



LAARS® U.H.E.®

Ultra-High Efficiency
Commercial Water Heaters



Ultra-High Durability
Ultra-High Recovery
Ultra-High Efficiency
- Up to 99.1% Efficient

ULTRA-HIGH EFFICIENCY WATER HEATERS

The Reliable Solution to Your Commercial Hot Water Needs



The Laars U.H.E. commercial gas water heater outperforms the competition when it comes to installation flexibility, quiet operation, and ultra-high performance. With a remarkable thermal efficiency rating as high as 99.1%, and some of the highest hot water recovery rates in the industry, the U.H.E. line of commercial water heaters is the smart choice for your commercial hot water needs.

All models can vent vertically, horizontally and are also approved for unbalanced, direct-vent closed combustion applications with up to 170 equivalent feet of piping. Laars U.H.E. also operates quieter than other water heaters in its class, and building owners, managers, and occupants will appreciate the difference.

Durability is designed into all U.H.E. commercial water heaters via the Laars Heating Systems patented stainless steel Sediment Reduction System, a continuous self-cleaning system that is proven to extend the life of the water heater. With its superb efficiency, unprecedented installation flexibility, durability and quiet operation, Laars U.H.E. gives building owners, engineers, and plumbing and heating professionals a commercial water heater that delivers large amounts of hot water, saves energy and is installable in some of the most difficult locations.

Laars U.H.E. commercial water heaters are truly Built to be the Best™.

LAARS® U.H.E.® ULTRA-HIGH EFFICIENCY WATER HEATERS

U.H.E. MODEL FEATURES:

Thermal Efficiency up to 99.1%—Fully condensing design.

Submerged Combustion Chamber—Submerging the combustion chamber in the center of the water storage tank minimizes radiant heat loss and improves efficiency.

Zero Inch Clearance—The U.H.E. Series jacket is cool to the touch and is approved for zero inch clearance to combustibles for unsurpassed installation flexibility.

Enamel Glass—An exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula is fused to the steel surface by firing at a temperature of over 1600°F (871°C).

Protective Magnesium Anode Rods—Each U.H.E. Series model has multiple anodes to provide added protection against corrosion for long trouble-free service.

Factory Installed Sediment Reduction System—Cold water inlet sediment reducing device helps prevent sediment build up in tank.

Water Connections—Factory-installed true dielectric fittings extend water heater life and simplify water line connections.

Hand Hole Cleanout—Allows inspection of tank interior and facilitates the removal of sediment deposits.

Non-CFC Foam Insulation—Covers the sides and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.

Direct Spark Ignition—For improved operational dependability and durability.

Premix Power Burner—A self compensating negative regulation system automatically increases or decreases fuel flow when a change in combustion air is detected. This provides the range for optimum combustion and efficiency (automatic high altitude compatibility).

Three Year Limited Warranty on Steel Tank—Heavy gauge steel automatically formed, rolled and welded to assure a continuous seam for glass lining.

One Year Limited Warranty on Parts



Three Pass Heat Exchanger System—The three pass Heat Exchanger system keeps the hot combustion gases moving at a high velocity. The combination of high turbulence and velocity causes an enormous rate of heat transfer into the water.

ADVANCED CONTROLS

Intelligent design combines temperature control, diagnostic codes, and system ignition functions into a single control with LCD display.



Operation Mode

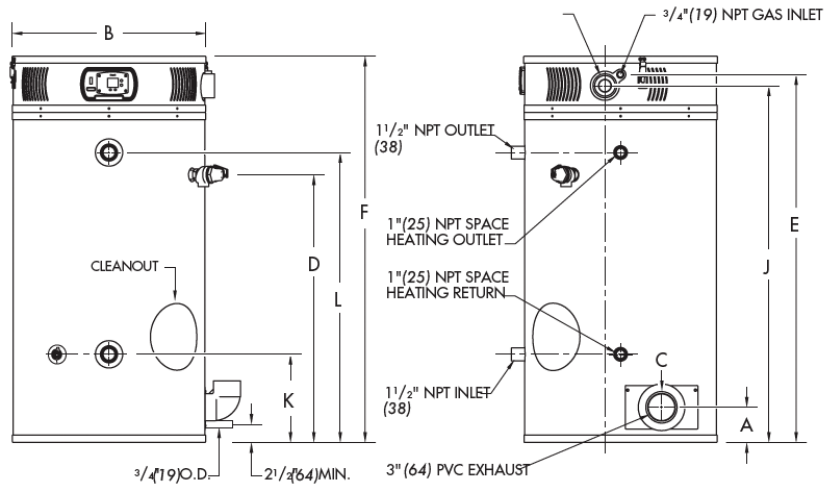
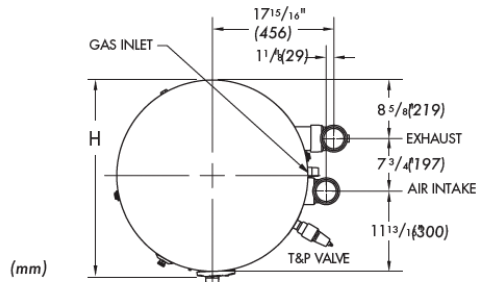
Digitally displayed operation modes have the capability of adjusting temperature settings up to 180°F (82°C).

Service Mode

Eight different digitally displayed service screens can be easily cycled through by pressing the select button. There is the capability of adjusting the temperature setting up to 180°F (82°C), adjusting the degree setting (°F to °C), locking operation mode maximum temperature setting, and displaying temperature sensor reading, or flame current or diagnostic codes.

Model Number	GPH Recovery at Degree Rise*												LPH Recovery at Degree Rise*											
	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F	17°C	22°C	28°C	33°C	39°C	44°C	50°C	56°C	61°C	67°C	72°C	78°C
LUHE60T125E3NA	485	364	291	242	208	182	162	145	132	121	112	104	1836	1378	1102	916	787	689	613	549	500	458	424	394
LUHE60T150E3NA	564	423	338	282	242	211	188	169	154	141	130	121	2135	1601	1279	1067	916	799	712	640	583	534	492	458
LUHE60T199E3NA	740	558	444	370	317	277	247	223	202	185	171	159	2801	2112	1681	1401	1200	1049	935	844	765	700	647	602
LUHE100T150E3NA	601	450	360	300	257	225	200	180	164	150	139	129	2275	1703	1363	1136	973	852	757	681	621	568	526	488
LUHE100T199E3NA	792	597	475	396	339	297	264	239	216	198	183	170	2998	2260	1798	1499	1283	1124	999	905	818	750	693	644
LUHE100T250E3NA	980	735	588	490	420	367	327	294	267	245	226	210	3710	2782	2226	1855	1590	1389	1238	1113	1011	927	856	795
LUHE100T300E3NA	1115	836	669	558	478	418	372	335	304	279	257	239	4221	3165	2532	2112	1809	1582	1408	1268	1151	1056	973	905

TECHNICAL AND DIMENSIONAL DATA



Model Number	Nominal Gal. Capacity				Therm. Eff.	A Floor to Exhaust Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	H Depth	J Floor to Air Intake Conn.	K Floor to Cold Water Conn.	L Floor to Hot Water Conn.	Water Conn. NPT	Gas Conn. Size	Relief Valve Open	Approx. Shipping Weight
	U.S. Gal.	Imp. Gal.	BTU/Hr. Input	LP BTU/Hr. Input		%	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
LUHE60T125E3NA	60	50	125,000	125,000	96.0	5	28¼	3	39⅛	53¼	56¾	28¼	51⅝	12⅓⅛	41⅓⅛	1½	¾	¾	570
LUHE60T150E3NA	60	50	150,000	150,000	93.0	5	28¼	3	39⅛	53¼	56¾	28¼	51⅝	12⅓⅛	41⅓⅛	1½	¾	¾	570
LUHE60T199E3NA	60	50	199,999	199,999	92.0	5	28¼	3	39⅛	53¼	56¾	28¼	51⅝	12⅓⅛	41⅓⅛	1½	¾	¾	570
LUHE100T150E3NA	100	83	150,000	150,000	99.1	5	28¼	3	60⅞	74¼	85¾	28¼	72⅝	12⅓⅛	62⅓⅛	1½	¾	¾	900
LUHE100T199E3NA	100	83	199,999	199,999	98.5	5	28¼	3	60⅞	74¼	85¾	28¼	72⅝	12⅓⅛	62⅓⅛	1½	¾	¾	900
LUHE100T250E3NA	100	83	250,000	250,000	97.0	5	28¼	3	60⅞	74¼	85¾	28¼	72⅝	12⅓⅛	62⅓⅛	1½	¾	1	900
LUHE100T300E3NA	100	83	300,000	300,000	92.0	5	28¼	3	60⅞	74¼	85¾	28¼	72⅝	12⅓⅛	62⅓⅛	1½	¾	1	900

Model Number	Nominal Liter Capacity			Therm. Eff.	A Floor to Exhaust Conn.	B Jacket Dia.	C Vent Size	D Floor to T&P Conn.	E Floor to Gas Conn.	F Floor to Top of Heater	H Depth	J Floor to Air Intake Conn.	K Floor to Cold Water Conn.	L Floor to Hot Water Conn.	Water Conn. NPT	Gas Conn. Size	Relief Valve Open	Approx. Shipping Weight
		kW/Hr. Input	LP kW/Hr. Input		%	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
LUHE60T125E3NA	227	36.6	36.6	96.0	127	718	76	992	1353	1432	718	1303	325	1065	38	19	19	259
LUHE60T150E3NA	227	43.9	43.9	93.0	127	718	76	992	1353	1432	718	1303	325	1065	38	19	19	259
LUHE60T199E3NA	227	58.6	58.6	92.0	127	718	76	992	1353	1432	718	1303	325	1065	38	19	19	259
LUHE100T150E3NA	379	43.9	43.9	99.1	127	718	76	1526	1886	2169	718	1837	325	1599	38	19	19	408
LUHE100T199E3NA	379	58.6	58.6	98.5	127	718	76	1526	1886	2169	718	1837	325	1599	38	19	19	408
LUHE100T250E3NA	379	73.2	73.2	97.0	127	718	76	1526	1886	2169	718	1837	325	1599	38	19	25	408
LUHE100T300E3NA	379	87.9	87.9	92.0	127	718	76	1526	1886	2169	718	1837	325	1599	38	19	25	408

Maximum Vent Runs (Feet)

Model Number	3" Dia	4" Dia	Model Number	3" Dia	4" Dia
LUHE60T125	120	170	LUHE100T150	120	170
LUHE60T150	100	150	LUHE100T199	100	150
LUHE60T199	80	130	LUHE100T250	80	130
			LUHE100T300	60	110

Note: The weight is the same for both ASME and Non-ASME models.

All models comply with the latest ultra-low NOx requirements of 14 ng/J or less.

14.0" (356mm.) w.c. maximum static, 4.5" (114mm.) w.c. minimum running (recommend 7.0" (178mm.) w.c. minimum running)

For propane gas models change suffix "N" to "X" and remove "E" from the model number.

Example: LUHE100T150E3X

(A) ASME - All models are available with ASME construction. To order ASME construction add the (A) to the end of the model number.

Example: LUHE60T125E3NA

