

Slant/Fin®

EUTECTIC SERIES

Superior cast-iron, three pass, oil-fired boilers

**DOE
SEPT. 2012
COMPLIANT**

- Up to 87% AFUE
- Resistant to thermal shock and corrosion
- Improves overall heating system efficiency
- Three pass Eutectic heat exchanger maximizes heat transfer
- Hinged, reversible swing out door and removable baffles for fast, easy service
- Available with Beckett, Carlin EZ 1 Pro, and Riello burners
- Lifetime limited warranty
- Direct Vent models available for installations without chimneys
- Extremely quiet

**Free
5 Year
Parts &
Labor
Warranty**
when registered
upon installation.

Look for our
Hydronic Explorer app
on itunes!
(Works with ipad or iphone)



EC-10 Series is jacketed and assembled. Less burner and circulator.



EC-20 Series is knocked down for field assembly. With burner, less circulator.

2 Series, 8 Models
Oil-fired 91,000 to 350,000 BTUH
Up to 87% Efficiency

Since 1949
Slant/Fin®
BOILERS & BASEBOARD
The Only Name You Want Heating Your Home

Special Eutectic Control Features

Features of Special 2012 Compliant Control

- Dynamic temperature reset
- Energy saving through circulator-off delay
- Priority override for domestic hot water
- Freeze resistance
- 2 in 1 self checking sensor w/ Low Water Cut-off
- Cycle history diagnostic information
- Reduce inventory through universal design
- Backlit LCD screen with programming touch pad
- Built-in power disconnect switch (optional)
- Cold-Start compatible

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SEPT. 2012
COMPLIANT**



Standard Control Panel



Includes on-off switch, indicator lights and tridicator. Behind panel is a 2012 compliant Honeywell L7248L.

The Eutectics special control contains a Department of Energy (DOE) 2012 compliant load-matching energy saving algorithm. This feature saves fuel by dynamically changing the temperature high operating limit to the minimum temperature necessary to meet the heating demand. The qualified service technician can adjust the algorithm to align comfort and energy savings.

Good looks and more.

The beauty of the Eutectic Series boilers goes beyond their good looks. With up to 87% AFUE, dramatic energy savings and extremely quiet performance, they can be installed almost anywhere.

The Outback Connection

All piping connections are made at the rear of the boilers to keep installation looking neat. Supply and return connections, drain valve and cast iron flue connector are located here. Flue outlet on the EC-10 series is only 15½" off the floor, low enough for the lowest of chimney breechings.



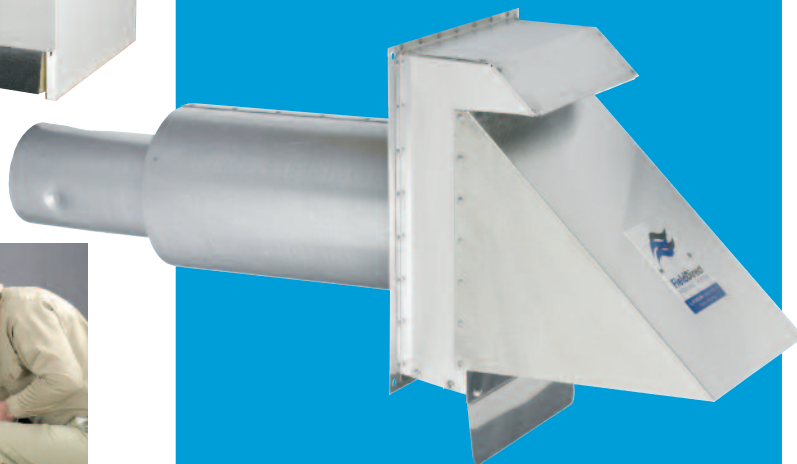
Annual cleaning is easy

Access to boiler flueways is from the front. Unbolt door and swing open for full access to heat exchanger. Wide open flueways for easy brushing of entire heat exchanger. No place for dirt to hide. Bolted shut door ensures positive seal. Clean-out door is reversible from left hinge to right. Easily accomplished by removing two screws and loosening two nuts to transfer hinge to opposite side without loosening door from boiler.



No chimney? No problem.

EC-10 series boilers (up to 161MBH) can be vented directly to outdoors with flexible vent piping. No need to build a chimney in new construction or re-line poor chimneys on replacement jobs. Good air in, bad air out.



Concentric vent terminal takes combustion air in through outer ring, gets heated slightly by the exhaust air in the inner ring and insulates the exhaust from building construction. This ingenious device means there is only one opening through the wall. For direct vent applications specify "direct vent kit and burner".

3 PASS DESIGN

The Three pass design is what makes the boiler extremely quiet and efficient. Popular in large commercial boilers, this design maximizes heat transfer, increases efficiency due to increased surface area that the flue gasses come in contact with and keeps it there longer. This results in low stack temperatures indicating high efficiency. There is at least 6 lineal feet and at least 11 square feet of surface area to ensure generous heat transfer. A.F.U.E. is 87%. The extra room in the boiler passageways provides for thermal expansion of the flue gasses making this boiler extremely quiet.

CONTROL PANEL

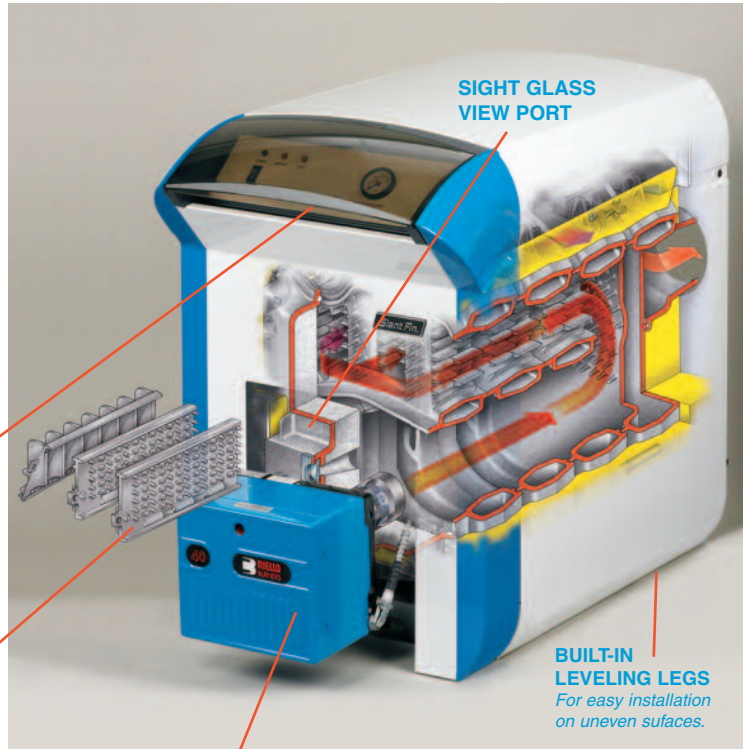
Includes on-off switch, indicator lights and tridicator. Behind panel is a 2012 compliant Honeywell L7248L

BAFFLE PLATES

Removable for easy cleaning of boiler sections, baffle plates help turbulate flue gasses ensuring homogenized flue gas temperatures on boiler heat exchanger walls maximizing heat transfer into boiler water.

Eutectic EC-10 Features

Combines world class design and workmanship with unequalled Eutectic cast iron performance.



COMBUSTION CHAMBER

Direct heat transfer to Eutectic iron without refractory chambers or target wall. The 2000 degree boiler flame heats boiler walls quickly, transfers energy to boiler water unimpeded by insulation. Tightly sealed chamber and sections allows positive overfire pressure, further ensuring maximum heat transfer. Minimal draft loss through boiler makes venting through chimney easy.

WATER CHANNELS

When boiler is operating at low water temperatures, water condensation could form on the heat exchanger. These specially integrated channels direct water flow to combustion chamber where it is burned off. The formation of condensation is allowed to occur periodically when the outdoor reset control operates boiler at low temperatures.

OIL BURNERS

Riello, Carlin EZ Pro and Beckett models provide clean, reliable, efficient combustion under all operating conditions. The burner for each Eutectic boiler is optimized and custom manufactured to Slant/Fin specifications. Burners provide high static pressure for positive chamber pressure. Every burner is adjusted for peak performance but final minor adjustments are easily made by the installer. Riello comes with blue burner cover for additional good looks and quietness.

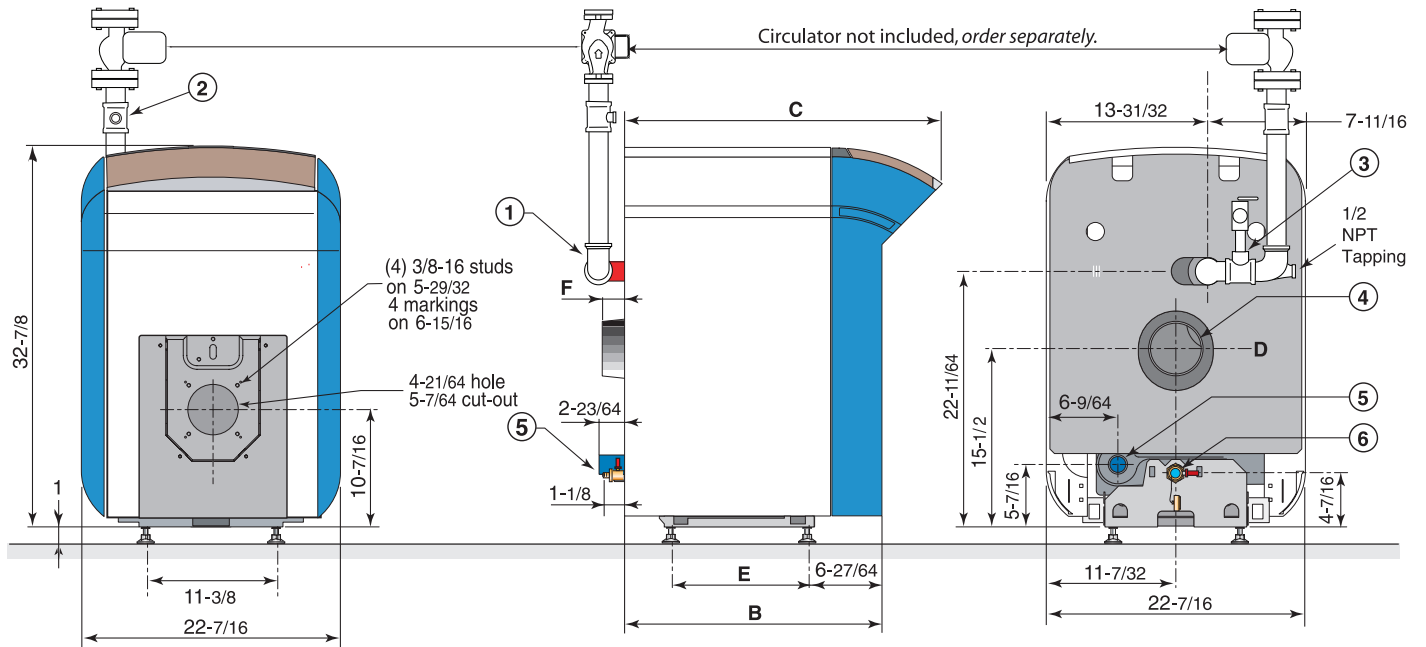
Eutectic Model Comparison



Type of Boiler	EC-13P	EC-13-0.7	EC-14P	EC-14-0.9	EC-15P	EC-15-1.1	EC-16P	EC-16-1.25	EC-25	EC-26	EC-27	EC-28
AHRI Firing Rate												
#2 Fuel Oil GPH	0.65	0.70	0.80	0.90	1.00	1.10	1.15	1.25	1.55	1.90	2.25	2.50
#2 Fuel Oil MBH	91	98	112	126	140	154	161	175	217	266	315	350
D.O.E. Heating Capacity MBH Water												
#2 Fuel Oil	79	85	98	109	123	134	141	152	190	232	272	302
AHRI Water Net Rating MBH												
#2 Fuel Oil	69	74	85	95	107	117	123	132	165	202	237	263
AFUE												
#2 Fuel Oil	87%	86%	87%	86%	87%	86%	87%	86%	86.5%	86.5%	N/A	N/A
CO ₂ = 13% #2 Fuel Oil	87%	86%	87%	86%	87%	86%	87%	86%	86.5%	86.5%	N/A	N/A
Number of Sections	3		4		5		6		5	6	7	8
Number of Baffle Plates	3		2		2		0		2	4	4	4
Weight (pounds)	267		328		390		452		567	655	741	827
Boiler Total Heating Surface Area (sq. ft.)	10.8		14.9		18.9		22.9		32	39	46	53
Flue Diameter Connection (inches)	5.0		5.0		5.0		6.0		6.0	7.0	7.0	7.0
Overfire Pressure (inches) WC Positive	0.02		0.02		0.03		0.04		0.08	0.10	0.10	0.12
Breeching Draft (inches) WC Negative	0.02		0.02		0.02		0.02		0.03	0.03	0.03	0.03
Content (gallons of water)	5.0		6.5		8.0		9.5		11.0	13.0	15.0	17.0

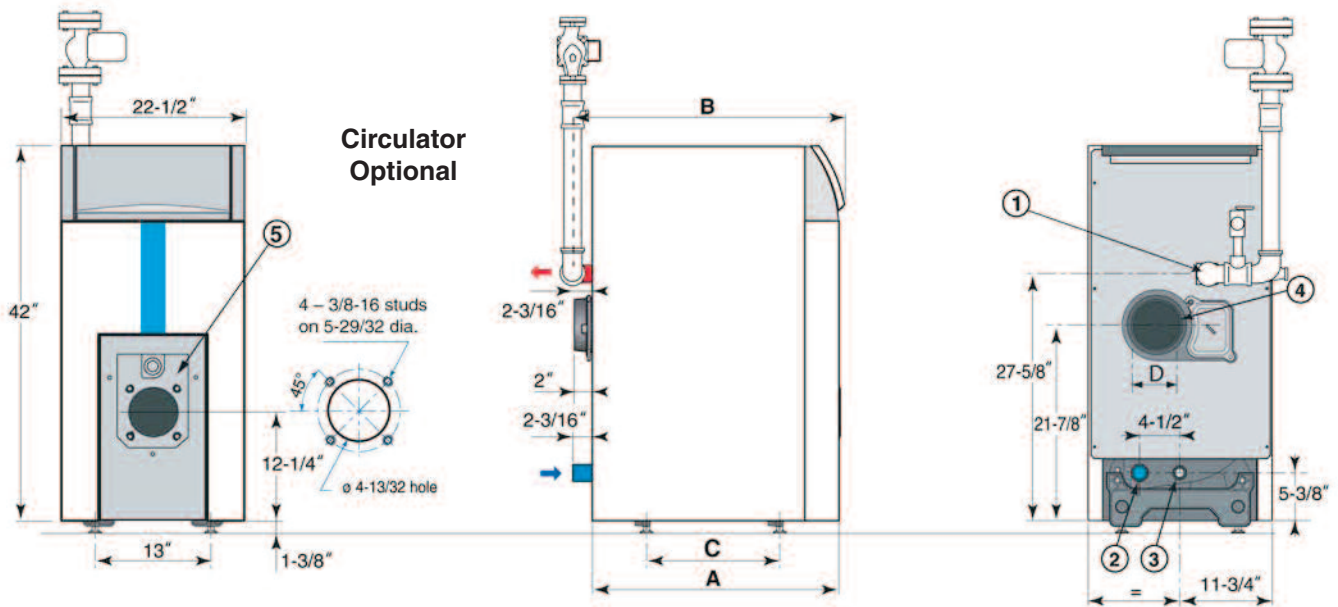
Maximum operating pressure: 60 psi Maximum water temperature: 210°F

Dimensions All dimensions shown are in inches.



MODEL	B	C	D	E	F
EC-13P	22-1/4	26-31/32	5	11-13/16	1-31/32
EC-14P	27-1/4	31-31/32	5	16-13/16	1-31/32
EC-15P	32-1/4	36-31/32	5	21-13/16	1-31/32
EC-16P	37-1/4	41-31/32	6	26-13/16	3-29/32

- 1 1-1/4" NPT nipple 2 1/4" Tapping 3 3/4" Relief valve 4 Flue outlet D 5 1-1/4" NPT nipple 6 1/2" drain outlet



	A	B	D	① ②	C
EC-25	32-9/16"	35-3/8"	6" dia.	1-1/2"	20"
EC-26	37-9/16"	40-3/8"	7" dia.	1-1/2"	25"
EC-27	42-9/16"	45-3/8"	7" dia.	1-1/2"	30"
EC-28	47-9/16"	50-3/8"	7" dia.	1-1/2"	35"

- 1 1-1/2" supply tapping 2 1-1/2" return tapping 3 3/4" drain tapping 4 Flue outlet 5 Burner mounting plate



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