



HEATING SYSTEMS
MC & VR HEATERS



MC & VR 50/250 HEATERS

Variable Rate Heating with Less Hassle

MC 50/250 and VR 50/250 variable rate heaters offer producers improved efficiency, more control, easier access and increased longevity compared to other forced air units available on the market today.

TWO MODELS TO FIT YOUR NEEDS



MC 50/250

The standard On/Off **MC 50/250*** heater offers manual control over heater output. Various output levels can be easily verified and set with a simple handle adjustment.



VR 50/250

The **VR 50/250*** heater is designed to work with the EDGE® control system, providing additional features including stir fan mode, exercise mode, remote access and diagnostics.



MC and VR heaters are available in a stainless steel finish and include 304 stainless steel shell and internal components. Both heaters are also available in galvanized and painted galvanized metal with aluminized steel internal components, offering increased corrosion resistance and longevity.

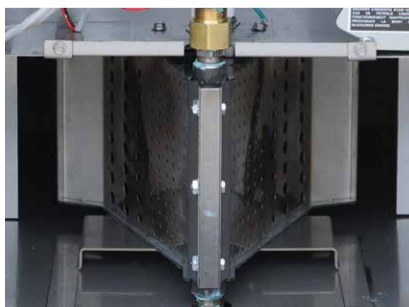
*PATENT PENDING



AVAILABLE ON ALL MC AND VR HEATERS

Improved Burner Performance

Most variable rate heaters can range from 65,000 to 250,000 BTU's. The MC and VR line-style burner offers an extended range of 50,000 to 250,000 BTU's, allowing the heater to run longer while improving heat distribution and humidity control. Even while operating at lower BTU's, it provides a more consistent flame, and maintains 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. We've replaced silicon carbide models with silicon nitride, a material typically used in performance engine parts. They reach hotter surface temperatures and will last significantly longer due to a dust-inhibiting design that reduces carbon buildup.

Industry Leading Diagnostics

The on/off MC 50/250 model's multi-color LED diagnostic system combines several colors and frequencies to offer more precise information.



MC 50/250 LED Diagnostics

The VR 50/250 features an OLED display that will show text on the fault condition, allowing the end user to have a better understanding of an issue without having to decipher LED flashes for trouble codes.



VR 50/250 OLED Diagnostics

Water and Dust Tight

All models come with our water and dust tight control box for long life and the industry's highest grade FEP-coated wires. Wires connect with pull out terminal blocks replacing the spade terminals used in the past.

Easy Maintenance

A single, easy-to-remove door allows effortless access to all serviceable parts from a single location. Plus, every aspect of the heater can be serviced using a single tool – 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
- Factory installed power cord for easy installation
- Easy access gas ports allow for quick checks of incoming and manifold gas pressure.

VR 50/250 HEATERS

Improve Heating Efficiency with EDGE®

The VR 50/250 heater is designed to work seamlessly as a standalone or in legacy mode using on/off outputs from legacy controllers such as the TC5 Series, Expert Series, Evolution, Pro Vision or competitive controller. When connected to EDGE, advanced features such as stir fan mode, exercise mode, remote access and remote diagnostics are available, made possible by the patent pending control system inside the VR 50/250.

VR 50/250 CAN BE OPERATED IN FOUR DIFFERENT CONTROL MODES:

Stand Alone – No controller is needed; this mode accommodates up to two LED temperature probes*. The heater will maintain a user defined set point for the air space.

Legacy – The on/off signal from a legacy controller triggers the heater; the algorithm inside the burner control unit will synchronize its target temperature with the temperature set point to maintain consistent room temperatures. Requires a continuous power supply, one LED temperature probe* and control signal from the legacy controller.

Variable – This mode accommodates any controllers that have modulating heat logic built in. 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® – The VR 50/250, combined with the EDGE controller, provides the ultimate in climate control management including remote connectivity, system diagnostics, and real time notifications. Remotely reset the heater up to three times in 24 hours in the event of a lockout. 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 must be connected as well. Need to expand? No problem. Just connect additional VR 50/250 heaters to your existing EDGE controller and you're all set.

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



BACK UP PROTECTION

If the controller communication is lost, the VR 50/250 will maintain the last known temperature set point using the integrated EDGE LED temperature probe.



VR 50/250 is the industry's first modulating heater with the ability to work with any control system.



INCLUDED FEATURES WHEN PAIRING OUR EDGE CONTROL SYSTEM WITH THE VR 50/250 HEATER

Remote Connectivity

VR 50/250 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

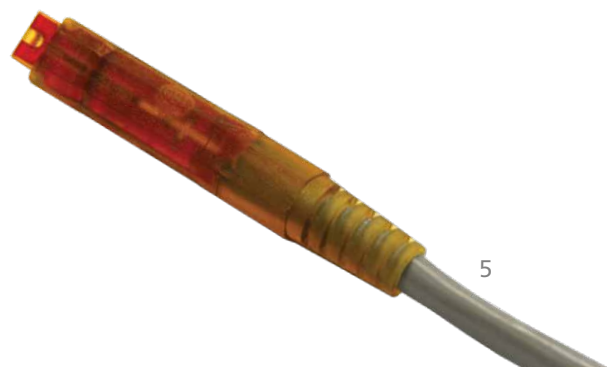
As the animals grow or during warmer months, VR 50/250 doesn't need to sit idle. By circulating air through the heater without turning on the burner, you can maximize your investment by utilizing the internal fan to maintain optimal and uniform environmental conditions.

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.

Temperature Probe Flexibility

EDGE heaters combined with the EDGE Controller give 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.

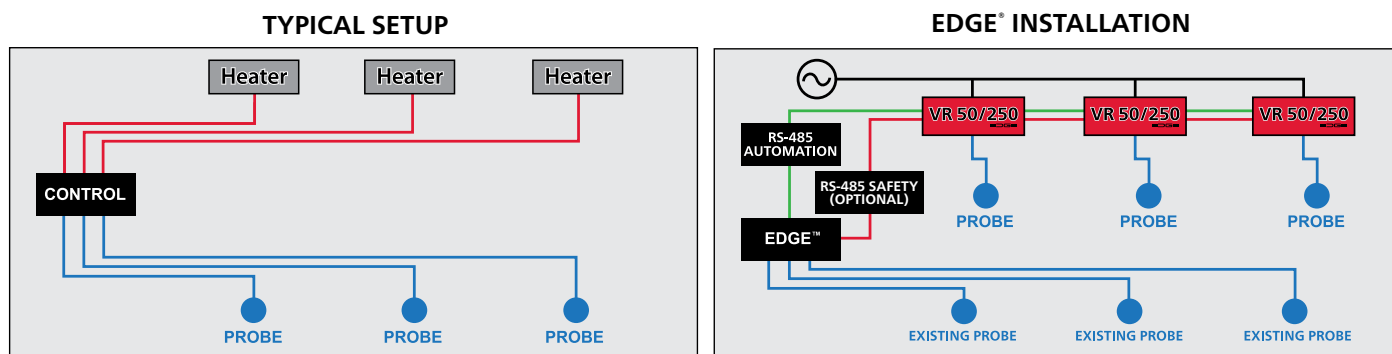


MC & VR 50/250 HEATERS

Retrofit or New Construction

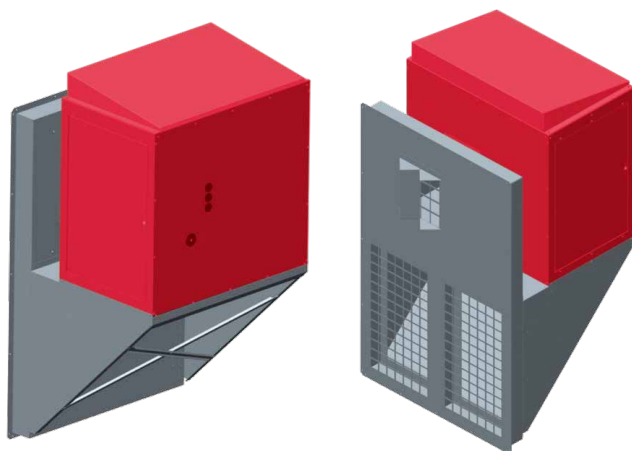
Want to upgrade from an on/off heater to variable heat? Competitor models would require the installation of an entirely new set of controls to run their variable rate heater. But the VR 50/250 heater has built-in smart logic. It will work with any control system, saving you time and money.

When it comes to a new installation, wiring and installing all of the equipment can add up fast. The VR 50/250 allows the LED probes 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.

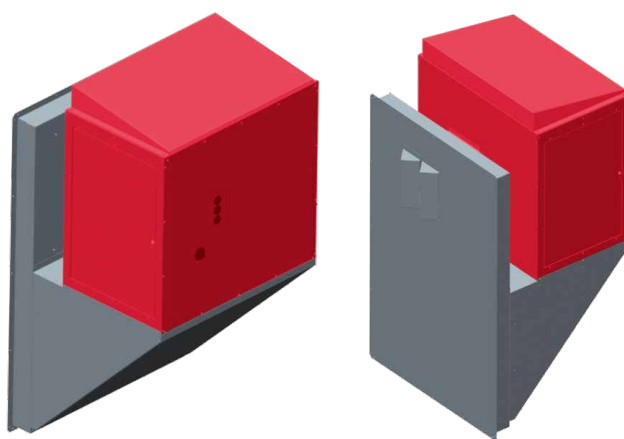


Optional Outdoor Installation Kits

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.



RECIRCULATING SETUP



NON-RECIRCULATING SETUP

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.



EDGE® CONTROL FOR COMPLETE HEAT MANAGEMENT

EDGE manages VR 50/250 heat output based on temperature measurements and specified parameters to give you the most efficient means of heating your barn and maintaining a consistent comfort level. When connected to EDGE, remotely monitor the system and current draw of each heater.

EDGE allows you to monitor temperature, static pressure, humidity, wind speed, wind direction, precipitation, lighting, ammonia and CO₂ sensors, inlet positions, current transformers, water meters, animal weights, feed usage and run time, alarms and more! There is no limit to what EDGE can do for your operation.



automatedproduction.com

USA

P.O. Box 20
1004 E. Illinois Street
Assumption, IL 62510
Ph. 217-226-4449
Fax: 217-226-3540

INTERNATIONAL

5200 Armand-Frappier
St-Hubert (QC)
Canada J3Z 1G5
Tél. +1 877-926-2777
Fax +1-877-408-1046

For more information contact your
local AP representative.



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