

# QUICK REFERENCE GUIDE

## 80% MODULATING ECM MULTI-POSITION RESIDENTIAL GAS FURNACES (33" TALL)

### NOTES:

1. If the furnace is equipped with NOx screens and is to be used with LP (propane) gas, the screens must be removed prior to start-up.
2. Drip leg in the gas line must be installed.
3. The furnace controls require correct polarity on the power supply and a proper ground.
4. Y & G must be connected to the control board for cooling operation.
5. External filters required on all configurations.
6. Electrical or gas entry is available on both casing sides.
7. To measure total static pressure add supply duct pressure to the return duct pressure, add pressure drop across the 'A' coil, and add pressure drop across the filter. Ignore negative signs on the readings.
8. Inlet gas pressure for natural gas should be 7" and for propane should be 11" w.c. Nominal manifold gas pressure is 3.5" for natural gas and 10" w.c. for propane at max. input.
9. For downflow application the vent blower must be rotated 90 left or right as shown.

Models	Airflow CFM (Bottom Return without Filters)				Minimum Wire Size awg @ 75' One-Way	Maximum Over Current Protection
	0.5" ESP (Nominal)*					
	D-A	C-A	B-A	A-B		
(T,Y,C,L)PLC060A12MP12C	600	815	1050	1340	14	15
(T,Y,C,L)PLC080B12MP12C	580	775	960	1290	14	15
(T,Y,C,L)PLC080C16MP12C	1000	1200	1395	1715	14	15
(T,Y,C,L)PLC100C16MP12C	980	1165	1345	1600	14	15
(T,Y,C,L)PLC100C20MP12C	1140	1330	1515	2110	12	20
(T,Y,C,L)PLC120C20MP12C	1200	1400	1510	1990	12	20

Models	Input Rate		Total Unit Amps	Air Temp. Rise Max Input °F	Air Temp. Rise Min Input °F	Time For 1 ft <sup>3</sup> Natural Gas (1030 Btu/Ft <sup>3</sup> ) Seconds (On Max. Rate)
	Max	Min				
(T,Y,C,L)PLC060A12MP12C	60,000	30,000	7.0	30-60	20-50	62
(T,Y,C,L)PLC080B12MP12C	80,000	40,000	7.5	40-70	20-50	46
(T,Y,C,L)PLC080C16MP12C	80,000	40,000	10.0	35-65	20-50	46
(T,Y,C,L)PLC100C16MP12C	100,000	50,000	10.0	35-65	20-50	37
(T,Y,C,L)PLC100C20MP12C	100,000	50,000	12.0	35-65	20-50	37
(T,Y,C,L)PLC120C20MP12C	120,000	60,000	12.0	45-75	25-55	30

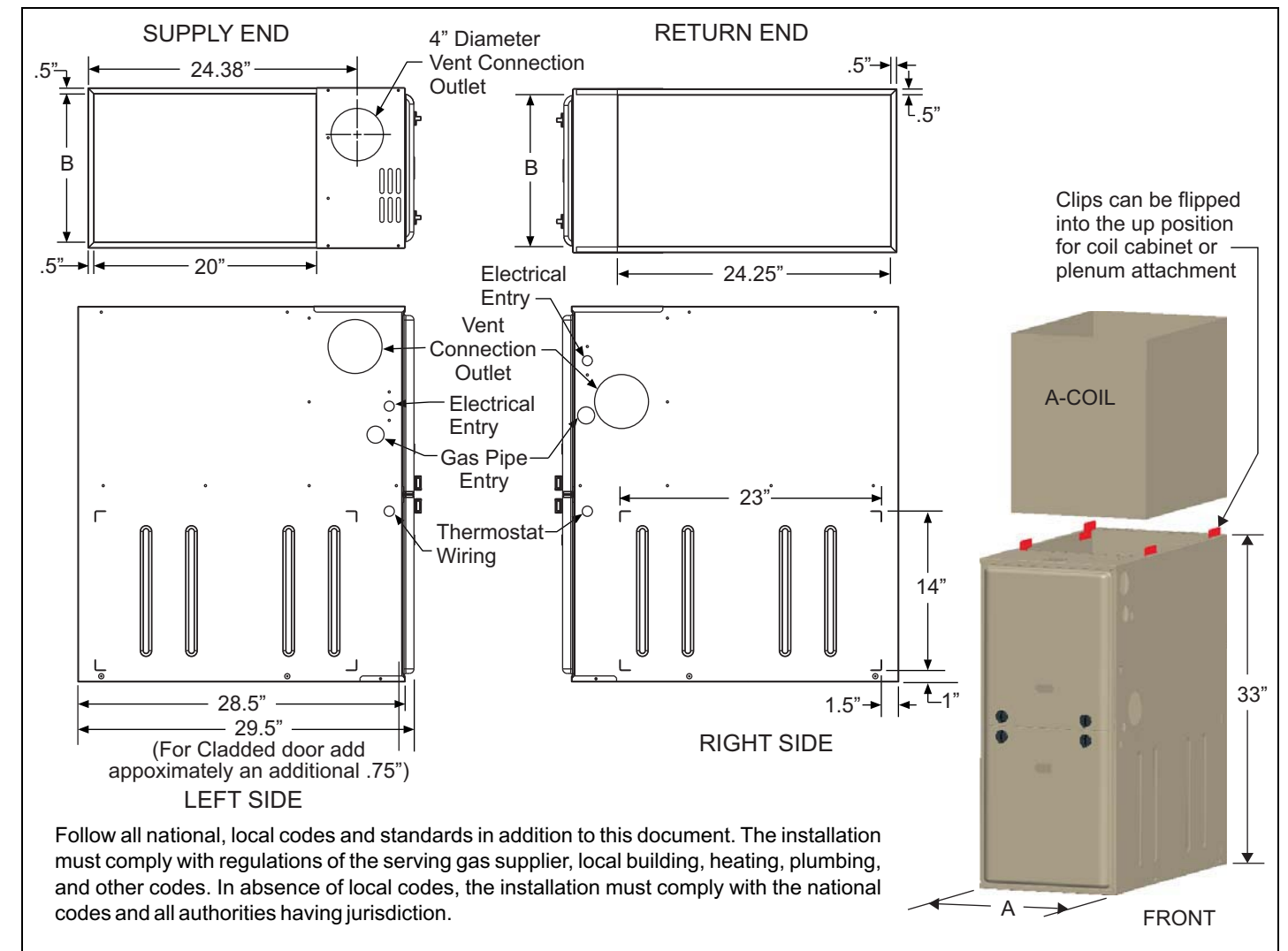
\* Other airflows are available. see Tech guide for all CFM options.

### LED INDICATOR

- Slow Green Flash - Normal operation in standby mode
- Slow Amber Flash - Normal operation with call for cooling
- Two Amber Flashes - Normal operation with call for heat

- Three Amber Flashes - Normal operation, burner is on at end of thermostat cycle.
- Six Amber Flashes - Normal operation with call for heat pump heating.
- Any Red Flash - Fault condition

This document does not replace the installation instructions, which must be referred to for detailed information.



### CLEARANCES

Application	Upflow	Downflow	Horizontal
Top	1"	0"	0"
B-Vent	1"	1"	1"
Rear	0"	0"	0"
Side	0"	0"	1"
Front*	0"	0"	0"
Floor	Combustible	Combustible <sup>1</sup>	Combustible
Closet	Yes	Yes	Yes
Line Contact	No	No	Yes

1. For combustible floors only when used with special sub-base.
- \* 24" clearance in front and 18" on side recommended for service access.  
All furnaces approved for alcove and attic installation.

### DIMENSIONS

Cabinet Size	A (in)	B (in)
All 'A' Cabinet Furnaces	14-1/2"	13-3/8"
All 'B' Cabinet Furnaces	17-1/2"	16-3/8"
All 'C' Cabinet Furnaces	21"	19-7/8"



**MOST COMMON INSTALLATION CONFIGURATIONS (MORE OPTIONS AVAILABLE WITH INDUCER ROTATION, WHICH IS COVERED IN THE INSTALLATION MANUAL)**

Furnace is multi-position and may be installed in any of the configurations shown.

Inducer blower may be rotated 90° either way to vent through casing side, as shown below.

These are Category I units and the vent system must be installed in accordance with latest edition of the National Fuel Gas Code, Z223.1/NFPA 54, or in Canada, CSA B149.1.

These furnaces should be vented **only** with type B vent pipe. No single - wall vent pipe or vent connectors are allowed. This furnace **should not** be vented into a masonry chimney.

These are modulating furnaces which vary the gas input between 50% and 100% of full rate. To make it easier to check that the furnace is not overfired or underfired, put the furnace in TEST MODE and clock the gas meter. See Installation Booklet for details of TEST MODE.

Optional - Vent blower may also be rotated 90° left or right to vent through casing side.

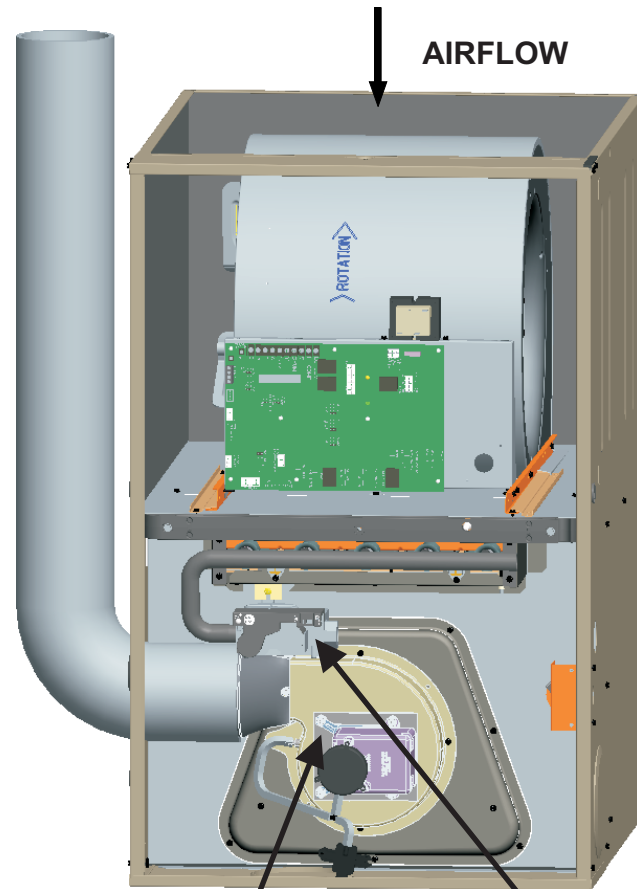
Combustion Air Entry

Junction Box (May be moved to other side)

Bottom blockoff plate - Remove for bottom return applications

AIRFLOW

UPFLOW

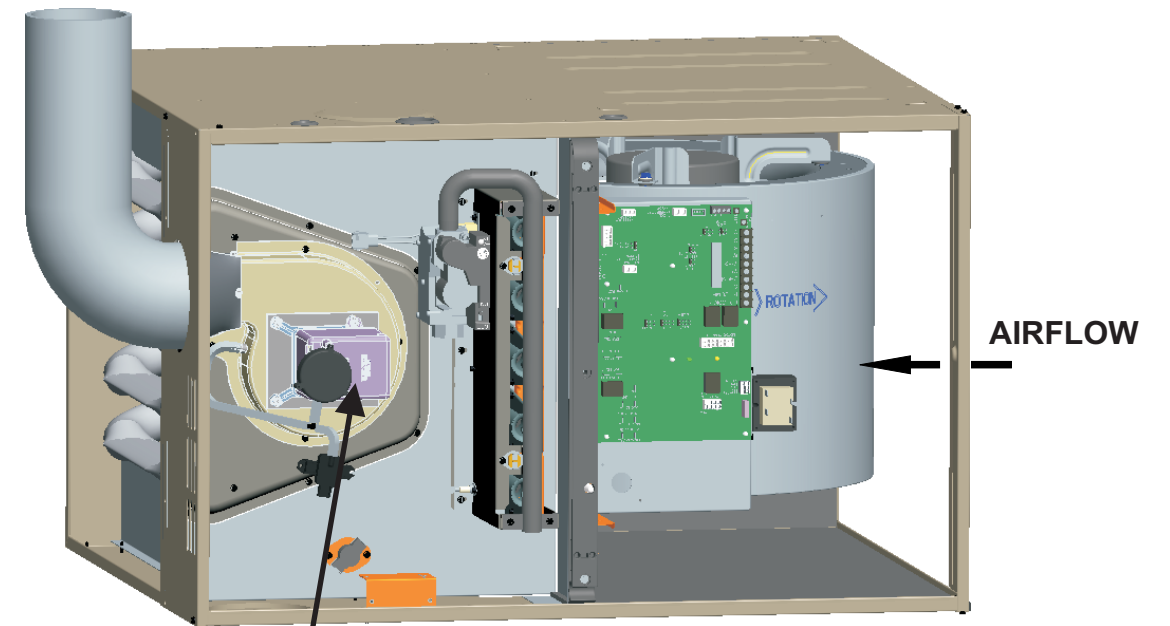


Vent blower must be rotated 90° left or right to vent through casing side.

For downflow applications, the gas valve must be rotated upwards as shown

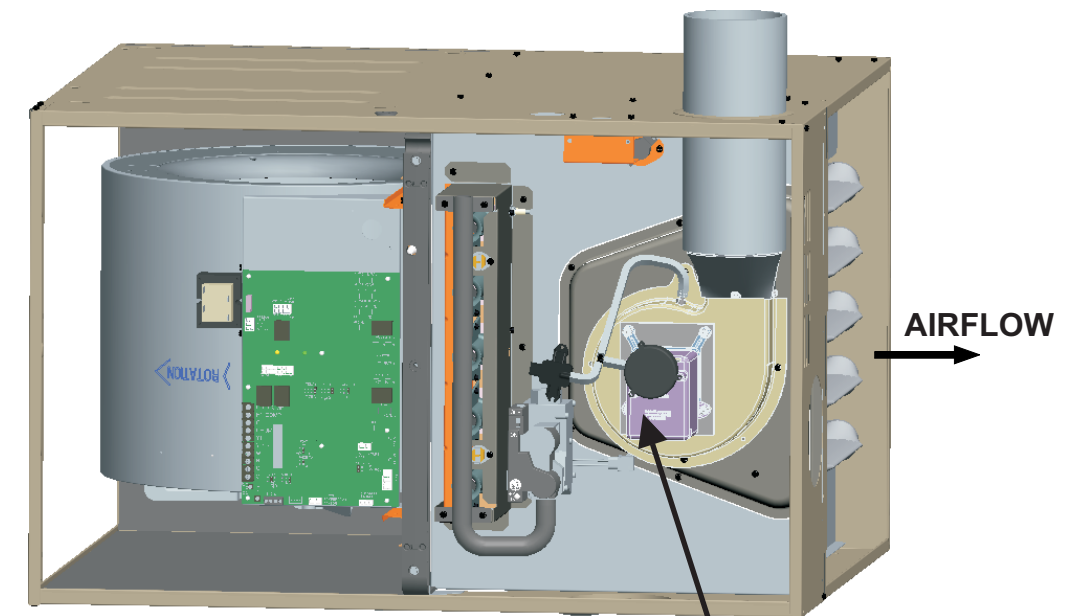
DOWNFLOW

Must be installed on combustibles floor base or coil cabinet to prevent blockage of combustibles air openings



Vent blower may also be rotated 90° left or right to vent through casing top.

HORIZONTAL LEFT



Vent blower may also be rotated 90° left or right to vent through casing top.

HORIZONTAL RIGHT