

## VARIFLAME<sup>™</sup> HEATERS





## Variable Rate Heating with Less Hassle

The VariFlame variable rate heater offers producers more control, easier access and increased longevity compared to any other unit available on the market today. Pair the VariFlame in legacy mode with any controller, seamlessly synchronizing and adjusting with the temperature curves set in the controller to maintain desired room temperature.



### TWO MODELS TO FIT YOUR NEEDS

## **VariFlame**

The standard on/off VariFlame heater\* offers manual control over heater output. Various output levels can be easily verified and set with a simple handle adjustment.

# **VariFlame**

The VariFlame with EDGE<sup>®</sup> Connect<sup>\*</sup> is designed to work with the EDGE control system, providing additional features including stir fan mode, exercise mode, remote access and diagnostics.



PATENT PENDING \* Both VariFlame models available in either galvanized, painted galvanized or stainless steel finish



### AVAILABLE ON ALL VARIFLAME MODELS

### Improved Burner Performance

Most variable rate heaters have the ability to range from 65,000 to 250,000 BTU's. VariFlame's line-style burner offers an extended range of 50,000 to 250,000 BTU's. This allows the heater to run longer while improving heat distribution and humidity control. Even while operating at lower BTU's, the line-style burner provides a more consistent flame while maintaining ignition reliability, flame sense and flame stability.



### **No More Igniter Frustration**

Our new igniters are the most durable and easy-to-use on the market. Made of silicon nitride, a material typically used in performance engine parts, these igniters replace silicon carbide models. They reach hotter surface temperatures and will last significantly longer due to a dustinhibiting design that reduces carbon buildup.

### **Standard Diagnostics**

The on/off model VariFlame multi-color LED diagnostic system combines several colors and frequencies to offer more precise information.



### **Longer Life**

VariFlame is the first heater offered with all 304 stainless steel shell and internal components. This corrosion-resistant and durable construction increases the lifespan and saves you money. VariFlame is also available in galvanized and painted galvanized metal with aluminized steel internal components, offering increased corrosion resistance and longevity.

All models come with our water and dust tight control box for long life and the industry's highest grade FEP-coated wires and stainless steel terminals.

#### **Easy Maintenance**

Maintenance is easy with VariFlame. It is the only heater on the market featuring a single, easy-to-remove door that allows you to effortlessly access all serviceable parts from a single location. Plus, every aspect of the heater can be serviced using a single tool  $- \frac{1}{4}$ " nut driver. The removable grill guard also allows you to easily clean out the blower wheel, ensuring that your heater always runs at peak performance.



#### **Standard Accessories**

- Air Diverter Kit allows you to place the air flow in the position of your choice: Y-duct, T-duct or straight through
- Hanging Kit hooks and chain allow you to hang the heater from the ceiling
- Sediment Trap captures debris that may come through the gas line and prevents it from entering the gas valve

### **VARIFLAME WITH EDGE® CONNECT**

## **Revolutionizing Heating** in the Swine Industry

VariFlame with EDGE<sup>®</sup> Connect has been designed to work seamlessly as a standalone heater or in legacy mode using on/off outputs such as the TC5 Series, Expert Series, Evolution, Pro Vision or competitive controller. When connected to the EDGE control system, advanced features such as stir fan mode, exercise mode, remote access and remote diagnostics are available. This is all possible through the patent pending control system inside the VariFlame EDGE Connect model heaters.

### VARIFLAME WITH EDGE CONNECT CAN BE OPERATED IN FOUR DIFFERENT CONTROL MODES:

**Stand Alone Mode** – No controller is needed for the VariFlame stand alone mode. This mode accomodates up to 2 LED temperature probes\* with 1 probe required for operation. The unit will maintain the temperature set in the heater burner control unit (BCU) at the time of installation.

**Legacy Mode** – The on/off signal from a legacy controller (TC5, VT110) triggers the heater; the algorithm inside the burner control unit will synchronize its target temperature with the temperature set point used in legacy control to maintain consistent room temperatures. This mode requires a continuous power supply, one LED temperature probe\* and control signal from the legacy controller.

**Series II Mode** – This mode will accommodate any controllers that have modulating heat logic built in for controlling a variable rate heater.



This mode requires a continuous power supply, one LED temperature probe\* and a 0-10 volt, or 4-20 mA signal for connection to the controller.

**EDGE Connect** – The VariFlame EDGE connect heater combined with the EDGE controller provides the ultimate in climate control management including remote connectivity, system diagnostics, and real time notifications. This setup includes Stir-fan and exercise modes for even greater efficiency and added value. Continuous power supply, up to two LED temperature probes\* and RS-485 connection to the EDGE automation network is required. For redundant systems, the EDGE safety RS-485 network may be connected as well. Need to expand? No problem. Just connect additional VariFlame with EDGE Connect heaters to your existing EDGE controller and you're all set.

\* One (1) LED temperature probe is included with every heater



VariFlame with EDGE<sup>®</sup> Connect is the industry's first modulating heater with the ability to work with any control system.

### AVAILABLE ON ALL EDGE CONNECT MODELS

### Simple Troubleshooting

If a problem arises, the multiline OLED display will show text on the fault condition, allowing the end user to have a better understanding of the problem without having to decipher LED flashes for trouble codes.

### **Back Up Mode**

When an EDGE LED temperature probe is connected, VariFlame will maintain the temperature set point of the last heating cycle.

## FEATURES AVAILABLE WHEN PAIRING OUR EDGE CONTROL SYSTEM WITH VARIFLAME WITH EDGE CONNECT

### **Remote Connectivity**

VariFlame with EDGE Connect allows you to control all of your heaters and many other inputs from a single controller. Through the exclusive EDGE technology, producers can access diagnostics and adjust barn settings remotely from any web enabled device.

#### Stir-Fan Mode

As the animals grow or during warmer months, VariFlame with EDGE Connect doesn't need to sit idle. By circulating air through the heater without turning on the burner, you can maintain optimal and uniform environmental conditions.



### **Exercise Mode**

Much like a human's exercise routine, EDGE allows you to schedule regular "exercise" sessions for your heater. EDGE will automatically turn on the heater as often as you prescribe to ensure it is kept in good working condition.

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### **Temperature Probe Flexibility**

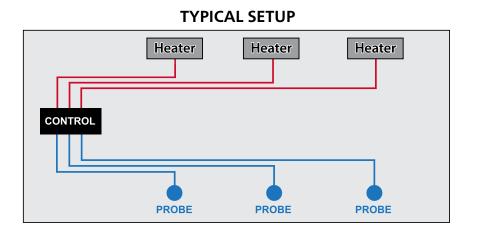
EDGE Connect heaters combined with the EDGE Controller gives you the ability to utilize the LED temperature probes for more than just running the heater. They can also be used to control curtains, fans, and other equipment.

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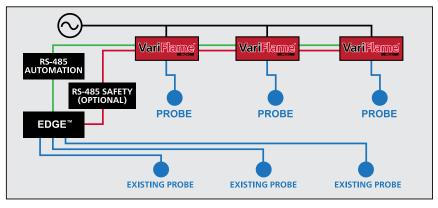
## **Retrofit or New Construction**

Want to upgrade from an on/off heater to variable heat? Competitor models would require the installation of an entirely new set of controls to run their variable rate heater. But VariFlame has built-in smart logic. It will work with any control system, saving you time and money.

When it comes to a new installation, wiring and installing all of the equipment can add up fast. VariFlame with EDGE Connect allows the LED probes that are connected to the heaters to become total room probes, used for the entire EDGE system. This dual-use feature allows installers to run less wire and speed up installation, saving money on the entire ventilation system.



### **EDGE<sup>®</sup> CONNECT INSTALLATION**



### **Optional Outdoor Installation Kits**

If installing the heater in the room is not possible, the outdoor kit can be used to add the heater to a building exterior where it can be programmed to recirculate air from inside or outside.

## **Heater Specifications**

### Dimensions

Length	30.3″
Width	18.6″
Height	27.5″

### **Propane Units**

Gas	Vapor Propane
Maximum Input	250,000 (BTUH)
Minimum Input	50,000 (BTUH)
Inlet Gas Supply Pressure Max	13.5 in. W.C.
Inlet Gas Supply Pressure Min	12.0 in. W.C.
Fuel Consumption Per Hour Max	11.58 lbs.
Fuel Consumption Per Hour Min	2.32 lbs.
Motor Characteristics RPM	1/3 H.P., 1100 RPM
Electric Supply (Volt/Hz/Phase)	115/60/1
Amp Draw (Starting)	9.5
Amp Draw (Continuous)	4.5
Min Combustion Distance Top	1 ft.
Sides	1 ft.
Back	1 ft.
Blower Outlet	6 ft.

### Natural Gas Units

Gas	Natural Gas
Maximum Input	250,000 (BTUH)
Minimum Input	50,000 (BTUH)
Inlet Gas Supply Pressure Max	13.5 in. W.C.
Inlet Gas Supply Pressure Min	7.0 in. W.C.
Fuel Consumption Per Hour Max	238 cu. ft.
Fuel Consumption Per Hour Min	47.6 cu. ft.
Motor Characteristics RPM	1/3 H.P., 1100 RPM
Electric Supply (Volt/Hz/Phase)	115/60/1
Amp Draw (Starting)	9.5
Amp Draw (Continuous)	4.5
Min Combustion Distance Top	1 ft.
Sides	1 ft.
Back	1 ft.
Blower Outlet	6 ft.

Specifications are subject to change without notice.



### **PROVEN & DEPENDABLE**<sup>™</sup>





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