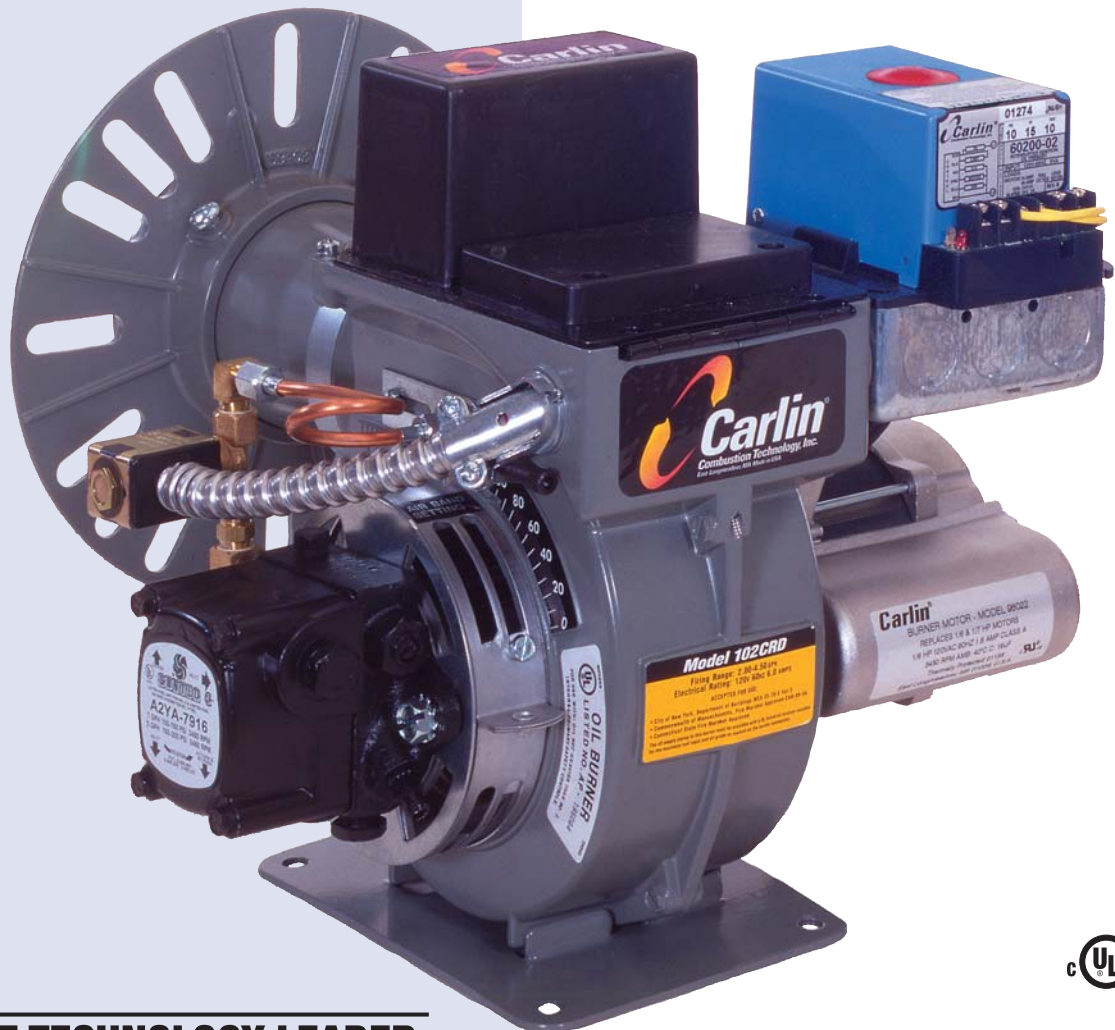




MODELS **102CRD™**
99FRD™ & 100CRD™
Advanced Oil Burners

0.5 TO 4.5 GPH

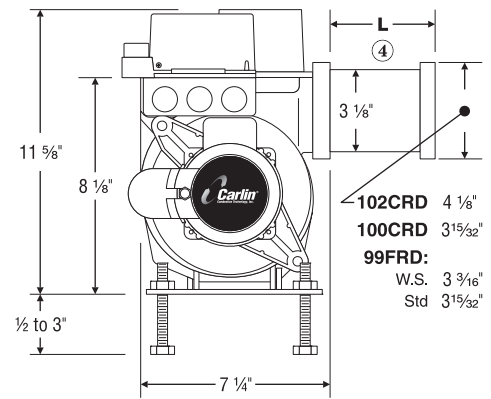
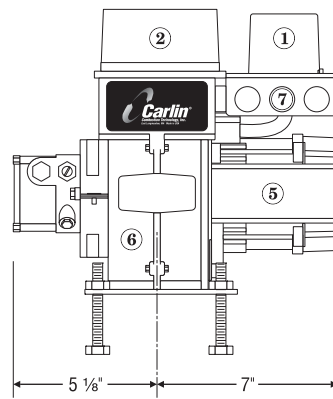
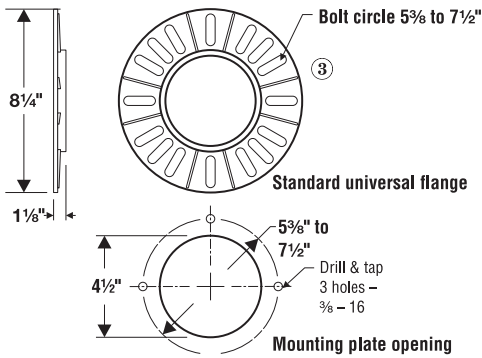
- Compact
 - Versatile
 - High-speed
- The oil burners
for all your
applications



CARLIN. THE TECHNOLOGY LEADER.



Carlin 99FRD, 100CRD & 102CRD Advanced Oil Burners



- ① Carlin 60200 microprocessor control
- ② Carlin 41000 solid state ignitor
- ③ Universal flange (welded flange optional)
- ④ Air tube (L = 5", 7", 9", or 11") (subtract 1 5/16" on 102CRD burners for finished length of air tube)
- ⑤ Carlin PSC motor
- ⑥ Cast aluminum blower housing
- ⑦ Junction box

Features

The 99FRD, 100CRD and 102CRD advanced oil burners feature Carlin's adjustable head assembly — for unmatched fuel/air mixing, smooth light-offs and quiet running.

Proven for years in the field and in extensive boiler and furnace testing, these burners cover the range from residential to semi-commercial, to meet your needs for oil-burning applications.

Look at the features and options:

Easy adjustment and service

- Only adjustments are the air band and the retention ring, with Carlin's unique Allen key setting method
- Blower access cover allows full view of blower compartment
- Burners use the same air handling parts for each firing rate range
- Compact design using standard components, including Carlin electronic ignition and microprocessor primary controls. Optional oil line heater and SVC oil valve also available.
- Tapered electrode tip design doubles the life of electrodes

Unmatched performance

- Positive ignition, stable operation, and compact flame
- Insensitive to draft or moderate back-pressure variations
- Damper not required to maintain high seasonal efficiencies
- Excellent performance tested in appliances that do not use refractory combustion chambers
- Pressure augments in 99FRD increases static pressure to 3.5 inches w.c. — for cleaner starts and stops

Specifications

Input

99FRD	0.50	to	3.00	GPH
100CRD	0.50	to	2.25	GPH
102CRD (2 5/8" air cone)	2.00	to	3.50	GPH
102CRD (3" air cone)	3.00	to	4.50	GPH

The maximum firing rate shown is for natural draft at elevations up to 2,000 feet above sea level. Reduce the rate for forced draft firing as given in the burner manual (up to 21% reduction for 100CRD at 0.20 inches w.c. overfire pressure). For altitudes higher than 2,000 feet, reduce capacity 4% per 1,000 feet above sea level.

Fuels

U. S.	No. 1 or No. 2 Fuel oil
Canada	No. 1 Stove oil or No. 2 Furnace oil

Electrical

Power	120 VAC/60 HZ/1-PHASE
Limit circuit input (60200 primary)	120 VAC/60 HZ
Current	
99FRD	Approximately 5.5 AMPS
100CRD	Approximately 5.5 AMPS
102CRD	Approximately 6.0 AMPS
Motor	
99FRD	1/6 HP, 3450 RPM
100CRD	1/6 HP, 3450 RPM
102CRD	1/6 HP, 3450 RPM
(Optional) Oil valve power	120 VAC/60 HZ
(Optional) Nozzle line heater	120 VAC/60 HZ

Ignition

Carlin Model 41000 solid state electronic ignitor	
Ignition voltage	14,000 VOLTS

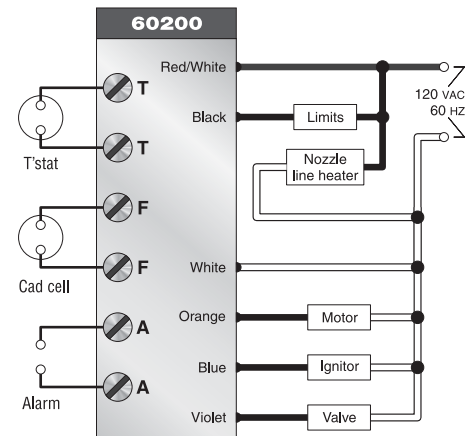
Agencies

UL Listed	(US & Canada)
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Special notes

1. 99FRD burners ship with blank (closed) air shutters. The maximum input with blank shutters is 2.25 GPH. For higher firing rates, order with open air shutter (for range from 1.50 to 3.00 GPH).
2. Burners ship standard with adjustable flange unless ordered for specific OEM application. Special welded flange and required insertion depth if welded flange is required. Use welded flange when firing into a positive-pressure combustion chamber.
3. All burners ship with single-stage fuel pumps unless optional two-stage pump is specified.

Wiring (typical, using 60200 primary)



Warning — For use only by a qualified service technician.

1. Always disconnect power source before wiring to avoid electrical shock or damage to the control. All wiring must comply with applicable codes and ordinances.
2. Thermostat terminals (T-T) provide a current source. Never apply external power to these terminals under any circumstances.
3. Alarm terminals provide a 24 VAC-rated dry contact, suitable for use with security/fire alarm systems such as Carlin SecureHeat™.

TECH SUPPORT HOTLINE 800-989-2275



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