has been fused to steel by firing at a temperature range of 1400°F to 1600°F. Electric heating elements shall be 24K Goldenrod medium watt density screw-in type with Incoloy sheath and ceramic terminal block. Internal power circuit fusing shall be provided. Element operation shall be linear sequencing through individual magnetic contactors. Control circuit shall be factory fused and include an immersion thermostat temperature probe with built-in ECO control. Control cabinet and jacket shall be of baked enamel finish and shall provide full size control and element compartment for complete service and maintenance performance through front hinged compartment door, and enclose tank with foam insulation. 1 1/4" inlet and outlet connection shall be provided. The heater tank shall have a three year limited warranty and controls and accessories shall have a one year limited warranty as outlined in the written warranty. Fully illustrated instruction manual to be included. For multiple installation, factory built manifold kits for _____ heater installation (maximum of 4 heaters) shall be provided. Meets or exceeds the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1. Water heater should incorporate the iCOMM™ system for remote monitoring, leakage detection and fault alert.

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.