

LAARS®-Stor Commercial Energy Saver Single-Wall Indirect Water Heater



Photo is of
SW-80C-5

The LAARS®-Stor Series® Single-Wall Models feature:

- **Heat Exchanger**—Single-Wall 1½" O.D. glass coated (Vitrarglas®) carbon steel coil. The coil has a heat transfer area of 27.2 sq. ft. and a stored water volume of 5.0 Gal. Maximum supply temperature from the boiler must not exceed 240° F.
- **Sediment Reduction System**—Cold water inlet sediment reducing device helps prevent sediment build up in tank. Increases first hour delivery of hot water while minimizing temperature build up in tank.
- **Glass Coating**—LAARS® tanks are lined with 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).
- **Immersed Adjustable Honeywell Aquastat**—Fast acting immersion aquastat for automatic temperature control.
- **Supply and Return Connections**—1" NPT female connections are located on the front for both the boiler collector supply and return.
- **2" Non-CFC Foam Insulation**—Covers the side and top of tank, reducing the amount of heat loss. This results in less energy consumption, improved operation efficiencies and jacket rigidity.
- **Potable Water Connections**—1" NPT factory installed true dielectric fittings extend water heater life and eases installation.
- **Three Protective Aluminum Anode Rods**—Provide added protection against corrosion for long trouble-free service.
- **T&P Relief Valve**—Installed.
- **Low Restriction Brass Drain Valve**—Tamper proof design.
- **AHRI Certified**—These water heaters are rated by the Air-Conditioning, Heating, and Refrigeration Institute to provide accurate performance data within the standards of the certification. This certification provides a recognized standard for proper comparison of hydronic appliances.



5-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.

For products installed in USA, Canada and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 6,442,178; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012.

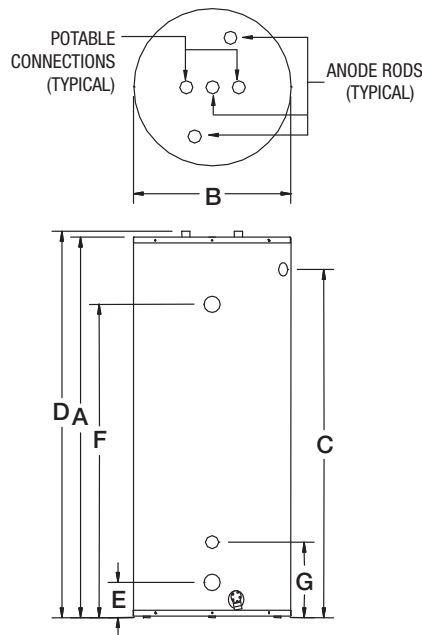
Commercial LAARS®-Stor Indirect Water Heater

Single Wall Models

Meet or exceed ASHRAE 90.1b (current standard)

Model Number	Capacity		A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Water Conn.	E Floor to Exchanger Outlet	F Floor to Exchanger Inlet	G Floor to Aquastat	Approx. Shipping Weight
	U. S. Gal.	Imp. Gal.	in.	in.	in.	in.	in.	in.	in.	lbs.
LS-SW65C5	58	48	59 ¹ / ₄	22	53 ¹ / ₈	60	5 ³ / ₈	47 ³ / ₄	11 ¹ / ₂	273
LS-SW80C-5	73	61	59	24	52 ⁷ / ₈	59 ³ / ₄	5 ³ / ₈	47 ³ / ₄	11 ¹ / ₂	300
LS-SW120C5	114	95	62 ¹ / ₂	28 ¹ / ₄	55 ³ / ₄	63 ¹ / ₄	6 ³ / ₈	48 ³ / ₄	11 ¹ / ₂	422

Model Number	Capacity		A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Water Conn.	E Floor to Exchanger Outlet	F Floor to Exchanger Inlet	G Floor to Aquastat	Approx. Shipping Weight
	Liters		mm.	mm.	mm.	mm.	mm.	mm.	mm.	kg.
LS-SW65C5	220		1505	559	1349	1524	137	1213	292	124
LS-SW80C-5	276		1499	610	1343	1518	137	1213	292	136
LS-SW120C5	431		1588	718	1416	1607	162	1238	292	191



AHRI Certified Water Heater Ratings

Model Number	First Hour Delivery @ 135°F (Gal.)	Continuous Draw Rating @ 135°F (Gal./Hr.)	Standby Heat Loss Rating (°F/Hr.)	Minimum Output Rate of Heat Source (BTU/Hr.)	Minimum Heat Source Flow Rate (Gal./Min.)
LS-SW65C5	405	370	0.7	245,000	14.0
LS-SW80C-5	415	370	0.6	245,000	14.0
LS-SW120C5	445	370	0.4	245,000	14.0

These certified ratings were obtained with a heat source output rate and flow rate as specified and a 180°F boiler water supply temperature. Other results will be obtained under different conditions.

DOE Water Heater Performance

Model Number	Maximum First Hour Rating (Gal.) @		Continuous Draw Rating (Gal./Min.) @		Approximate Boiler Output Needed for Rating (BTU/Hr.)
	140°F	115°F	140°F	115°F	
LS-SW65C5	534	820	8.0	12.8	420,000
LS-SW80C-5	546	834	8.0	12.8	420,000
LS-SW120C5	583	871	8.0	12.8	420,000

Based on 200°F boiler water temperature and 50°F potable water inlet.

Heat Exchanger Head Loss

GPM	5	8	10	12	14
Ft. of Hd. Loss	0.64	1.63	2.55	3.67	5.00

General

All units are certified at 300 PSI (2068 kPa) test pressure and 150 PSI (1034 kPa) working pressure. All potable water connections are 1" NPT (25.4mm) on 8" (203mm) centers.

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

Suitable for Water (Potable) Heating and Space Heating.

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into the potable side of this system. The potable side may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance.