



# Cast Iron Oil-Fired Water Boilers

CSFH III & CSW SERIES

*KEEPING FAMILIES*  *WARM SINCE 1936*



*Quality Engineered for Efficiency and Dependability*

# CSFH III & CSW SERIES

*Oil-Fired, Hot Water*

## Optimal Efficiency & Operation for Oil Heated Homes

The CSFH III & CSW Series oil-fired water boiler delivers 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 CSFH III & CSW Series an ideal replacement or new construction choice.

### High Efficiency Ratings (86%)

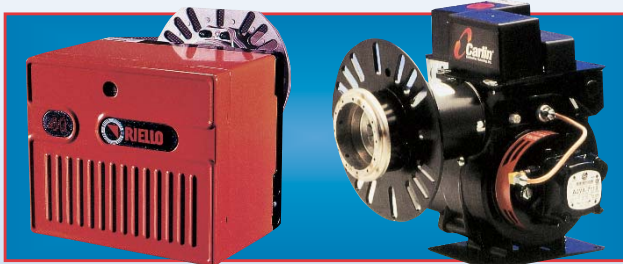
With efficiencies up to 86% AFUE, the CSFH III & CSW Series provides increased energy savings resulting in lower fuel bills. The boiler's wet-base design helps overall efficiency by enclosing the combustion chamber with water on all five sides therefore maximizing heat transfer. With the potential cost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

### Cast-Iron Sections and Push Nipples

The CSFH III & CSW 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 CSFH III & CSW Series will provide many years of efficient and trouble-free operation.

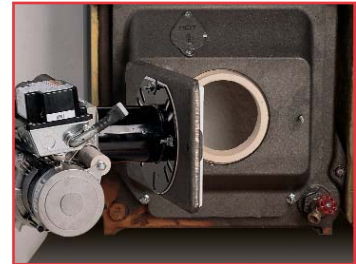
### High-Performance Burner Versatility

The CSFH III is designed to accommodate various oil burners. Choose manufacturer approved burners from Beckett, Carlin or Riello. The CSW Series is available with the Beckett AFII Burner.



### 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.

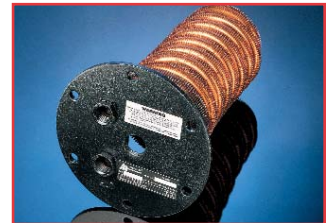


These flue way openings are easily accessed

through an integrated two-part flue collector. 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.

### Tankless Water Heater Option

An optional tankless hot water coil is offered with the CSFH III & CSW 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 CSFH III & CSW 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.



## CSFH III & CSW Series Key Product Features:

- Efficiencies up to 86% AFUE
- Cast-iron heat exchanger and swing door
- Recessed target wall
- Large flueway opening
- Special burner mounting plate increases combustion chamber
- Cast-iron sections and water-tight push nipples
- Tankless heater optional
- Wide range of sizes to fit residential and light commercial applications



## CSW Series Additional 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
- Concentric fresh air vent termination included



# CSFH III & CSW Series

## RATINGS AND DATA

BOILER MODEL NO. <sup>1</sup>	I = B = R OIL BURNER INPUT <sup>2</sup>		D.O.E. HEATING CAPACITY MBH	I = B = R NET RATINGS WATER MBH	NOZZLE FURNISHED 140 PSI	A.F.U.E. RATING
	G.P.H.	MBH				
*CSFH-365W	.65	91	79	68.7	.60 80°B	86.0
CSFH-3100W	1.00	140	117	102	.85 80°B	81.0
*CSFH-4100W	1.00	140	120	104	.85 80°B	86.0
CSFH-3125W†	1.25	175	144	125	1.10 60°B	80.0
CSFH-4125W	1.25	175	149	130	1.10 80°B	82.5
*CSFH-5125W	1.25	175	151	131	1.10 80°B	86.0
CSFH-4150W	1.50	210	175	152	1.25 80°B	81.0
*CSFH-6150W	1.50	210	181	157	1.25 80°B	86.0
CSFH-5175W	1.75	245	206	179	1.50 80°BH	81.5
CSFH-5200W	2.00	280	231	210	1.75 70°BH	81.0
CSFH-6225W	2.25	315	254	221	2.00 45°B	—
CSFH-7275W	2.75	385	307	267.1	2.25 60°B	—
*CSW3W†	.65	91	79	68.7	.60 45°B	86.0
*CSW4W†	1.00	140	120	104	.85 45°B	86.0
*CSW5W†	1.25	175	150	130	1.10 45°B	86.0

\* Indicates an ENERGY STAR® product. Note: Nozzles with an H designation are Hago brand, all others are Delevan. † Beckett AFII burner used.

## DIMENSIONS

BOILER MODEL NO.	A LENGTH OF FLUSH JACKET	B FRONT OF CASING TO C/L OF FLUE OUTLET	C DIAMETER OF FLUE OUTLET	D FRONT OF JACKET TO FLUE	E LENGTH OF JACKET	F COIL TAPPING
CSFH-3	17 7/8	11 1/4	6	6 11/16	13	1/2
CSFH-4	21 1/2	12 5/8	6	8 3/16	16 5/8	3/4
CSFH-5	25 1/8	14 1/4	7	9 13/16	20 1/4	3/4
CSFH-6	29 1/4	15 15/16	8	8 5/16	23 7/8	3/4
CSFH-7	32 3/8	17 15/16	8	8 5/16	27 1/2	3/4
CSW3	17 7/8	11 1/4	4	8 5/16	13	—
CSW4	21 1/2	12 5/8	4	8 3/16	16 5/8	—
CSW5	25 1/8	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>a</sup>	BOILER WATER CONTENT (GALS.)
CSFH-365	T3	Available On Request	10.5
CSFH-3100	T3	3.25	10.5
CSFH-4100	T4	3.25	13.5
CSFH-3125	T3	3.75	10.5
CSFH-4125	T4	3.75	13.5
CSFH-5125	T4	3.75	16.5
CSFH-4150	T4	4.0	13.5
CSFH-6150	T4	4.0	19.5
CSFH-5175	T4	4.25	16.5
CSFH-5200	T4	5.5	16.5
CSFH-6225	T4	5.75	19.5
CSFH-7275	T4	6.0	22.5
CSW3	P3	Available On Request	10.5
CSW4	T4	3.25	13.5
CSW5	T4	3.75	16.5

## YOUR ASSURANCE OF QUALITY

Columbia Boilers products are designed, tested, and assembled to ensure that you get the very best in home heating comfort and value. Each product must meet or exceed all recognized safety, performance and efficiency standards.



Tested for 75 Lbs. ASME Working Pressure



For more information on Columbia Boilers contact the following:

Columbia Heating Products

1409 Rome Road, PO Box 24202

Baltimore, MD 21227

Tel 410-242-5300 Fax 410-247-5026

Columbia Heating Supply

390 Old Reading Pike, PO Box 377

Pottstown, PA 19464

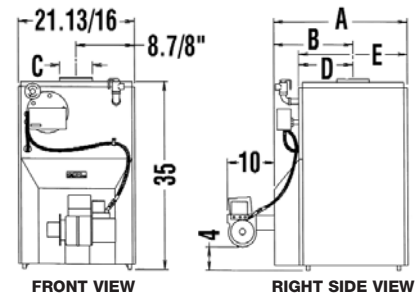
Tel 610-323-9200 Fax 610-323-8532

Web Site: www.columbiaheating.com

## CSW VENTING SPECIFICATIONS

MODEL NO.	MIN. VENT RUN*	MAX. VENT RUN*	FLUE SIZE DIA.
CSW3	2'	10'	4"
CSW4	2'	10'	4"
CSW5	2'	10'	4"

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



## NOTES:

- Add suffix "T" to denote boiler with tankless heater.
- I = B = R burner capacity is based on an oil heating value of 140,000 Btu/gal. and with 13% CO<sub>2</sub>.
- 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. All ratings subject to verification.
- For equivalent square feet of radiation, divide I=B=R output by 150.
- 120 volts, 15 amps and 60Hz are required to operate this unit.
- The MEA number for the SFH-W series is 182-86E.

## STANDARD EQUIPMENT CSFH III & CSW:

Cast Iron Boiler, Flush Jacket, Swing-Out Burner Door, Clean Cut AFG Beckett Oil Burner, Target Wall/Liner, Circulator-1", ASME Relief Valve, Thermiter Gauge, Drain Valve, Wiring Harness, Plastic Cover, Supply Tapping (Qty. 1) 2", Return Tapping (Qty. 1) 1 1/2", High Limit & Circulator Control, Primary Control, Burner Electrical Disconnect. For Tankless Heater Units: Add Tankless Hot Water Coil and Triple Aquastat Relay.

**Additional standard equipment CSW:** Clean Cut Beckett AFII Burner, Pre & Post Purge Control, Oil-Line Solenoid, Vent Termination Kit (includes 10' Stainless Steel Double Wall Insulated Flex Pipe, Concentric Termination, Air Proving Switch). Note: Air tight silicone seal between sections in addition to braided fiberglass rope seal. For Tankless Heater Units: Add Tankless Heater and Triple Aquastat Relay.

*Specifications and dimensions are subject to change without notice.*

M.E.A.# 182-86E

9/09