

Date: _____ Engineer: _____
 Job: _____ Contractor: _____
 Model #: _____ End User: _____
 Representative: _____ Prepared by: _____



The **Ampttron** is a commercial electric boiler for hydronic heating at working pressures up to 160PSI.



- ANSI/UL 834 - 2018 certified
- ASME Section IV "H" Stamp
- Canadian Registration Number (CRN)
- CSD-1 Compliant
- 0 CO₂ emissions



Standard Features

- Six capacities of 90KW-540KW across three footprints
- 240V, 480V, 600V 3PH 60HZ power supply options
- ASME Section IV "H" stamped carbon steel heat exchangers (250°F max)
- 160PSI maximum working pressure
- 2" Fiberglass insulation
- Vertically installed replaceable Incoloy 800 heating elements – top access
- 75 WSI for better longevity of heating elements
- Contactors rated @ 10,000,000 cycles
- 200,000 AIC-rated fuses
- Novel baffle design to increase water velocity for element longevity
- Modbus RTU standard, Protocol Translator available for other communication needs
- Side water connections
- Separate control panel on the top
- 100 KA SCCR compliance
- Safety relief valve
- Forklift skid base
- Status light
- CSD-1
- Low water cutoff w/manual reset

Optional Features

- PLC + HMI + Power Monitor*
- BMS gateway – BACnet MSTP/IP, LonWorks or Metasys N2
- Isolation Valve kit (Consult Factory)
- SCR control option (installed in factory)
 - Infinite output modulations with SCR
 - Increase contactor life expectancy (less contactor cycling)
 - Better setpoint tracking
 - Decreases power surge
 - Allows better tracking at lower flow rates leading to higher overall efficiencies
- Non-standard Safety Relief Valves (lower pressure)
- Drain Valve Kit
- Flow Switch

Date: _____ Engineer: _____
 Job: _____ Contractor: _____
 Model #: _____ End User: _____
 Representative: _____ Prepared by: _____



- Air vent
- Built in fused or non-fused disconnect kits (90KW – 360KW models, 100 KA SCCR with fused disconnects)
- Ship loose fused disconnect kits (450KW & 360KW models)
- Integrated fused and non-fused disconnect (factory installed)
- Safety door interlock
- SCCR protection up to 100 KA RMS – Factory installed manual disconnect and integrated door interlock – Models 360KW and under

***PLC + HMI + Power Monitor**

- 7" Color Touch-Screen HMI
- Automated SCR control
- PLC-integrated Voltmeter and Ammeter
- PLC-Integrated power metering with totalizer
- Integrated load imbalance monitoring and alarm
- Advanced PID loop control
- Individual step monitoring and automatic rotation
- Adjustable power-limiting schedule
- Weekly setpoint scheduling with outdoor sensor reset
- Native Bacnet, TCP/IP or MSTP
- Adjustable fixed speed pump control with timers
- Adjustable variable speed pump control with timers
- Isolation valve control with adjustable timers
- HMI integrated Alarm
- Load imbalance monitoring and alarm

Electrical Ratings							
Model	Input	Voltage	Amps	MCA	MOP	Element Details	Step Details
AMEH-90	90KW	480VAC 60Hz, 3 Phase	111	138	150	6 @ 15KW	1 @ 90KW
	90KW	600VAC 60Hz, 3 Phase	87	108	125	6 @ 15KW	1 @ 90KW
AMEH-180	180KW	480VAC 60Hz, 3 Phase	219	273	300	12 @ 15KW	2 @ 90KW
	180KW	600VAC 60Hz, 3 Phase	176	220	225	12 @ 15KW	2 @ 90KW
AMEH-270	270KW	480VAC 60Hz, 3 Phase	327	408	450	18 @ 15KW	3 @ 90KW
	270KW	600VAC 60Hz, 3 Phase	262	327	350	18 @ 15KW	3 @ 90KW
AMEH-360	360KW	480VAC 60Hz, 3 Phase	437	546	600	24 @ 15KW	4 @ 90KW
	360KW	600VAC 60Hz, 3 Phase	350	437	450	24 @ 15KW	4 @ 90KW
AMEH-450	450KW	480VAC 60Hz, 3 Phase	546	682	700	30 @ 15KW	5 @ 90KW
	450KW	600VAC 60Hz, 3 Phase	437	546	600	30 @ 15KW	5 @ 90KW
AMEH-540	540KW	480VAC 60Hz, 3 Phase	653	816	900	36 @ 15KW	6 @ 90KW
	540KW	600VAC 60Hz, 3 Phase	523	653	700	36 @ 15KW	6 @ 90KW

Electrical Ratings (240V Models)							
Model	Input	Voltage	Amps	MCA	MOP	Element Details	Step Details
AMEH-90	90KW	240VAC 60Hz, 3 Phase	219	273	300	12 @ 7.5KW	2 @ 45
AMEH-180	180KW	240VAC 60Hz, 3 Phase	437	546	600	24 @ 7.5KW	4 @ 45
AMEH-270	270KW	240VAC 60Hz, 3 Phase	653	816	900	36 @ 7.5KW	6 @ 45

Date: _____ Engineer: _____
 Job: _____ Contractor: _____
 Model #: _____ End User: _____
 Representative: _____ Prepared by: _____



Water Content	
Model	Volume (Gallon)
AMEH-90	53
AMEH-180	53
AMEH-180 (240V)	107
AMEH-270	107
AMEH-360	107
AMEH-270 (240V)	153
AMEH-450	153
AMEH-540	153

Minimum Flow Rate at Maximum Input	
Model	Flow (GPM)
AMEH-90	7.60
AMEH-180	15.21
AMEH-270	22.82
AMEH-360	30.42
AMEH-450	38.02
AMEH-540	45.63

Based on maximum temperature rise of 80°F

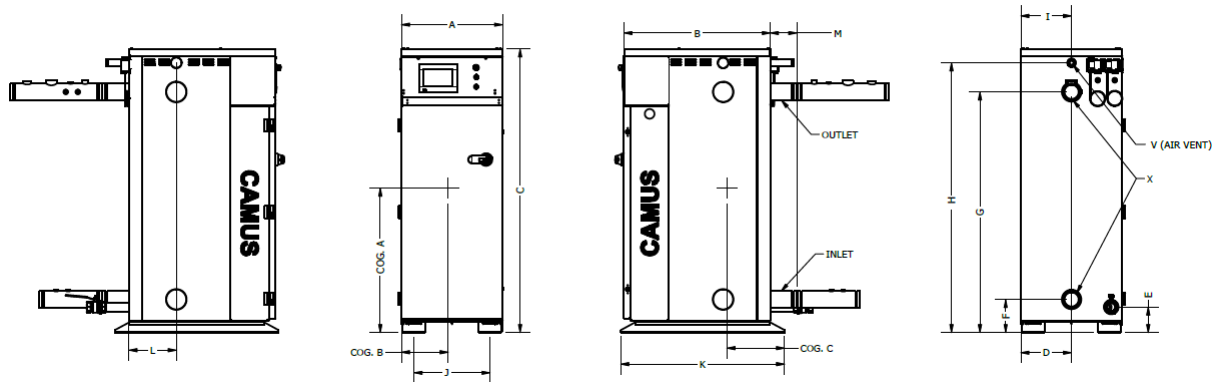
Absolute Minimum Flow Rate	
Model	Flow (GPM)
AMEH-90	6
AMEH-180	12
AMEH-270	18
AMEH-360	24
AMEH-450	30
AMEH-540	36

Recovery Capacity			
Model	100°F (GPH)	80°F (GPH)	60°F (GPH)
AMEH-90	364.7331	455.9164	607.8885
AMEH-180	729.4662	911.8327	1215.777
AMEH-270	1094.199	1367.749	1823.665
AMEH-360	1458.932	1823.665	2431.554
AMEH-450	1823.665	2279.582	3039.442
AMEH-540	2188.399	2735.498	3647.331

Date: _____ Engineer: _____
 Job: _____ Contractor: _____
 Model #: _____ End User: _____
 Representative: _____ Prepared by: _____



Dimensional Data



Model	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	J (in.)
AMEH-90 & 180	21	30 3/8	58 3/4	10 1/2	5 1/4	6 7/8	49 7/8	55 7/8	10 1/2	15 3/4
AMEH-180 (240V) & 270 & 360	28	39 3/8	63	14	6	8 1/4	50 1/2	57 1/4	14	23
AMEH- 270 (240V) & 450 & 540	33	43 1/4	65 1/2	16 1/2	5 7/8	8 7/8	50 7/8	58 5/8	16 1/2	27 1/4

**COG-Center of Gravity

Model	K (in.)	L (in.)	COG** (A)	COG** (B)	COG** (C)	M (in.)	V (in.) Ø AIR VENT	X (in.) Ø INLET/ OUTLET	Weight (lbmass)
AMEH-90 & 180	34	9 3/4	29 7/8	9 3/4	12	5 1/2	1	3	682
AMEH-180 (240V) & 270 & 360	44	14	30 1/2	13 5/8	17 5/8	5 1/4	1	3	1125
AMEH- 270 (240V) & 450 & 540	47 1/2	17	30 7/8	16	19 1/4	5 1/8	1	4	1534

*Minimum Clearance to Combustibles				
Model	Top (in.)	Back (in.)	Sides (in.)	Front (in.)
AMEH-90 & 180	12	12	15	36
AMEH-180 (240V) & 270 & 360	18	18	18	36
AMEH- 270 (240V) & 450 & 540	18	18	18	36

*Service clearances are different than clearances to combustibles. Refer to IOM.