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AUG 1 4 2009

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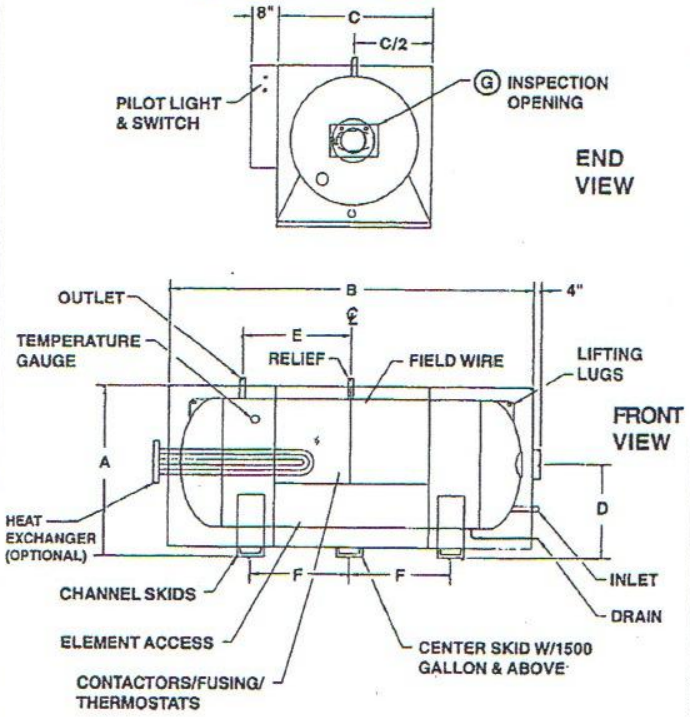
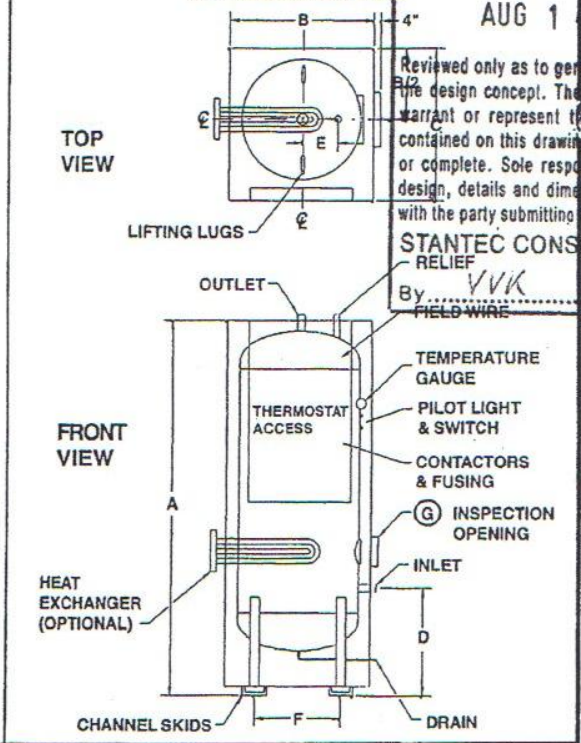
By VVK

HORIZONTAL MODELS



VERTICAL MODELS



ALL DIMENSIONS IN INCHES

A. O. Smith Model*	Nominal Gallon Capacity	Maximum KW Input	Height A	Width (Length) B	Depth C	D	E	Skid Spacing F	Inspection Opening G	Inlet Outlet Opening	Drain Opening	Relief Valve Opening**
HORIZONTAL ELECTRIC STORAGE HEATER												
DHE-200	200	180	38-1/2	77	36	10-1/2	17-1/2	18		1-1/2	3/4	3/4
DHE-250	250	240	38-1/2	91	36	10-1/2	24	24		1-1/2	3/4	1
DHE-300	300	300	44-1/2	81	42	8-1/4	17	18	Optional	2	3/4	1
DHE-350	350	330	44-1/2	93	42	8-1/4	23	24		2	3/4	1
DHE-400	400	390	44-1/2	100	42	8-1/4	26-1/2	27-1/2		2	3/4	1
DHE-500	500	480	51	94	48	14	24	24	4" X 6"	2	1-1/4	1
DHE-600	600	600	51	109	48	14	32	32		2	1-1/4	1
DHE-700	700	690	51	121	48	14	38	38	Handhole	2	1-1/4	1
DHE-800	800	780	57	111	54	16-1/2	32	32		2	1-1/2	1
DHE-1000	1000	990	61	111	60	16-1/2	29-1/2	29-1/2		3	1-1/2	1
DHE-1250	1250	1200	61	138	60	16-1/2	43	43		3	1-1/2	1
DHE-1500	1500	1500	61	150	60	16-1/2	50	49	11" x 15"	3	1-1/2	1
DHE-2000	2000	1980	70	177	66	20	60	60	Manhole	3	2	1-1/4
DHE-3000	3000	3000	76	211	72	20	72-1/2	74		3	2	1-1/2
DHE-5000	5000	3000	82	296	78	20-1/2	113-1/2	115		3	2	1-1/2
DHE-7500	7500	3000	94	317	90	21-1/2	121	119		4	2	1-1/2
DHE-10,000	10,000	3000	106	345	102	22	132	130		4	2	1-1/2
VERTICAL ELECTRIC STORAGE HEATER												
DVE-125	125	120	78-1/2	30	37	16	6	17		1-1/4	3/4	3/4
DVE-150	150	150	83-1/2	30	37	16	6	17		1-1/4	3/4	3/4
DVE-150L	150	150	59-1/2	36	43	17-1/2	6	21		1-1/4	3/4	3/4
DVE-200	200	180	79-1/2	36	43	17-1/2	6	21		1-1/2	3/4	3/4
DVE-250	250	240	93	36	43	17-1/2	6	21	Optional	1-1/2	3/4	1
DVE-300	300	300	83-1/2	42	49	19	6	25-1/2		2	3/4	1
DVE-350	350	330	95-1/2	42	49	19	6	25-1/2		2	3/4	1
DVE-400	400	390	102-1/2	42	49	19	6	25-1/2		2	3/4	1
DVE-500	500	480	97	48	55	21	6	30	4" X 6"	2	1-1/4	1
DVE-600	600	600	112	48	55	21	6	30		2	1-1/4	1
DVE-700	700	690	124	48	55	21	6	30	Handhole	2	1-1/4	1
DVE-800	800	780	116	54	61	23	8	34		2	1-1/2	1
DVE-1000	1000	990	116	60	67	24-1/2	10	38		3	1-1/2	1
DVE-1250	1250	1200	143	60	67	24-1/2	10	38	11" x 15"	3	1-1/2	1
DVE-1500	1500	1500	155	60	67	24-1/2	10	38		3	1-1/2	1
DVE-2000	2000	1980	183	66	73	25	12	42-1/2	Manhole	3	2	1
DVE-3000	3000	3000	217	72	79	27-1/2	14	47		3	2	1-1/2
DVE-5000	5000	3000	309	78	85	30	14	51		3	2	1-1/2
DVE-7500	7500	3000	330	90	97	30	14	59-1/2		4	2	1-1/2
DVE-10,000	10,000	3000	358	102	109	30	14	68		4	2	1-1/2

*Complete Model Number includes the desired KW at end, e.g.: DVE-500-120 when KW = 120.
**Size may vary according to KW input.
Minimum installation clearances required: 30" from front, 12" from top, and 24" from right side.

STANDARD KW INPUTS

Standard KW Ratings	Number of Immersion Heaters	BTU Input & Output	GPH Recovery 100°F Rise	Number of 50A Contactors Three-Phase 208V, 240V	Number of 50A Contactors Three-Phase 480V, 600V	Amperage Draw Three-Phase 208V	Amperage Draw Three-Phase 240V	Amperage Draw Three-Phase 480V	Amperage Draw Three-Phase 600V
15	1-15KW	51,195	61	1	1	42	37	19	15
24	2-12KW	81,912	98	2	1	67	58	27	23
30	2-15KW	102,390	123	2	1	83	72	36	29
36	3-12KW	122,868	147	3	1	100	87	43	35
45	3-15KW	153,585	184	3	2	126	109	54	44
60	4-15KW	204,720	246	4	2	167	145	72	58
75	5-15KW	255,975	307	5	3	208	181	90	72
90	6-15KW	307,170	369	6	3	250	217	109	87
105	7-15KW	358,365	430	7	4	292	253	127	101
120	8-15KW	409,560	492	8	4	333	289	145	115
150	10-15KW	511,950	615	10	5	416	361	180	144
180	12-15KW	614,340	738	12	6	499	433	217	173
210	14-15KW	716,730	861	14	7	583	505	253	202
240	16-15KW	819,120	984	16	8	666	577	289	231
252	16-15,1-12	860076	1033	17	10	700	607	304	243
300	20-15KW	1,023,900	1,230	20	10	832	722	361	289
330	22-15KW	1,126,290	1,353	22	11	916	794	397	318
360	24-15KW	1,228,680	1,476	24	12	999	866	433	346
390	26-15KW	1,331,070	1,599	26	13	1,083	938	469	375
420	28-15KW	1,433,460	1,722	28	14	1,166	1,010	505	404
450	30-15KW	1,535,850	1,845	30	15	1,249	1,083	542	433
480	32-15KW	1,638,240	1,968	32	16	1,332	1,155	578	462
510	34-15KW	1,740,630	2,091	34	17	1,416	1,227	613	491
540	36-15KW	1,843,020	2,214	36	18	1,499	1,299	650	520
570	38-15KW	1,945,410	2,337	38	19	1,582	1,371	686	548
600	40-15KW	2,047,800	2,460	40	20	1,664	1,443	722	577
630	42-15KW	2,150,190	2,583		21			758	606
660	44-15KW	2,252,580	2,706		22			794	635
690	46-15KW	2,345,970	2,829		23			830	664
720	48-15KW	2,457,360	2,952		24			866	693
810	54-15KW	2,764,530	3,321		27			974	779
900	60-15KW	3,071,700	3,690		30			1,083	866
990	66-15KW	3,378,870	4,059		33			1,191	953
1080	72-15KW	3,686,040	4,428		36			1,299	1,039
1170	78-15KW	3,993,210	4,797		39			1,408	1,126
1260	84-15KW	4,300,380	5,166		42			1,516	1,213
1350	90-15KW	4,607,550	5,535		45			1,624	1,300
1440	96-15KW	4,914,720	5,904		48			1,732	1,386
1530	102-15KW	5,221,890	6,273		51			1,841	1,473
1620	108-15KW	5,529,060	6,642		54			1,949	1,559
1800	120-15KW	6,141,600	7,380		60			2,170	1,732
1980	132-15KW	6,757,740	8,118		66			2,382	1,905
2040	136-15KW	6,962,520	8,364		68			2,454	1,963
2220	148-15KW	7,576,860	9,102		74			2,670	2,136
2250	150-15KW	7,679,250	9,225		75			2,707	2,165
2400	160-15KW	8,188,800	9,840		80			2,887	2,310
2640	176-15KW	9,010,320	10,824		88			3,175	2,540
2820	188-15KW	9,624,660	11,562		94			3,392	2,714
3000	200-15KW	10,236,000	12,300		100			3,608	2,887

Not Recommended

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SAMPLE SPECIFICATIONS

The heater(s) shall be A.O. Smith Dura-Power Commercial Electric Model Number _____ or an approved equal. Heater(s) shall be rated at _____ KW, _____ V, _____ phase, 60 cycle AC. The heater shall be for (vertical/horizontal) installation with lifting lugs and channel skid base. Vessel shall be constructed to Section IV of the ASME Code for 125 psi working pressure. Vessel shall be glass-lined with anodic protection. Entire vessel and electrical controls are to be encased in a rectangular sheet metal enclosure with baked enamel finish. Tank to be insulated with fiber glass insulation. Separate 2" dial type temperature gauge will be mounted on the front of the enclosure. Enclosure to have hinged locking door over electric controls. There shall be _____ individually replaceable _____ KW, 4 bolt flange mounted, incoloy sheathed heating elements each complete with prewired terminal leads. These elements will be switched by magnetic contactors which are operated by a 120V fused control circuit protected by manual reset high limit. Control circuit is activated by a master pilot switch and electronic low water cutoff. The thermostatic control of the contacts shall be in _____ stages through solid state modulating step control which will balance the water heating input to the demand. This control shall prevent the entire electrical load from being switched on instantaneously. The control shall have even load progressive sequencing which utilizes the "first on, first off" principle thereby equalizing the operating time of heating elements and contactors. Each magnetic contactor and heating element circuit will be protected by a maximum of 60 amp cartridge type fuses with a minimum of 100,000 amp interrupting capacity. The entire water heating package shall be prewired to solderless terminal lugs, factory tested, complete with ASME temperature and pressure relief valve and bear the Underwriters' Laboratories label. Heater(s) shall have a 3 year limited warranty as outlined in the written warranty. Fully illustrated instruction manual included.