



**VANTAGE® Modulating (CTH3)**

**MT Series**

**Efficiency:** ROBERTS GORDON® innovative high efficiency reflectors are a key component to our low-intensity infrared heaters to provide a radiant efficiency higher than any other low-intensity infrared heater on the market with an Infrared Factory of 15\*. This is highly specifiable as no competitor can match our radiant efficiency. However, a higher efficiency heater will mean a higher price. So depending on who the decision maker is, a higher radiant efficiency may not be a guaranteed lock. Identifying the decision maker will help push this through. Particularly if the owner will continue to operate in the building. Efficiencies are more important to owner-operators than owner-developers as the operators are more interested in keeping overall operation costs down and productivity up. This can be achieved with increased comfort and fuel savings as a result from a higher efficient radiant heating system.

\*Rated in accordance with AHRI Standard 1330.

**Burner Construction:** All ROBERTS GORDON® burners are spot-welded durable construction with electrostatically applied powder coating to resist corrosion for long-lasting high quality appearance. An internal partition separates the electrical compartment from the combustion air side which keeps all hot gases and dirt away from the burner controls which will contribute to a longer component life. Serviceability is accessible through easy-to-remove access panels.

**Product Warranty:** All of our products carry an industry-leading (3) year tip to tip warranty. The warranty includes all parts and components. This is NOT a pro-rated warranty. Other manufacturers may offer short 1 year warranty on parts and a longer warranty on components such as tubes. Warranties such as this are deceiving as most of the failed components are parts from the burner head, not the tubes. You can be confident that when purchasing a high-performance ROBERT GORDON® product that your investment is well protected.

**Safety:** All heaters are tested and approved to be in compliance with ANSI Z83.20 (latest edition). Each burner has multiple safety features that will lock the burner out in the event of a component failure or other external influences such as combustion air blockage. It is our goal at Roberts-Gordon to always be in compliance with the latest government standards and regulations to ensure safe operation of our heating equipment.

**Heater Exchangers:** Available in hot-rolled steel, aluminized, or double coated porcelain steel, our highly emissive heat exchangers maximize radiant output. The first 10' (3 m) section of heat exchanger tubing for all unitary heaters consists of ALUMI-THERM® steel, which contains mostly aluminized steel with traces of titanium for added durability and increased longevity.

 <b>Feature</b>	 <b>Function</b>	 <b>The Real Story</b>	 <b>Sell Up</b>
<p><b>True Dual 2-Stage Heater</b></p>	<p>Two distinct firing rates (high and low). Both air and gas adjust in sync with each other to provide an even air-to-gas ratio at both high and low stages.</p>	<p>Unlike other two-stage infrared heaters that do not adjust both air and gas simultaneously, maintaining an even air-to-gas ratio through both high and low stages (30% differential) provides optimum flame performance through both stages.</p>	<p>Although a true dual stage heater has benefits, it does not compare to the VANTAGE® Modulating heater. The modulating heater maintains a precise air-to-gas ratio through high and low firing rates and everything in between (35% differential). Optimum combustion throughout full range of burner inputs is ensured by pre-programmed burner controls that adjust both fuel and air simultaneously. Complete modulation creates fuel savings while providing the precise amount of heat required maximizing comfort and efficiency.</p>
<p><b>Stainless Steel Heat Exchanger (Optional)</b></p>	<p>Rugged stainless steel heat exchangers ideal for harsh applications</p>	<p>Stainless steel is a poor emitter of radiant energy (up to .62). Because of the poor emissivity, more heat is pushed out the stack compared to other heat exchanger materials more commonly use (e.g. heat-treated aluminized, hot-rolled steel, etc.).</p>	<p>Roberts-Gordon does NOT offer a stainless steel heat exchanger option because of the significant decrease in performance. Instead, the CTH3 heater is offered with durable heat-treated aluminum steel with an emissivity rating of .80 and is rated to withstand harsh conditions.</p>
<p><b>Burner Construction</b></p>	<p>Burner constructed of corrosion resistant housing. Controls separated from combustion air.</p>	<p>The burner housing is made of corrosion resistant steel, but is unfinished. Combustion blower located outside of the burner housing (standard option). An inlet air collar with enclosure is offered as a separate option. The combustion air is separated from the controls.</p>	<p>The combustion blower in the CTH3 is located inside of the burner compartment that is made of corrosion resistant galvaneel steel with a durable black powder coated finish for a long-lasting appearance. An internal partition completely separates the combustion air from the electrical components to maintain long-lasting operation.</p>

 <b>Feature</b>	 <b>Function</b>	 <b>The Real Story</b>	 <b>Sell Up</b>
<b>Aluminum Reflectors with 98% Reflectivity</b>	Mill finish aluminum reflectors provide the maximum amount of radiant energy emitted from the heat exchanger down towards objects below.	Mill finished reflectors do have a high emissivity rating. However, Solaronics poor reflector design results in radiant energy bouncing back into the tube, thus reducing radiant output and creating wear and tear which can shorten heater life span.	Although Solaronics offers the same type of reflector material as we do, Roberts-Gordon high efficiency reflectors far exceed the performance of Solaronics's reflectors while eliminating radiant energy from bouncing back into the heat exchanger. We have achieved an Infrared Factor as high as 15. This is higher than any low-intensity infrared tube heater on the market.

Roberts-Gordon LLC | 1250 William Street | P.O. Box 44 | Buffalo, NY 14240-0044 USA  
 Telephone: +1.716.852.4400 | Fax: +1.716.852.0854 | Toll Free: 800.828.7450  
[www.robertsgordon.com](http://www.robertsgordon.com)

This document should be used as a competitive analysis sheet to promote ROBERTS GORDON® Infrared Heating systems over competitors.  
 Competitive information is subject to change without notice.