# Residential Combustion Control

# VR4300 Line Voltage; VR8300 Low Voltage Standing Pilot **Combination Gas Controls**





Application: Single Stage
Type of Fuel: Natural (LP if conversion kit included)

Pressure Tapping: 1/8 in. NPT with plug

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing Body Pattern: Straight-through (with flange if included)

Capacity (kBtuh):

1/2 x 3/4 inlet x outlet – At 1 in. wc p.d. – 190,000 BTUh: 30,000 BTUh minimum: 290,000 BTUh maximum Natural Gas 3/4 x 3/4 inlet x outlet – At 1 in. wc p.d. – 200,000 BTUh: 30,000 BTUh minimum: 300,000 BTUh maximum Natural Gas

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Operating Temperature Range: 0°F to 175°F (-18°C to +79°C);

VR8300M -40°F to +175°F (-40°C to +79°C)

Approvals, Underwriters Laboratories Inc.: UL Component Recognized MCCZ2.MH5323

Approvals, CSA: CSA International: 112395

Approvals, Australian Gas Association: 4717; except VR8300M models

Pressure Ratings (psi): 1/2 psi Pressure Ratings (kPa): 3.5 kPa Ignition Type: Standing Pilot

Combination gas control for use in 24 Vac, 120 Vac, gas-fired, standing pilot appliances with capacities from 30 to 300 cfh.

- Control includes safety shutoff, manual valve, two automatic operators, pressure regulator and pilot adjustment.
- Compact size.
- Provides two automatic valves.
- Solenoid operated first automatic valve opens on thermostat call for heat, closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meets codes requiring dual safety shut-off.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- Compatible with ECO connector.
- LITE-RITE (OFF-PILOT-ON) lighting sequence.

### Accessories:

390427A/U - One 3/4 x 1/2 in. reducer bushing 390427B/U - One 1/2 inch x 3/8 inch reducer bushing

390427E/U – Two 3/4 x 1/2 in. reducer bushings 393200-1/U – ECO adapter with 1/4" x 0.032" quick-connect terminals for VR8200 and VR8300 family.

393690-13/U - 1/2" NPT Elbow Flange kit includes flange, o-rings and hex screws

393690-4/U - 3/4" NPT Straight Flange kit includes flange, o-rings and hex screws

393691/U - Single Stage Natural to LP Gas Conversion Kit. 8" to 12" adjustment range. Includes regulator spring, o-ring, adjustment screw and cap screw

394588/U - Single Stage LP to Natural Gas Conversion Kit. 3" to 5" adjustment range. Includes regulator spring, o-ring, adjustment screw

395253-1/U - Single Stage LP to Natural Gas Conversion Kit. 5" to 7" WC adjustment. Includes regulator spring, o-ring, and adjustment

396221/U - Single Stage Natural to LP Gas Conversion Kit. 8" to 12" adjustment range. Includes regulator spring, o-ring, and adjustment screw. Reuse existing cap screw.

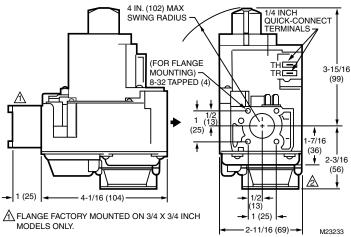
396222/U - Single Stage LP to Natural Gas Conversion Kit. 3" to 5" adjustment range. Includes regulator spring, o-ring, and adjustment screw. Reuse existing cap screw.

	Material Number	Voltage	Frequency	Opening Characteristics	Inlet/Outlet Size (in.)	Pressure Regulator Setpoint (in. wc)	Pressure Regulator Setpoint (kPa)	Electrical Connections	Includes
	VR4300A4502/U	120 Vac	60 Hz	Standard	3/4 in. straight flange on inlet x 3/4 in.	3.5 in. WC	0.87 kPa	21 in. (533 mm) leadwire.	One 1/2 x 3/8 in. reducer bushing Two 3/4 x 1/2 in. reducer bushings Natural to LP Conversion Kit
	VR8300A3500/U	24 Vac	60 Hz	Standard	1/2 in. x 3/4 in.	3.5 in. WC	0.87 kPa	1/4 in. quick- connect male terminals	One 3/4 x 1/2 in. reducer bushing Natural to LP Conversion Kit
	VR8300A3518/U	24 Vac	60 Hz	Standard	1/2 in. x 3/4 in.	3.5 in. WC	0.87 kPa	1/4 in. quick- connect male terminals	One 3/4 in. straight flange One 3/4 x 1/2 in. reducer bushing Natural to LP Conversion Kit Q340 Thermocouple ECO Adaptor
	VR8300A4508/U	24 Vac	60 Hz	Standard	3/4 in. straight flange on inlet x 3/4 in.	3.5 in. WC	0.87 kPa	1/4 in. quick- connect male terminals	Two 3/4 x 1/2 in. reducer bushings Natural to LP conversion kit
	VR8300A4516/U	24 Vac	60 Hz	Standard	3/4 in. straight flange on inlet x 3/4 in.	3.5 in. WC	0.87 kPa	1/4 in. quick- connect male terminals	Two 3/4 x 1/2 in. reducer bushings Natural to LP conversion kit Q340 Thermocouple ECO adaptor
	VR8300C4506/U	24 Vac	60 Hz	Step	3/4 in. straight flange on inlet x 3/4 in.	Step Setting: 0.9 in. WC non-adjustable; Full Rate: 3.5 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.22 kPa	1/4 in. quick- connect male terminals	Two 3/4 x 1/2 in. reducer bushings
	VR8300H4501/U	24 Vac	60 Hz	Slow	3/4 in. straight flange on inlet x 3/4 in.	3.5 in. WC	0.87 kPa	1/4 in. quick- connect male terminals	-
J	VR8300M4406/U	24 Vac	50 Hz; 60 Hz	Standard	3/4 in. x 3/4 in.	3.5 in. WC	0.87 kPa	1/4 in. quick- connect male terminals	Two 3/4 x 1/2 in. reducer bushings Natural to LP Conversion Kit

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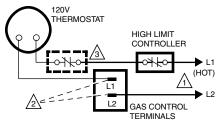
# **Combination Gas Controls**

## Dimensions in inches (millimeters)



⚠ STEP-OPEN MODELS ONLY.

## Wiring connections for 120 volt control



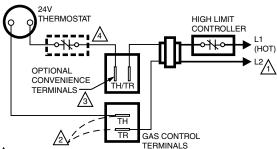
POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

DO NOT JUMPER THESE TERMINALS. THIS SHORTS VALVE COIL AND MAY BURN OUT ANTICIPATOR IN THERMOSTAT.

3 OPTIONAL HIGH LIMIT.

M3092B

# Wiring connections for 24 volt control



POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

DO NOT JUMPER THESE TERMINALS. THIS SHORTS VALVE COIL AND CAN BURN OUT ANTICIPATOR IN THERMOSTAT.

CONVENIENCE TERMINALS SERVE ONLY AS A TIE POINT.
THEY ARE NOT INTERNALLY WIRED TO THE CONTROL CIRCUIT
OR TO GROUND.

OPTIONAL HIGH LIMIT.

M2915C

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