

Gas Burner Controls—Combination

VR8204 Intermittent Pilot Dual Automatic Valve Combination Gas Controls

Combination gas controls for use in 24 Vac, gas-fired, intermittent pilot appliances with capacities from 20 to 200 cfh.



- Controls include manual valve, two automatic operators, servo pressure regulator and pilot adjustment.
- Use with S86F,H; S8600F,H and S8610 Control Modules.
- Compact size.
- Provide 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.
- Meet codes requiring dual safety shutoff.
- Standard and slow opening natural gas models include natural to LP gas conversion kit; LP to natural gas conversion kit also available.
- All adjustments and wiring connections are accessible from top of control.
- ON-OFF lighting sequence.

VR8204 controls replace the following Honeywell and competitive combination gas controls for applications requiring a minimum capacity of 20 cfh and a maximum capacity of 200 cfh.

- Honeywell VR8440
- White Rodgers 36E36/38
- Robertshaw 7100DER (700-070)

APPROVALS:

American Gas Association Design Certified: File No. L2025006.

Canadian Gas Association Design Certified: File No. L2025006.

MOUNTING: 0 to 90 degrees from the upright position of gas control knob, including vertically.

BODY PATTERN: Straight-through with ½ in. inlets and outlets.

PRESSURE TAPPING: ½ in. NPT with plug.

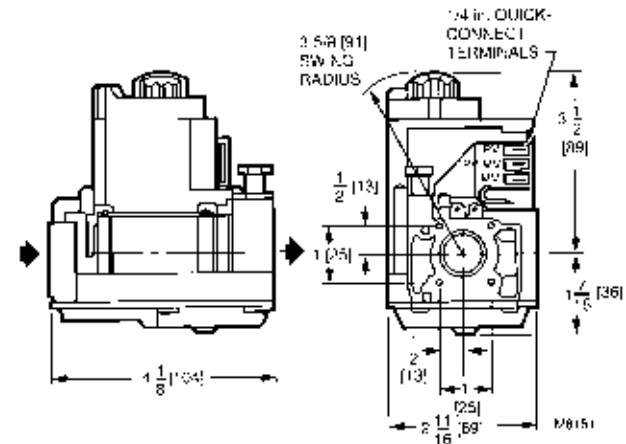
PRESSURE RATINGS: ½ psi (3.5 kPa) inlet pressure.
PILOT GAS OUTLET: Compression fitting for ¼ in. OD tubing.

TEMPERATURE RATINGS:
Ambient: VR8204A,C,H: 0 F to 175 F (–18 C to +79 C).
VR8204M: –40 F to +175 F (–40 C to +79 C).

ELECTRICAL RATINGS:
Power Supply: 24 Vac, 60 Hz.
Electrical Connections: ¼ in. male quick-connects.
THERMOSTAT HEAT ANTICIPATOR SETTING: 0.5A.

See VR8304 for typical wiring connections.

VR8204 dimensions in in. (mm).



Order Number	Inlet-Outlet Size (in.)	Capacity, A.G.A. Certified ^a		Pressure Regulator Setting		Type of Gas	Type of Pressure Regulator	Includes
		cfh	m ³ /hr	in. wc	kPa			
VR8204A2076	½ x ½	150	4.2	3.5	0.87	Nat.	Standard	½ x ⅝ in. reducer bushing ^b ; 393691 Natural to LP gas conversion kit.
VR8204A2258				9.5	2.36	LP		
VR8204A2266				3.5	0.87	Nat.	Step-opening	
VR8204C1001				0.7 step ^c ; 3.5 full rate	0.17 step ^c ; 0.87 full rate			
VR8204C1019				0.9 step ^c ; 3.5 full rate	0.22 step ^c ; 0.87 full rate			
VR8204C1027				1.2 step ^c ; 3.5 full rate	0.30 step ^c ; 0.87 full rate	LP		
VR8204C1035				1.4 step ^c ; 10.0 full rate	0.35 step ^c ; 2.5 full rate			
VR8204C1043				1.7 step ^c ; 3.5 full rate	0.48 step ^c ; 0.87 full rate	Nat.		

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VR8204 continued

Order Number	Inlet-Outlet Size (in.)	Capacity, A.G.A. Certified ^a		Pressure Regulator Setting		Type of Gas	Type of Pressure Regulator	Includes			
		cfh	m ³ /hr	in. wc	kPa						
<u>VR8204C1050</u>	½ x ½	150	4.2	2.5 step ^c ; 10.5 full rate	0.62 step ^c ; 2.62 full rate	LP	Step-opening	—			
<u>VR8204C1068</u>				4.0 step ^c ; 10.0 full rate	0.99 step ^c ; 2.5 full rate						
<u>VR8204C1076</u>				5.5 step ^c ; 10.0 full rate	1.37 step ^c ; 2.5 full rate						
<u>VR8204H1006</u>						3.5	0.87		Nat.	Slow opening	
<u>VR8204H1014</u>						10.0	2.5		LP		
<u>VR8204M1091</u>						3.5	0.87		Nat.	Standard	½ x ⅜ in. reducer bushing ^b ; 393690–14 bag assembly— ¾ in. straight flange with O ring, screws and wrench; and 393691 Natural to LP gas conversion kit.
<u>VR8204M8005</u>						3.4	0.84				
<u>VR8204M8013</u>			10.0	2.5	LP		394345-20LN Flange Assembly.				

^a Capacities based on 1,000 Btu/ft³, 0.64 sp gr natural gas at 1 in. wc pressure drop (37.3 MJ/m³, 0.64 sp gr natural gas at 0.25 kPa pressure drop).

^b Use of ½ x ⅜ in. reducer bushing reduces capacity to 130 cfh (3.7 m³/hr).

^c Step pressure is not adjustable.