

# Cast Iron Oil-Fired Water Boilers

*Quality Engineered for Efficiency and Dependability*

## *OSFH & OSW Series*



# **Olsen**

**Heating & Cooling Products**

A Division of ECR International Ltd.

An ISO 9001 Certified Company



## OSFH & OSW Series

*Oil-Fired, Hot Water Boilers*

# Optimal Efficiency & Operation for Oil Heated Homes

The OSFH natural draft chimney vent & OSW side wall vent oil-fired water boilers deliver high efficiency, reliability and ease of maintenance for homes requiring hot water heat fueled by oil. A smart design combined with quality components result in lower operating costs making the OSFH & OSW Series an ideal replacement or new construction choice.

### High Efficiency Ratings (86%)

With efficiencies up to 86% AFUE, the OSFH & OSW Series provides increased energy savings resulting in lower fuel bills. The boiler's wet-base design helps overall efficiency by enclosing the combustion chamber with water on all five sides therefore maximizing heat transfer. With the potential cost savings this represents, the OSFH & OSW Series will pay for itself in a few short years.

### Cast-Iron Sections and Push Nipples

The OSFH & OSW Series utilizes cast-iron construction because of its durability and efficient heat transfer capabilities. Cast iron sections and push nipples are utilized to construct the heat exchanger. Using only the highest quality cast-iron and heat transfer designs, the OSFH & OSW Series will provide many years of efficient and trouble-free operation.



### Easy Access & Maintenance

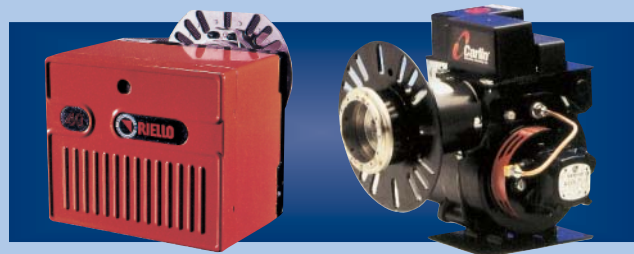
A sturdy cast-iron swing door allows for quick and easy inspection of the oil burner and combustion area while extra large flue ways allow for easy cleaning and set-ups. These flue way openings are easily



accessed through an integrated two-part draft hood. In addition, a recessed target wall increases the chamber size and is protected from accidental flue brush damage during normal maintenance. All components are easy to reach, greatly reducing the time spent on regular maintenance and service calls.

### High-Performance Burner Versatility

The OSFH is designed to accommodate various oil burners. Choose manufacturer approved burners from Beckett, Carlin or Riello. The OSW Series is available with the Beckett AFII burner.



### Tankless Water Heater Option

An optional tankless hot water coil is offered with the OSFH & OSW Series. It features off-set tapings to speed installation and service.

Used with a flow control and tempering valve, this tankless heater is an ideal method of providing domestic hot water for most installations.



## Factory Pre-Wired & Tested

Each OSFH & OSW Series Boiler is shipped with controls pre-wired and is subjected to a series of rigorous quality assurance tests to provide quick and easy setup in the field.

### OSFH & OSW SERIES BOILER DETAILS

- 1 Cast-Iron Heat Exchanger
- 2 Quality Burner Options:  
Beckett (standard), Carlin or Riello.  
Features: solenoid oil valve,  
interrupted duty ignition,  
protector relay & primary control.
- 3 Aquastat Control
- 4 Cast-Iron Swing Door
- 5 Optional Tankless Water Heater With  
Raised Flange
- 6 Pre-Painted Steel



### OSFH & OSW Series Key Features

- Efficiencies up to 86% AFUE
- Cast-Iron Heat Exchanger and Swing Door
- Recessed Target Wall
- Large Flueway Opening
- Special mounting plate for an enlarged chamber area
- Cast Iron Sections and water-tight Push Nipples
- Tankless heater options
- Natural draft chimney vent (Starfire III Series)

### OSW Series Additional Key Features

- Flexible side wall venting
- 10 feet of double wall insulated stainless steel flexible vent pipe included
- Air tight silicone seal between sections in addition to braided fiberglass rope seal
- 4-inch diameter flue outlet



*Flexible Vent Pipe*



*Concentric Vent*



*Direct Vent Illustration*

# OSFH-W • WT & OSW-W • WT

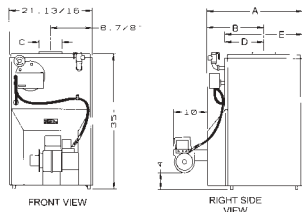
## RATINGS AND DATA

BOILER MODEL NO. <sup>1</sup>	I = B = R OIL BURNER INPUT <sup>2</sup> G.P.H. MBH		D.O.E. HEATING CAPACITY MBH	I = B = R NET RATINGS <sup>3</sup> WATER MBH	NOZZLE FURNISHED 140 PSI <sup>4</sup>	A.F.U.E. RATING
OSFH-365W	.65	91	79	69	.60 80°B	86.0
OSFH-3100W	1.00	140	117	102	.85 80°B	81.0
OSFH-4100W	1.00	140	120	104	.85 80°B	86.0
OSFH-3125W <sup>5</sup>	1.25	175	144	125	1.10 60°B	80.0
OSFH-4125W	1.25	175	149	130	1.10 80°B	82.5
OSFH-5125W	1.25	175	151	131	1.10 80°B	86.0
OSFH-4150W	1.50	210	175	152	1.25 80°B	81.0
OSFH-6150W	1.50	210	181	157	1.25 80°B	86.0
OSFH-5175W	1.75	245	206	179	1.50 80°B	81.5
OSFH-5200W	2.00	280	231	201	1.75 80°B	81.0
OSFH-6225W	2.25	315	251	218	2.00 60°B	—
OSFH-7275W	2.75	385	307	267	2.25 60°B	—
OSW3W <sup>5</sup>	.65	91	79	69	.60 45°B	86.0
OSW4W <sup>5</sup>	1.00	140	121	105	.85 45°B	86.0
OSW5W <sup>5</sup>	1.25	175	150	130	1.10 45°B	86.0

## OSW VENTING SPECIFICATIONS

MODEL NO.	MIN. VENT RUN*	MAX VENT RUN*	FLUE SIZE DIA.
OSW3	2'	10'	4"
OSW4	2'	10'	4"
OSW5	2'	10'	4"

\*Units include termination kit and 10' vent pipe.



### NOTES:

1. Add suffix "T" to denote boiler with tankless heater.
2. I = B = R burner capacity is based on an oil heating value of 140,000 Btu/gal. and with 13% CO<sub>2</sub>.
3. Net ratings based on 170° temperature in radiators and include 15% allowance for normal piping and pick-up load. Consult manufacturer for unusual piping and pick-up requirements.
4. Nozzle listed is for use with Beckett burner at 140 psi. When alternate burner is used, consult burner manufacturer's recommendations.
5. AFII burner used.
6. Gallons of water per minute heated from 40° to 140°F with 200°F boiler water temperature.

\*\*For equivalent square feet of radiation, divide I=B=R output by 150.

**STANDARD EQUIPMENT SFH & SW:** Cast Iron Boiler, Flush Jacket, Swing-Out Burner Door, Clean Cut AFG Beckett Oil Burner, Target Wall/Liner, Circulator—1 1/2", ASME Relief Valve, Thermostat Gauge, Drain Cock, Wiring Harness, Plastic Cover, Supply Tapping (Qty. 1) 2", Return Tapping (Qty. 1)—1 1/2", High Limit and Circulator Control, Primary Control/Burner Relay. For Tankless Heater Units: Add Tankless Hot Water Coil and Triple Aquastat Relay. **Additional Standard Equipment SW:** Clean Cut AFG Beckett Oil Burner, Pre & Post Purge Control, Oil-Line Solenoid, Vent Termination Kit (includes 10' Stainless Steel Double Wall Insulated Flex Pipe, Concentric Termination, Vacuum Relief Valve). Note: Air tight silicone seal between sections in addition to braided fiberglass rope seal. For Tankless Heater Units: Add Tankless Heater and Substitute High/Low Limit Control.

Optional CSD-1 Control Available

(Specifications and dimensions are subject to change without notice.)

MEA# 182-86E

## DIMENSIONS

BOILER MODEL NO.	A LENGTH OF FLUSH JACKET	B FRONT OF CASING TO C/I OF FLUE OUTLET	C DIAMETER OF FLUE OUTLET	D FRONT OF JACKET TO FLUE	E LENGTH OF JACKET	F COIL TAPPING
OSFH-3	17 7/8"	11 1/4"	6"	6 11/16"	13"	1/2"
OSFH-4	21 1/2"	12 7/8"	6"	8 3/16"	16 7/8"	3/4"
OSFH-5	25 1/2"	14 1/4"	7"	9 13/16"	20 1/4"	3/4"
OSFH-6	29 1/4"	15 15/16"	8"	8 5/16"	23 7/8"	3/4"
OSFH-7	32 7/8"	17 15/16"	8"	8 5/16"	27 1/2"	3/4"
OSW3	17 7/8"	11 1/4"	4"	8 5/16"	13"	—
OSW4	21 1/2"	12 7/8"	4"	8 3/16"	16 7/8"	—
OSW5	25 1/2"	14 1/4"	4"	9 13/16"	20 1/4"	—

## TANKLESS WATER HEATER CAPACITIES

BOILER MODEL NO.	TANKLESS HEATER NO.	TANKLESS HEATER CAPACITY INTERMITTENT DRAW (G.P.M.) <sup>6</sup>	BOILER WATER CONTENT (GALS.)
OSFH-365	P3	Available On Request	10.5
OSFH-3100	P3	4.5	10.5
OSFH-4100	T4	3.25	13.5
OSFH-3125	P3	3.75	10.5
OSFH-4125	T4	4.5	13.5
OSFH-5125	T4	3.75	16.5
OSFH-4150	T4	4.5	13.5
OSFH-6150	T4	4.0	19.5
OSFH-5175	T4	4.25	16.5
OSFH-5200	T4	5.5	16.5
OSFH-6225	T4	5.75	19.5
OSFH-7275	T4	6.0	22.5
OSW3	P3	Available On Request	10.5
OSW4	T4	3.25	13.5
OSW5	T4	3.75	16.5

## YOUR ASSURANCE OF QUALITY

Olsen products are designed, tested, and assembled to ensure that you receive the very best in home heating comfort, and value. Each product meets or exceeds all recognized safety, performance and efficiency standards.

**For more information on Olsen heating products, contact your local Olsen distributor. Or call the Customer Service Department at 1-888-259-7253.**



Tested for 100 Lbs.  
ASME Working Pressure

# Olsen

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