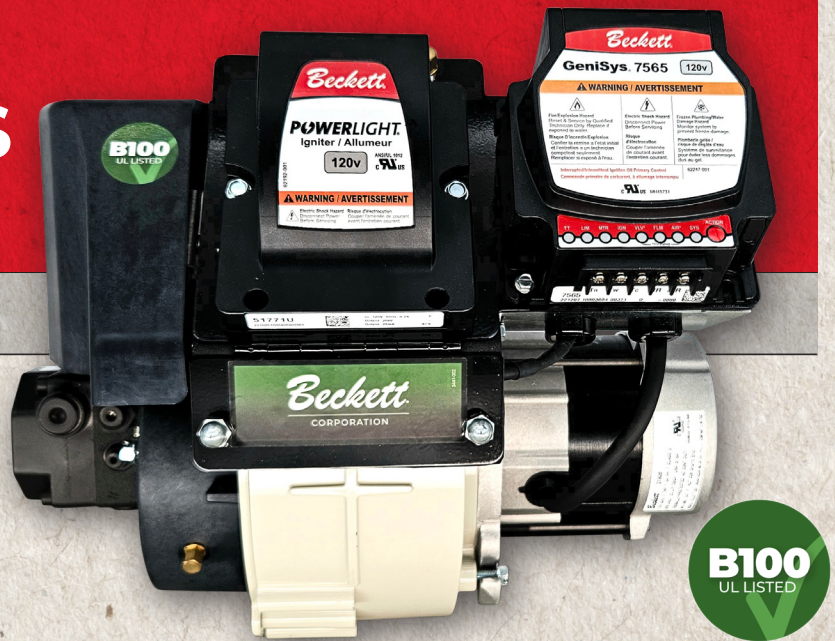


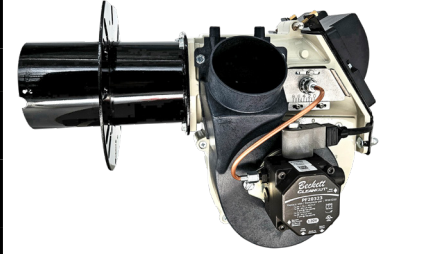
RF LIQUID HEATING FUELS BURNER

PRODUCT SHEET

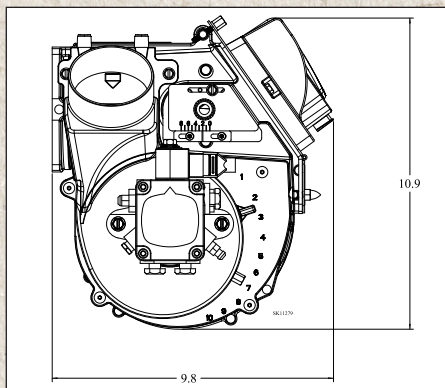
Description

The RF burner is the first burner specifically designed and tested for use with Biodiesel blends up to B100, Renewable Diesel Blends up to R100, traditional #1 and #2 Fuel Oil. (Heating Oils Type #0, #1 and #2 in Canada)

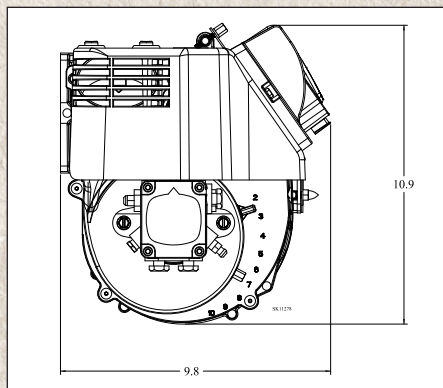


Category	Feature	Benefit
Improved Combustion 	Quiet Performance	RF has increased air capacity and quiet operation
	Head Design	Burner head design ensures a stable flame base for all fuels and reduces coking
	State-of-the-art airflow	The RF airflow design boosts velocity by utilizing the whole air tube, resulting in better combustion with optimized air flow
	Air Intake	The fuel pump is separated from the fresh air intake, improving burner performance during cold air intake
	Adjustable Flange	Burner-in-a-box provides an adjustable flange with a 2° pitch built-in for optimal performance
	Increased Air Capacity	Highly adjustable with air guides, adjustable head setting and single air adjustment band
Versatility 	Fuel Agnostic Combustion Technology (F.A.C.T.)™	Easily transitions between No. 2 and B100/R100 fuel types
	System Flexibility	Approved specs operate in various scenarios; tested with #2 and up to B100 fuel oil, with and without baffles, direct and chimney vents
	Outside Air Adapter	Allows ducting from virtually any directions
	Air Proving Kit	The air proving switch kit easily adds combustion air proving to any RF burner installation
	Flame Shaping	Nozzle line assembly and airflow adjustments provide more effective flame shaping through two distinct adjustments.
	Flame Sighting	RF cad cell's position offers greater tolerance and reduced position sensitivity
Ease of Use 	Optimized Air Intake Design	Features a built-in fresh air intake system, isolated from the pump bleed port, reducing the risk of oil entering the burner housing
	Air Adjustment w/ Ducting	Easily and accurately adjust air with the ducting in place, without needing to remove a cover
	Readily available Beckett parts	Utilizes the same major component parts found on other Beckett burners
	Optimized design for user simplicity	The z-dimension is easily set by inserting the nozzle line flush with the end of the air tube
	Ease of access to service	The control and igniter mounted on a single plate simplify nozzle line access and offer wide-open access to the burner interior and wiring

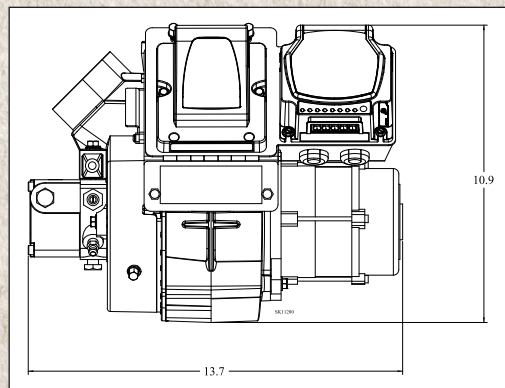
Beckett®



Side View - Less Air Intake Cover



Side View - With Air Intake Cover



Rear View - Less Air Intake Cover

Technical Specifications

Capacity

- 0.38 - 1.75 GPH
- 56,000 - 245,000 BTU/Hr

Fuels

- ASTM D396 - #1 & #2 Heating Oil
- ASTM D396 - B6 - B20 Biodiesel Blends
- ASTM D6751 for B100
- ASTM D975 for Diesel Fuel and Renewable Diesel
- CAN / CGSB - 3.2 for Heating Oil Types #0, #1, and #2

Dimensions

- Height - 10.9"
- Width - 13.700"
- Depth - 9.835"

Electrical

- 120 VAC / 60 Hz
- 5.8 Amps Maximum

Standard Components

Motor

- 1/7 HP 3450 RPM Type PSC

Igniter

- PowerLight® Solid-State-Continuous Duty

Fuel Pump

- CleanCut® PF2032x - Single Stage
- CleanCut® 2-Stage available - Contact Factory

Primary Control

- GeniSys® 7565 with myTechnician® programming and diagnostics

RF Universal Burners - (Ships with adjustable 0° and 2° pitch flanges)

Part Number	Description	GPH Range	Air Guide
RF101	Burner with 7" Air Tube, 6 - Slot Head	0.38 - 1.00	White 2.0" Diameter (Installed), (Red & Blue Included)
RF102	Burner with 7" Air Tube, 9 - Slot Head	0.90 - 1.75	Blue 2.5" Diameter (Installed), (White Included)

Air Guide Description

Part Number	Description	Feature
52684-003U (Includes all 3)	Red - 1.5" Diameter - Low Rate / Low Air	Enhances air adjustability for low firing rates and natural draft applications
	White - 2.0" Diameter - Mid Rate / Mid Air	Works in most applications
	Blue - 2.5" Diameter - High Rate / High Air	Increases air capacity for high firing rates and positive pressure appliances

RF Burner Accessories

Part Number	Description	Feature	Availability
5850	Adjustable Split Flange	For 0° pitch applications	Included
51634U	Adjustable Flange with a 2° Pitch	For 2° pitch applications, 2° pitch built into flange	Included
51633U	Adjustable Flange with a 0° Pitch	For 0° pitch applications	Optional
52682U	Outside Air Adapter Kit	3" Galvanized Adj. Elbow, 4"x3" Galvanized Reducer, 4" Air Intake Hood	Optional
52683U	Air Proving Switch (APS) Kits	0.50 in. WC	Optional
52683-002U		0.25 in. WC (for high rate)	Optional

The required air proving switch is determined by measuring the outlet pressure at the burner's pressure port. See step 2 of [APS literature](#)

7565U



51838U (Igniter Only)



52437-003U

(With Contact Clips)

PF20322U



PF20323U



21805U



21837U



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