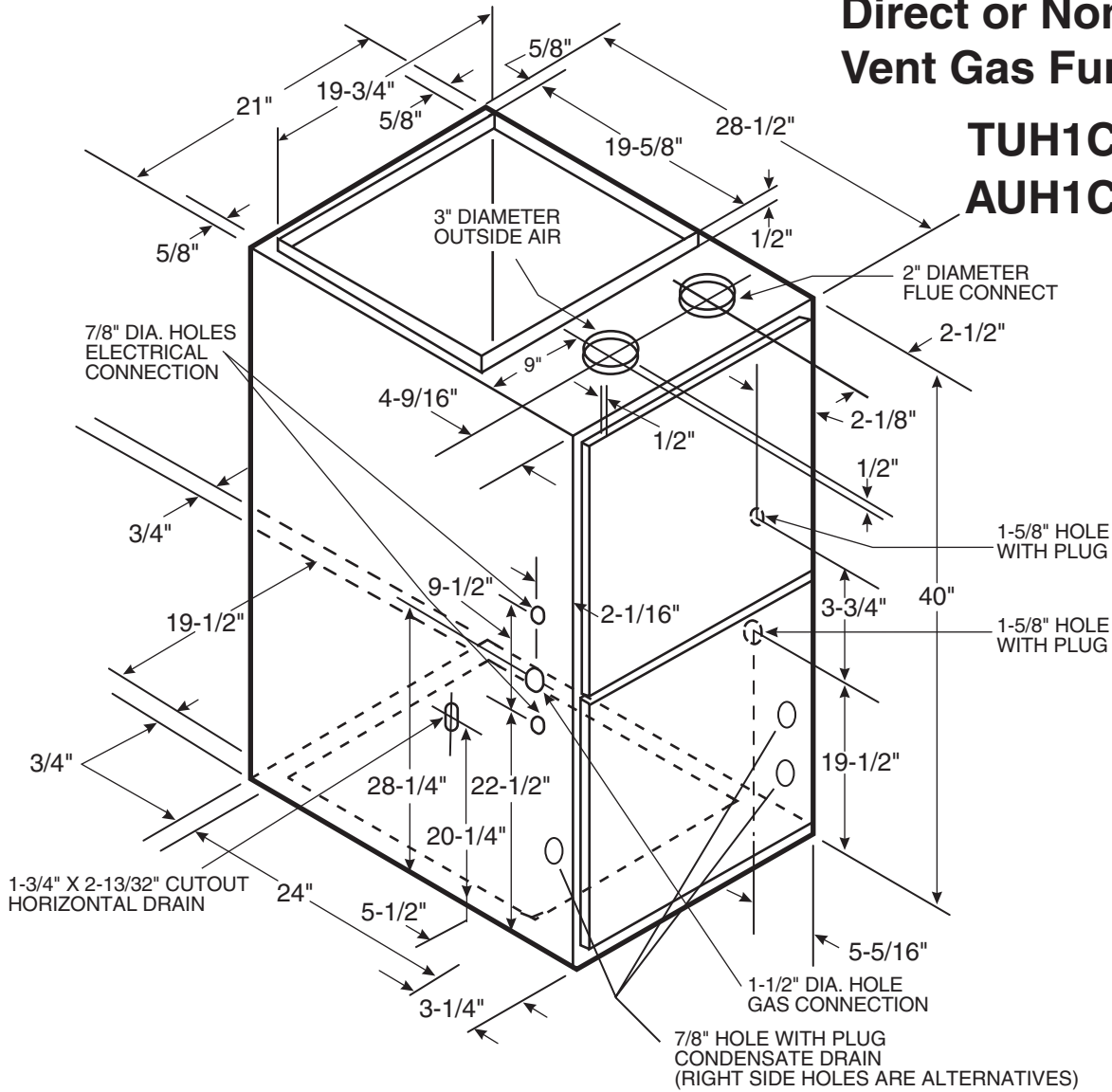


TAG: _____

SUBMITTAL

Upflow/Horizontal Direct or Non-Direct Vent Gas Furnace

TUH1C100A9481C
AUH1C100A9481C



FURNACE AIRFLOW (CFM) VS. EXTERNAL STATIC PRESSURE (in. w.c.)

MODEL	SPEED TAP	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
*UH1C100A9481C	4 - HIGH - Black	1982	1912	1836	1761	1679	1593	1496	1389	1267
	3 - MED.-HIGH - Blue	1892	1832	1765	1696	1621	1538	1446	1342	1205
	2 - MED.-LOW - Yellow	1759	1712	1660	1604	1536	1465	1383	1275	1149
	1 - LOW - Red	1593	1557	1521	1485	1433	1370	1294	1182	1068

*= First letter may be "A" or "T"

CFM VS. TEMPERATURE RISE

MODEL	Cubic Feet Per Minute (CFM)										
	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
*UH1C100A9481C			68	63	59	55	52	49	46	44	

*= First letter may be "A" or "T"

General Data ①

TYPE	Upflow/Horizontal
RATINGS ②	
Input BTUH	97,000
Capacity BTUH (ICS) ③	92,150
AFUE (Upflow / Horizontal)	95.0 / 94.2
Temp. rise (Min.-Max.) °F.	35 - 65
BLOWER DRIVE	DIRECT
Diameter-Width (In.)	10 x 10
No. Used	1
Speeds (No.)	4
CFM vs. in. w.g.	See Fan Performance
Motor HP	1/2
R.P.M.	1075
Volts/Ph/Hz	115/1/60
COMBUSTION FAN - Type	Centrifugal
Drive - No. Speeds	Direct - 1
Motor HP - RPM	1/20 - 3450
Volts/Ph/Hz	115/1/60
F.L. Amps	0.71
FILTER — Furnished?	No
Type Recommended	High Velocity
Hi Vel. (No.-Size-Thk.)	1 - 20x25 - 1in.

VENT PIPE DIAMETER — Min. (in.) ⑤⑥	3 Round
HEAT EXCHANGER	
Type-Fired	Alum. Steel
-Unfired	
Gauge (Fired)	20
ORIFICES — Main	
Nat. Gas Qty. — Drill Size	5 — 45
L.P. Gas Qty. — Drill Size	5 — 56
GAS VALVE	Redundant - Single Stage
PILOT SAFETY DEVICE	
Type	Hot Surface Ignition
BURNERS — Type	Multiport Inshot
Number	5
POWER CONN. — V/Ph/Hz ④	115/1/60
Ampacity (In Amps)	12.5
Max. Overcurrent Protection (amps)	20
PIPE CONN. SIZE (IN.)	1/2
DIMENSIONS	H x W x D
Crated (In.)	41- 3/4 x 23 x 30-1/2
Uncrated (In.)	40 x 21 x 28
WEIGHT	
Shipping (Lbs.)/Net (Lbs)	171 / 160

Notes

- ① Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3
- ② For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 1,000 feet for elevations above 2,000 feet above sea level. For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4% per 1,000 feet for elevations above 4,500 feet above sea level.
- ③ Based on U.S. government standard tests.
- ④ The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.
- ⑤ Refer to the Vent Length Table in the Installer's Guide or the Allowable Vent Length label located on the furnace.
- ⑥ All *UH1 furnace models have a vent outlet diameter that equals 2".

Mechanical Specifications

NATURAL GAS MODELS — Central heating furnace designs are certified by the American Gas Association for both natural and L.P. gas. Limit setting and rating data were established and approved under standard rating conditions using American National Standards Institute standards.

SAFE OPERATION — The Integrated System Control has solid state devices, which continuously monitor for presence of flame, when the system is in the heating mode of operation. Slow opening, dual solenoid combination gas valve and regulator provide extra safety and quieter operation.

QUICK HEATING — Durable, cycle tested, heavy gauge **aluminized steel heat exchanger and stainless steel secondary heat exchanger** quickly transfer over 90% of the heat to provide warm conditioned air to the structure. **Low energy power vent blower**, to increase efficiency and provide a positive discharge of gas fumes to the outside as it draws outdoor air in for sealed combustion, which means it uses no indoor air for combustion.

BURNERS — Multi-port, in-shot burners will give years of quiet and efficient service. All models can be converted to **L.P. gas** without changing burners.

INTEGRATED SYSTEM CONTROL — Exclusively designed operational program provides total control of furnace limit sensors, blowers, gas valve, flame control and includes self diagnostics for ease of service. The built-in, selectable "**Cooling Fan Off**" feature provides time-delay capability like a BAY24X045 Time-Delay Kit for cooling operation. Also contains connection points for E.A.C./humidifier.

AIR DELIVERY — The multispeed, direct-drive blower motor, with sufficient airflow range for most heating and cooling requirements, will switch from heating to cooling speeds on demand from room thermostat. The blower door safety switch will prevent or terminate furnace operation when the blower door is removed. (Fan relay and 35VA control transformer is standard).

AIR LEAKAGE — Air leakage is less than 2% of design airflow rate in accordance with ASHRAE 193.

STYLING — **Heavy gauge steel and "wrap-around" cabinet construction** is used in the cabinet with baked-on enamel finish for strength and beauty. The heat exchanger section of the cabinet is completely lined with foil-faced fiberglass insulation. This results in quiet and efficient operation due to the excellent acoustical and insulating qualities of fiberglass.

FEATURES AND GENERAL OPERATION — These High Efficiency, Direct Vent, Condensing Gas Furnaces employ a Hot Surface Ignition system, which eliminates the waste of a constantly burning pilot. They are convertible for HORIZONTAL use by rotating the unit to its left side. The integrated system control lights the main burners upon a demand for heat from the room thermostat. Complete front service access.

- a. Low energy power venter.
- b. Vent proving differential switch.

Since Ingersoll Rand has a policy of continuous product and product data improvement, it reserves the right to change specifications and design without notice.

Technical Literature - Printed in U.S.A.

Ingersoll Rand
6200 Troup Highway
Tyler, TX 75707



Library	Unitary
Product Section	Furnaces
Product	Furnace
Model	TUH1
Literature Type	Submittal
Sequence	-
Date	03/17
File No.	TUH1C100A-SUB-1E
Supersedes	TUH1C100A-SUB-1D