

VR4305

Direct Ignition Combination Gas Control

Application

These direct ignition combination gas controls are used in gas-fired appliances with capacities up to 300 feet³/hour at 1 inch wc pressure drop [8.5 meters³/hour at 0.25 kPa] for natural gas. They include a manual valve, two automatic operators, a pressure regulator, and a conduit cover. See Table 1 for temperature ranges and regulator types.

BODY PATTERN: Straight-through.

INLET X OUTLET SIZES AVAILABLE: 1/2 x 3/4 inch.
ADAPTERS: Adapters available for 1/2 and 3/4 inch straight and angle connections. Refer to Table 3.

ELECTRICAL RATINGS:

Voltage and Frequency: 120 Vac, 60 Hz.

Thermostat Heat Anticipator Setting: 0.14A.

Current Draw: 0.14A.

CAPACITY:

Size (Inlet x Outlet)	Capacity (at 1 inch wc pressure drop) ^a	Minimum Regulated Capacity	Maximum Regulated Capacity
1/2 x 1/2	240 feet ³ /hour [6.8 meter ³ /hour]	30 feet ³ /hour [0.8 meter ³ /hour]	340 feet ³ /hour [9.6 meter ³ /hour]
1/2 x 3/4	270 feet ³ /hour [7.6 meter ³ /hour]	30 feet ³ /hour [0.8 meter ³ /hour]	370 feet ³ /hour [10.5 meter ³ /hour]
3/4 x 3/4	300 feet ³ /hour [8.5 meter ³ /hour]	30 feet ³ /hour 0.8 meter ³ /hour]	415 feet ³ /hour [11.8 meter ³ /hour]

^a Capacity based on 1000 Btu/feet³, 0.64 specific gravity natural gas at 1 inch wc pressure drop [37.3 MJ/meter³, 0.64 specific gravity natural gas at 0.25 kPa pressure drop].

TABLE 1—TEMPERATURE RANGES AND
REGULATOR TYPES.

Model Number	Ambient Temperature Range	Regulator Type
VR4305H	0° F to 175° F [-18° C to +79° C]	Slow-opening
VR4305M	-40° F to 175° F [-40° C to +79° C]	Standard-opening
VR4305P	-40° F to 175° F [-40° C to +79° C]	Step-opening

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

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	1.62

TABLE 3—ADAPTER (FLANGE) PART NUMBERS.

Inlet/ Outlet Pipe Size	Flange Type	Part Number	
		Without Hex Wrench	With Hex Wrench
1/2 inch NPT	Straight	393690-6	393690-16
	Elbow	393690-3	393690-13
3/4 inch NPT	Straight	393690-4	393690-14
	Elbow	393690-5	393690-15

NOTE: Flange Kits include one flange with attached O-ring and four mounting screws.

APPROVALS:

American Gas Association design certificate:

L2025007.

Canadian Gas Association design certificate:

L2025007.

Australian Gas Association design certificate:

Applied for.

Delta C.