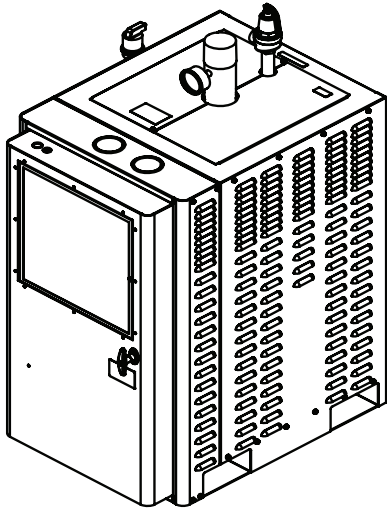


Commercial Electric Boiler

EB Electric Boiler

Indoor, Sizes 60-300



Date:

Project #:

Engineer:

Prepared By:

Bid Date:

Submittal Data



Project Name:

Location:

Contractor:

Standard Features

- ASME pressure vessel
- National Board & CRN registration
- Meets ASME CSD-1
- ASME 30 psi pressure rating and PRV (125 psi optional)
- SCCR rated at 5 kA
- Temp & pressure gauge
- 3" inspection opening
- 3" NPT water connections
- Integrated ½" air vent
- Supply and return water temperature sensing
- Digital temperature control with display
- Multi-boiler lead/lag control
- 0-10VDC external boiler control
- Adjustable outdoor reset
- Manual reset high limit, 220°F
- Auto reset high limit, 210°F
- Low water cutoff with manual reset
- Stage active indicator lights
- Circuit breaker or fuse protection on each stage
- Emergency shut-down connection point
- Safety door interlock
- Lockable door latch

Boiler Data

Number of Units:

208V 3Φ Model

- ☐ 60 kW
- ☐ 75 kW
- ☐ 90 kW
- ☐ 105 kW
- ☐ 120 kW
- ☐ 135 kW
- ☐ 150 kW
- ☐ 165 kW
- ☐ 180 kW

240V 3Φ Model

- ☐ 60 kW
- ☐ 75 kW
- ☐ 90 kW
- ☐ 105 kW
- ☐ 120 kW
- ☐ 135 kW
- ☐ 150 kW
- ☐ 165 kW
- ☐ 180 kW

480V 3Φ Model

- ☐ 60 kW
- ☐ 72 kW
- ☐ 84 kW
- ☐ 96 kW
- ☐ 108 kW
- ☐ 120 kW
- ☐ 132 kW
- ☐ 144 kW
- ☐ 160 kW
- ☐ 180 kW
- ☐ 200 kW
- ☐ 220 kW
- ☐ 240 kW
- ☐ 260 kW
- ☐ 280 kW
- ☐ 300 kW

600V 3Φ Model

- ☐ 60 kW
- ☐ 72 kW
- ☐ 84 kW
- ☐ 96 kW
- ☐ 108 kW
- ☐ 120 kW
- ☐ 132 kW
- ☐ 144 kW
- ☐ 160 kW
- ☐ 180 kW
- ☐ 200 kW
- ☐ 220 kW
- ☐ 240 kW
- ☐ 260 kW
- ☐ 280 kW
- ☐ 300 kW

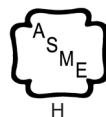
Factory Mounted Options

- ☐ 125 psi vessel & PRV
- ☐ BACnet interface
- ☐ LonWorks interface
- ☐ T775R system control

- ☐ Fault monitor, mounted and wired*

*Important Notes:

1. Fault monitor CANNOT be used with Wye power systems.
2. If power system is Delta, ground fault protection is required. The fault monitor option shown will satisfy this requirement. Job site may already have ground fault protection in place. Confirm before ordering this option.



Boiler Data

Model Number	Voltage 3Φ	Input kW	Output Btu/hour	Required Water Flow Rate For 20°F / 11°C Temp Rise		Headloss With 20°F / 11°C Temp Rise		Minimum Water Flow Rate		Boiler Weight (lbs)	
				gpm	l/m	ft	m	gpm	l/m	30psi	125psi
EB-060-208 (X,H)	208	60	204,729	21	78	0.1	0.03	5	19	680	705
EB-075-208 (X,H)	208	75	255,911	26	97	0.1	0.03	5	19	685	710
EB-090-208 (X,H)	208	90	307,093	31	116	0.1	0.03	5	19	690	715
EB-105-208 (X,H)	208	105	358,275	36	136	0.1	0.03	5	19	695	720
EB-120-208 (X,H)	208	120	409,457	41	155	0.1	0.03	5	19	700	725
EB-135-208 (X,H)	208	135	460,639	46	174	0.1	0.03	5	19	705	730
EB-150-208 (X,H)	208	150	511,821	51	194	0.1	0.03	5	19	710	735
EB-165-208 (X,H)	208	165	563,003	56	213	0.1	0.03	5	19	715	740
EB-180-208 (X,H)	208	180	614,186	61	233	0.1	0.03	5	19	720	745
EB-060-240 (X,H)	240	60	204,729	21	78	0.1	0.03	5	19	680	705
EB-075-240 (X,H)	240	75	255,911	26	97	0.1	0.03	5	19	685	710
EB-090-240 (X,H)	240	90	307,093	31	116	0.1	0.03	5	19	690	715
EB-105-240 (X,H)	240	105	358,275	36	136	0.1	0.03	5	19	695	720
EB-120-240 (X,H)	240	120	409,457	41	155	0.1	0.03	5	19	700	725
EB-135-240 (X,H)	240	135	460,639	46	174	0.1	0.03	5	19	705	730
EB-150-240 (X,H)	240	150	511,821	51	194	0.1	0.03	5	19	710	735
EB-165-240 (X,H)	240	165	563,003	56	213	0.1	0.03	5	19	715	740
EB-180-240 (X,H)	240	180	614,186	61	233	0.1	0.03	5	19	720	745
EB-060-480 (X,H)	480	60	204,729	21	78	0.1	0.03	4	15	685	710
EB-072-480 (X,H)	480	72	245,674	25	93	0.1	0.03	4	15	690	715
EB-084-480 (X,H)	480	84	286,620	29	109	0.1	0.03	4	15	695	720
EB-096-480 (X,H)	480	96	327,566	33	124	0.1	0.03	4	15	700	725
EB-108-480 (X,H)	480	108	368,511	37	140	0.1	0.03	4	15	705	730
EB-120-480 (X,H)	480	120	409,457	41	155	0.1	0.03	4	15	710	735
EB-132-480 (X,H)	480	132	450,403	45	171	0.1	0.03	4	15	715	740
EB-144-480 (X,H)	480	144	491,348	49	186	0.1	0.03	4	15	720	745
EB-160-480 (X,H)	480	160	545,943	55	207	0.1	0.03	7	26	700	725
EB-180-480 (X,H)	480	180	614,186	61	233	0.1	0.03	7	26	705	730
EB-200-480 (X,H)	480	200	682,428	68	258	0.1	0.03	7	26	710	735
EB-220-480 (X,H)	480	220	750,671	75	284	0.1	0.03	7	26	715	740
EB-240-480 (X,H)	480	240	818,914	82	310	0.1	0.03	7	26	720	745
EB-260-480 (X,H)	480	260	887,157	89	336	0.1	0.03	7	26	725	750
EB-280-480 X	480	280	955,400	96	362	0.1	0.03	7	26	730	n/a
EB-280-480 H	480	278	948,576	95	359	0.1	0.03	7	26	n/a	755
EB-300-480 X	480	300	1,023,643	102	388	0.1	0.03	7	26	735	n/a
EB-300-480 H	480	299	1,020,231	102	386	0.1	0.03	8	29	n/a	760
EB-060-600 (X,H)	600	60	204,729	21	78	0.1	0.03	4	15	685	710
EB-072-600 (X,H)	600	72	245,674	25	93	0.1	0.03	4	15	690	715
EB-084-600 (X,H)	600	84	286,620	29	109	0.1	0.03	4	15	695	720
EB-096-600 (X,H)	600	96	327,566	33	124	0.1	0.03	4	15	700	725
EB-108-600 (X,H)	600	108	368,511	37	140	0.1	0.03	4	15	705	730
EB-120-600 (X,H)	600	120	409,457	41	155	0.1	0.03	4	15	710	735
EB-132-600 (X,H)	600	132	450,403	45	171	0.1	0.03	4	15	715	740
EB-144-600 (X,H)	600	144	491,348	49	186	0.1	0.03	4	15	720	745
EB-160-600 (X,H)	600	160	545,943	55	207	0.1	0.03	7	26	700	725
EB-180-600 (X,H)	600	180	614,186	61	233	0.1	0.03	7	26	705	730
EB-200-600 (X,H)	600	200	682,428	68	258	0.1	0.03	7	26	710	735
EB-220-600 (X,H)	600	220	750,671	75	284	0.1	0.03	7	26	715	740
EB-240-600 (X,H)	600	240	818,914	82	310	0.1	0.03	7	26	720	745
EB-260-600 (X,H)	600	260	887,157	89	336	0.1	0.03	7	26	725	750
EB-280-600 X	600	280	955,400	96	362	0.1	0.03	7	26	730	n/a
EB-280-600 H	600	278	948,576	95	359	0.1	0.03	7	26	n/a	755
EB-300-600 X	600	300	1,023,643	102	388	0.1	0.03	7	26	735	n/a
EB-300-600 H	600	299	1,020,231	102	386	0.1	0.03	8	29	n/a	760

Note: "H" denotes optional 125psi model

Electrical Data

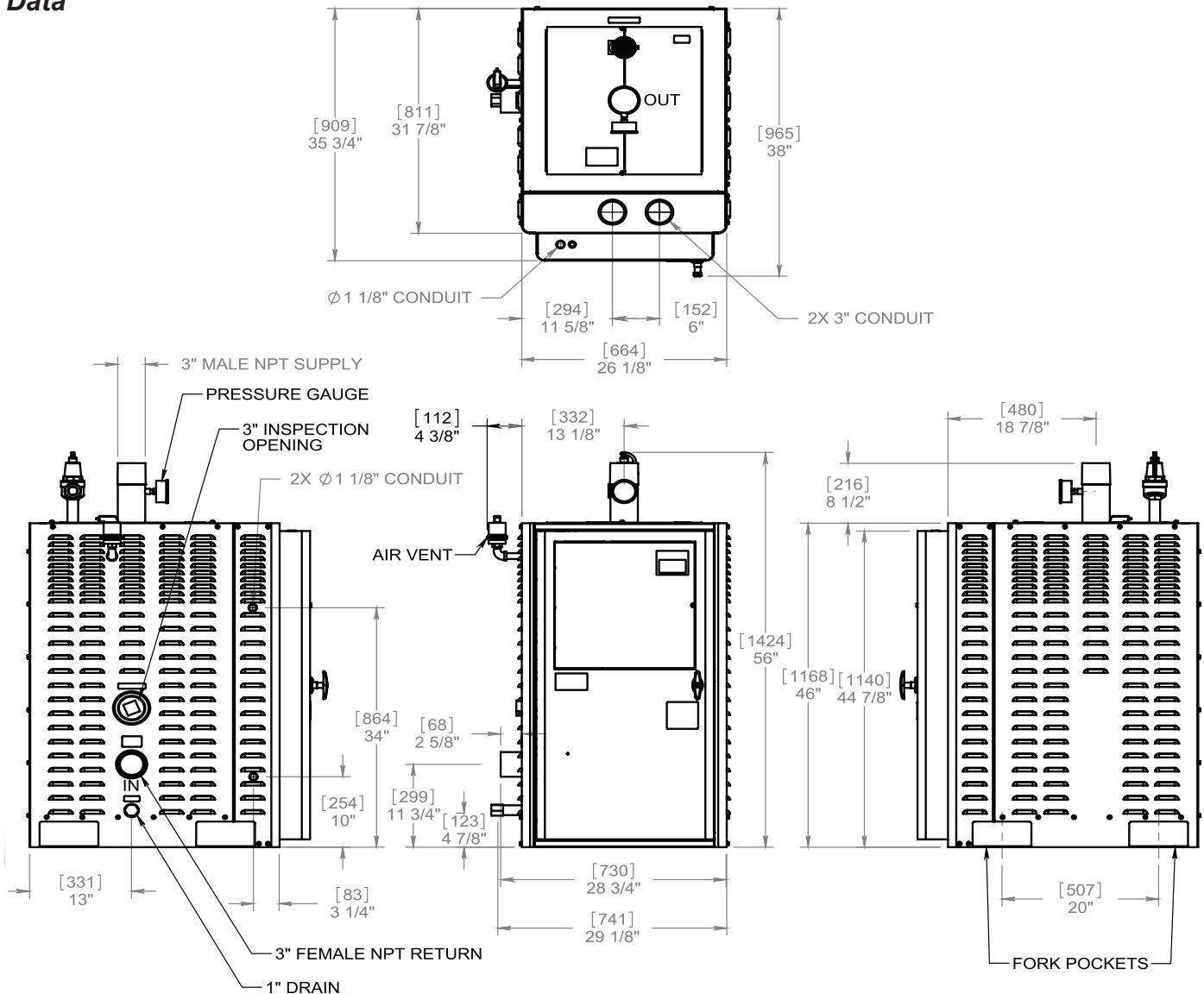
Model Number	Voltage 3Φ	kW	Separate Required Electric Feeds							Element Detail	
			3Φ Element Feed #1			3Φ Element Feed #2			120V Single Φ	Element Quantity	Steps
			Amps	MCA	MOP	Amps	MCA	MOP	Control Circuit		
EB-060-208 (X,H)	208	60	166.5	208.2	225	-	-	-	15 Amps	4	4 @ 15kW
EB-075-208 (X,H)	208	75	208.2	260.2	300	-	-	-	15 Amps	5	5 @ 15kW
EB-090-208 (X,H)	208	90	249.8	312.3	350	-	-	-	15 Amps	6	6 @ 15kW
EB-105-208 (X,H)	208	105	291.5	364.3	400	-	-	-	15 Amps	7	7 @ 15kW
EB-120-208 (X,H)	208	120	333.1	416.4	450	-	-	-	15 Amps	8	8 @ 15kW
EB-135-208 (X,H)	208	135	208.2	260.2	300	166.5	208.2	225	15 Amps	9	9 @ 15kW
EB-150-208 (X,H)	208	150	208.2	260.2	300	208.2	260.2	300	15 Amps	10	10 @ 15kW
EB-165-208 (X,H)	208	165	249.8	312.3	350	208.2	260.2	300	15 Amps	11	11 @ 15kW
EB-180-208 (X,H)	208	180	249.8	312.3	350	249.8	312.3	350	15 Amps	12	12 @ 15kW
EB-060-240 (X,H)	240	60	144.3	180.4	200	-	-	-	15 Amps	4	4 @ 15kW
EB-075-240 (X,H)	240	75	180.4	225.5	250	-	-	-	15 Amps	5	5 @ 15kW
EB-090-240 (X,H)	240	90	216.5	270.6	300	-	-	-	15 Amps	6	6 @ 15kW
EB-105-240 (X,H)	240	105	252.6	315.7	350	-	-	-	15 Amps	7	7 @ 15kW
EB-120-240 (X,H)	240	120	288.7	360.8	400	-	-	-	15 Amps	8	8 @ 15kW
EB-135-240 (X,H)	240	135	180.4	225.5	250	144.3	180.4	200	15 Amps	9	9 @ 15kW
EB-150-240 (X,H)	240	150	180.4	225.5	250	180.4	225.5	250	15 Amps	10	10 @ 15kW
EB-165-240 (X,H)	240	165	216.5	270.6	300	180.4	225.5	250	15 Amps	11	11 @ 15kW
EB-180-240 (X,H)	240	180	216.5	270.6	300	216.5	270.6	300	15 Amps	12	12 @ 15kW
EB-060-480 (X,H)	480	60	72.2	90.2	100	-	-	-	15 Amps	5	5 @ 12kW
EB-072-480 (X,H)	480	72	86.6	108.3	110	-	-	-	15 Amps	6	6 @ 12kW
EB-084-480 (X,H)	480	84	101.0	126.3	150	-	-	-	15 Amps	7	7 @ 12kW
EB-096-480 (X,H)	480	96	115.5	144.3	150	-	-	-	15 Amps	8	8 @ 12kW
EB-108-480 (X,H)	480	108	72.2	90.2	100	57.7	72.2	80	15 Amps	9	9 @ 12kW
EB-120-480 (X,H)	480	120	72.2	90.2	100	72.2	90.2	100	15 Amps	10	10 @ 12kW
EB-132-480 (X,H)	480	132	86.6	108.3	110	72.2	90.2	100	15 Amps	11	11 @ 12kW
EB-144-480 (X,H)	480	144	86.6	108.3	110	86.6	108.3	110	15 Amps	12	12 @ 12kW
EB-160-480 (X,H)	480	160	192.5	240.6	250	-	-	-	15 Amps	8	8 @ 20kW
EB-180-480 (X,H)	480	180	120.3	150.4	175	96.2	120.3	125	15 Amps	9	9 @ 20kW
EB-200-480 (X,H)	480	200	120.4	150.4	175	120.3	150.4	175	15 Amps	10	10 @ 20kW
EB-220-480 (X,H)	480	220	144.3	180.4	200	120.3	150.4	175	15 Amps	11	11 @ 20kW
EB-240-480 (X,H)	480	240	144.3	180.4	200	144.3	180.4	200	15 Amps	12	12 @ 20kW
EB-260-480 (X,H)	480	260	168.4	210.5	225	144.3	180.4	200	15 Amps	13	13 @ 20kW
EB-280-480 X	480	280	168.4	210.5	225	168.4	210.5	225	15 Amps	14	14 @ 20kW
EB-280-480 H	480	278	168.4	210.5	225	166.0	207.5	225	15 Amps	13	7 @ 20kW 6 @ 23kW
EB-300-480 X	480	300	192.5	240.6	250	158.4	210.5	225	15 Amps	15	15 @ 20kW
EB-300-480 H	480	299	193.7	242.1	250	166.0	207.5	225	15 Amps	13	13 @ 23kW
EB-060-600 (X,H)	600	60	57.7	72.2	80	-	-	-	15 Amps	5	5 @ 12kW
EB-072-600 (X,H)	600	72	69.3	86.6	90	-	-	-	15 Amps	6	6 @ 12kW
EB-084-600 (X,H)	600	84	80.8	101.0	110	-	-	-	15 Amps	7	7 @ 12kW
EB-096-600 (X,H)	600	96	92.4	115.5	125	-	-	-	15 Amps	8	8 @ 12kW
EB-108-600 (X,H)	600	108	57.7	72.2	80	46.2	57.7	60	15 Amps	9	9 @ 12kW
EB-120-600 (X,H)	600	120	57.7	72.2	80	57.7	72.2	80	15 Amps	10	10 @ 12kW
EB-132-600 (X,H)	600	132	69.3	86.6	90	57.7	72.2	80	15 Amps	11	11 @ 12kW
EB-144-600 (X,H)	600	144	69.3	86.6	90	69.3	86.6	90	15 Amps	12	12 @ 12kW
EB-160-600 (X,H)	600	160	154.0	192.5	200	-	-	-	15 Amps	8	8 @ 20kW
EB-180-600 (X,H)	600	180	96.2	120.3	125	77.0	96.2	100	15 Amps	9	9 @ 20kW
EB-200-600 (X,H)	600	200	96.2	120.3	125	96.2	120.3	125	15 Amps	10	10 @ 20kW
EB-220-600 (X,H)	600	220	115.5	144.3	150	96.2	120.3	125	15 Amps	11	11 @ 20kW
EB-240-600 (X,H)	600	240	115.5	144.3	150	115.5	144.3	150	15 Amps	12	12 @ 20kW
EB-260-600 (X,H)	600	260	134.7	168.4	175	115.5	144.3	150	15 Amps	13	13 @ 20kW
EB-280-600 X	600	280	134.7	168.4	175	134.7	168.4	175	15 Amps	14	14 @ 20kW
EB-280-600 H	600	278	134.7	168.4	175	132.8	166.0	175	15 Amps	13	7 @ 20kW 6 @ 23kW
EB-300-600 X	600	300	154.0	192.5	200	134.7	168.4	175	15 Amps	15	15 @ 20kW
EB-300-600 H	600	299	154.9	193.7	200	132.8	166.0	175	15 Amps	13	13 @ 23kW

Note: "H" denotes optional 125psi model

Clearances

	Minimum Clearance From Combustible Surfaces		Suggested Minimum Service Clearance	
	inches	cm	inches	cm
Back	0	0	0	0
Left	12	30	24	61
Right	8	20	12	30
Front	24	61	36	91
Top	26	66	26	66

Dimensional Data



Laars Heating Systems Company reserves the right to change specifications, components, features, or to discontinue products without notice.