# ROBERTS GORDON° LIEATING CONTROLLER CONTROLLER

for ROBERTS GORDON® Infrared Heaters





**Technical Specification** 

# **ROBERTS GORDON®**

## **Features**

### Compact, easy-to-use controls that maximize comfort and efficiency

- Energy savings Continuously adjusts heat output based on outdoor air and design temperatures so you only use the energy you need, when you need it
- Simplified zone control Manage two heating zones with one vacuum pump using four flexible operating modes
- Seamless BMS integration Operates independently or compatible with BACnet® Building Management Systems for streamlined facility-wide control
- Convenient operation Touchscreen interface and indicator lights make monitoring and adjustments simple, even in demanding environments

# Configurations

ROBERTS-GORDON® Heater	Roberts-Gordon Heating Controller Compatible	Variable Frequency Drive (VFD) Required	Number of VFD's Required	Maximum Number of Heating Zones Per Controller	Maximum Number of Systems/ Unitary Heaters Per Controller
CORAYVAC® with Modulation	Yes	Yes	1 per vacuum pump	2	1
CORAYVAC® On/Off	Yes	No	N/A	2	1
VANTAGE® CTHN Multiburner	Yes	No	N/A	2	1
VANTAGE® Modulating Heaters (Models CTH3 and HEM)	Yes	No	N/A	2	1
VANTAGE® Single-Stage Heaters (Models CTH2V and HEV)	Yes	No	N/A	2	4
GORDONRAY® Single-Stage (Model BH)	Yes	No	N/A	2	4
GORDONRAY® Two-Stage (Model DF)	No	N/A	N/A	N/A	N/A
Combination of CORAYVAC® and VANTAGE® Modulating Heaters on Single Controller	Yes	Yes (only for modulating CORAYVAC®)	1 per vacuum pump	2	1+1
Combination of CORAYVAC® and VANTAGE® or GORDONRAY® Single-Stage Heaters	Yes	Yes (only for modulating CORAYVAC®)	1 per vacuum pump	2	1+4
Combination of VANTAGE® Modulating and VANTAGE® or GORDONRAY® Single-Stage Heaters	Yes	No	N/A	2	1+4

# THE EXCLUSIVE PRODUCER OF CORAYVAC

Roberts-Gordon Heatin	ng Controller					
Electrical Rating		120 V 1ø, 60 Hz, 20 Amps				
Enclosure Finish		Gray RAL 7035, epoxy polyester powder, removable knockouts				
Controller Ambient Operating Temperature Range		-4 to140 °F (-20 to 60 °C) 0 to 75% relative humidity				
Zoning Capabilities		Up to two (2) ROBERTS GORDON® infrared heating systems (any combination of CORAYVAC® systems, VANTAGE® Multiburner systems, or unitary heaters) per controller				
Status Indication		Three (3) indicator lights on the controller enclosure: two (2) for zones and one (1) for pump, one (1) indicator light on the VFD enclosure				
Listings						
Enclosure		NEMA 4X/13, UL508 A, IEC 62208, UL				
Control Board		Programmable Controller, IEC 61000-4-5, EN 60068-2-6Fc, UL 60730-1, UL 60730-2-9, CSA E60730-2-9, EN 60730-2-9 UL94				
Touchscreen		PLC Product Certifications, CSA, EAC, RCM, CE, cURus, ICE6131-2				
Touchscreen						
Display Size in. (cm)		4 (10.16)				
System Configuration		System set up and updates are quickly and easily done via the touchscreen				
Real-Time Clock		Data retention time in the event of a power outage				
Real-Time Monitoring	and Trending	Yes				
Diagnostics Log		ON/OFF time and date				
System Operating Schedules		Daily (Repeated throughout the year upon call for heat)				
External Communication Only BACnet® MS/TP or		egrate with Building Management Systems (BMS)				
CN16		USB Mini-B Port				
CN17		USB A Port				
CN18		CAN Expansion Bus Port				
CN19		Serial Line Port (RS-485)				
CN20		Ethernet				
Universal Inputs	Analog/Digital	8/2				
Universal Outputs	Analog/Digital	2/6				
Installation						
Maximum Number of S Controllers Connected		31				
Distance Between Firs Controller ft. (m)	at and Last	3,280 (1,000)				
Equipment/Hardware/Software to Upload Program (if needed in the field)		Flash drive only; laptops, software, load reactors, jumpers, DIP or rotary switches not needed				
Repeater		Only needed if over 4,000 feet or 32 devices				
VFD Connection		Category 6 cable from VFD to controller				
		One indoor sensor per zone and one outdoor sensor required				
Warranty						
Duration		Three (3) year limited				
Battery						
Location						
Location		Accessible via a sliding cover on the control board within the enclosure				

Roberts-Gordon Heating Controller Variable Frequency Drive (VFD)				
Installation	Maximum distance from Central Control to vacuum pump: 3280 ft (1000 m)			
Options	120V/240V single-phase 240V/460V three-phase			
Electrical Rating	1HP VFD, 115V, 50/60Hz, 1ø, 15.7A 1HP VFD, 230V, 50/60Hz, 1ø, 8.5A 2HP VFD, 230V, 50/60Hz, 1ø, 14.9A 1HP VFD, 230V, 50/60Hz, 3ø, 5.3A 2HP VFD, 230V, 50/60Hz, 3ø, 9.3A 1HP VFD, 460V, 50/60Hz, 3ø, 3.45A 2HP VFD, 460V, 50/60Hz, 3ø, 6.15A			
Enclosure Weight Ibs. (kg)	17.7 (7.2)			

# Control Enclosure Front View Side View Front View Side View 11.4 (28.9) 11.8 (29.9) 7.9 (20)

Note: Each application requires a single Central Controller featuring a touchscreen (HMI). For applications requiring multiple controllers, all other controllers shall be Satellite Controllers that do not have a touchscreen.



Installation and service must be performed by a licensed contractor. Installation must conform to manufacturer's Installation, Operation and Service manual and local codes. In the absence of local codes, installation must conform with the National Fuel Gas Code. ANSI Z223.1.

Safety: operate heater with proper care and observe all safety precautions per the manufacturer's Installation, Operation and Service manual.

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