

## VR8345M Universal Electronic Ignition Gas Control

The VR8345M Universal Electronic Ignition Gas Control is used in gas-fired appliances with capacities up to 300 cu ft/hour at 1 inch wc pressure drop [8.5 cu m/hour at 0.25 kPa] for natural gas. The VR8345M will operate with a direct spark ignition (DSI), hot surface ignition (HSI) or intermittent pilot ignition. The control includes a manual valve, two automatic operators, a pressure regulator, pilot adjustment, pilot plug, and ignition adapter.



- Compatible with hot surface pilot, intermittent pilot and direct spark ignition.
- Replaces virtually any IP, HSI or DSI gas control.
- For use with 24 Vac heating appliances that burn natural or manufactured gas or liquefied petroleum (LP) gas. (Includes converter kit to adapt from natural gas to LP gas.)
- Compact to fit into tightly packed, high efficiency heating equipment.
- Works with virtually all residential equipment and all but the largest commercial equipment, with a regulation capacity range of 30,000 to 415,000 Btuh natural gas (48,600 to 672,300 LP gas).
- All adjustments and wiring connections accessible from top of control.
- Straight-through body pattern.
- 1/8 in. NPT inlet and outlet taps on top of gas control aid adjustment of gas pressure in problem installations.
- 3/4 in. x 3/4 in. inlet and outlet fit easily on high capacity systems plus others using 1/2 in. reducer bushings.

- 4.0 in. swing radius allows easy rotation into position inside the tightest furnace vestibules.
- Can be installed at any angle including vertically between 0 and 90 degrees from the upright position.
- Clearly marked, keyed terminal block allows quick attachment of wires and IP/DSI/HSI jumper. Keyed jumper cannot be incorrectly inserted.
- Internal inlet screen blocks contaminants in gas line from entering valve.
- -40°F to +175°F (-40°C to +79°C) temperature range standard.
- Standard opening.

### CONTENTS

Specifications .....	2
Ordering Information .....	2
Installation .....	3
Startup and Checkout .....	11
Maintenance .....	13
Operation .....	14
Service .....	17



# Specifications

**IMPORTANT:** *The specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit may not exactly match the listed specification. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.*

MODEL: VR8345M Universal Combination Gas Control.  
 AMBIENT TEMPERATURE RANGE: -40° to +175°F  
 (-40° to +79°C).

BODY PATTERN: Straight-through.  
 REGULATOR TYPE: Standard opening.  
 INLET X OUTLET SIZE: 3/4 x 3/4 inch.  
 IGNITION ADAPTER: Configures VR8345M to operate with direct spark or hot surface ignition.  
 ELECTRICAL RATINGS:  
 Voltage and Frequency: 24 Vac, 60 Hz.  
 Current Draw: 0.7A.  
 CAPACITY: See Table 1.

Use conversion factors in Table 2 to convert capacities for other gases.

TABLE 1—GAS CAPACITY.

Size (Inlet x Outlet)	Capacity (at 1 inch wc pressure drop) <sup>a</sup>	Minimum Regulated Capacity	Maximum Regulated Capacity
3/4 x 3/4	300 feet <sup>3</sup> /hr (8.5 meter <sup>3</sup> /hr)	30 feet <sup>3</sup> /hr (0.8 meter <sup>3</sup> /hr)	415 feet <sup>3</sup> /hr (11.8 meter <sup>3</sup> /hr)

<sup>a</sup> Capacity based on 1000 Btu/cu ft, 0.64 specific gravity natural gas at 1 in. wc pressure drop (37.3 MJ/cu m, 0.64 specific gravity natural gas at 0.25 kPa pressure drop).

TABLE 2—GAS CAPACITY CONVERSION FACTORS.

Gas	Specific Gravity	Multiply Listed Capacity By
Manufactured	0.60	0.516
Mixed	0.70	0.765
Propane	1.53	1.620

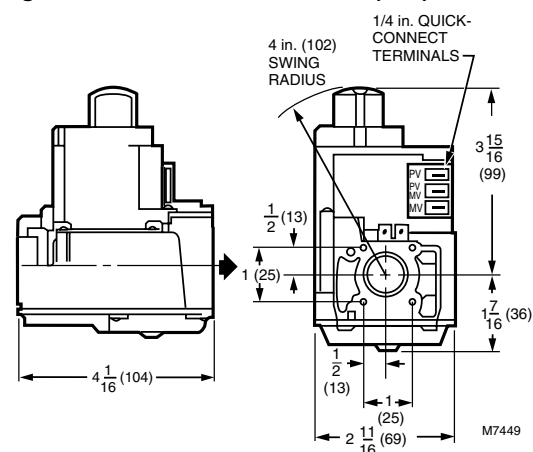
**APPROVALS:**

American Gas Association Design Certificate: L2025007.  
 Canadian Gas Association Design Certificate: L2025007.

PIPE ADAPTERS: Includes two 3/4 to 1/2 inch NPT bushings and one 1/2 to 3/8 inch NPT bushing.

CROSS REFERENCE: See Table 3 for cross reference information.

Fig. 1—VR8345 dimensions in in. (mm).



# Ordering Information

When purchasing replacement and modernization products from your TRADELINE<sup>®</sup> wholesaler or distributor, refer to the TRADELINE<sup>®</sup> Catalog or price sheets for complete ordering number, or specify—

1. Order number.
2. Ordered separately; pilot burner, igniter-sensor, transformer, limit controller, and thermostat or controller as required.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. Your local Home and Building Control Sales Office (please check the white pages of your phone directory).
2. Home and Building Control Customer Logistics  
 Honeywell Inc., 1885 Douglas Drive North  
 Minneapolis, Minnesota 55422-4386 (612) 951-1000

In Canada—Honeywell Limited/Honeywell Limitée, 740 Ellesmere Road, Scarborough, Ontario M1P2V9. International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.