

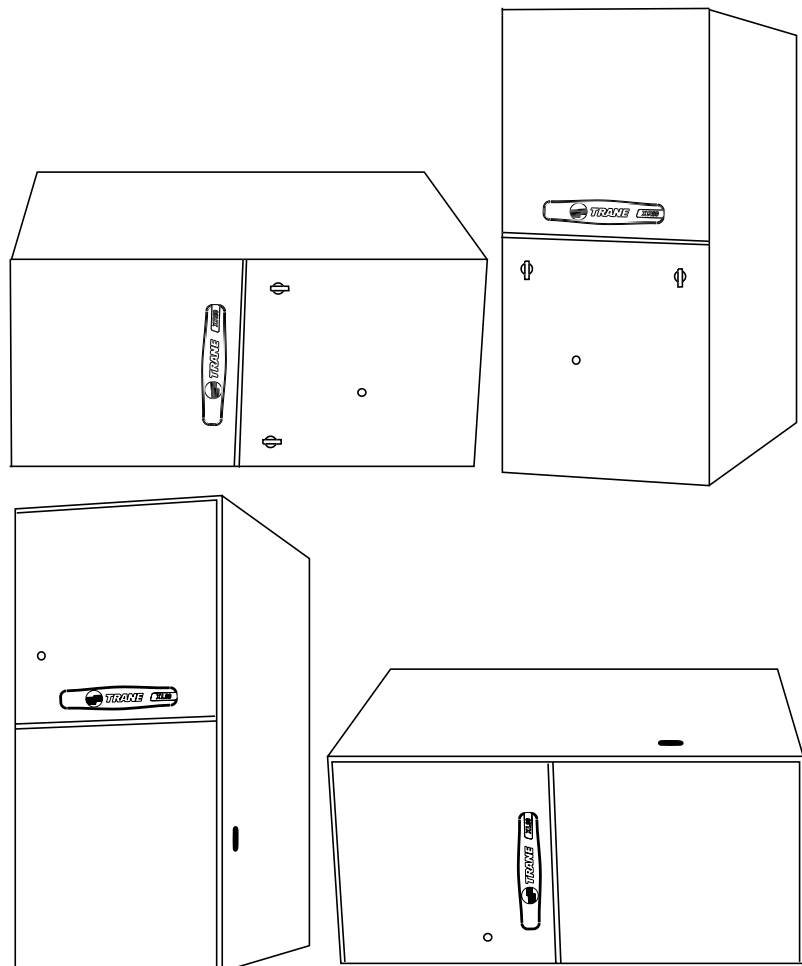


TRANE®

Upflow/Horizontal Left, Downflow/Horizontal Right Two Stage Condensing Gas-Fired Furnace

XL 90

TUX2B060A9362A, TUX2B080A9422A,
TUX2C100A9482A, TUX2D120A9602A,
TDX2B060A9362A, TDX2B080A9422A,
TDX2C100A9482A, TDX2D120A9602A
Direct Vent with
Variable Speed Inducer





General Features

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. Dual solenoid combination gas valve and regulator provide extra safety.

QUICK HEATING

Durable, cycle tested, heavy gauge **aluminized steel heat exchanger** quickly transfers 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.

BURNERS

Multipoint Inshot 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. Also contains connection points for E.A.C./humidifier.

AIR DELIVERY

The four speed, direct drive blower motor, has sufficient airflow 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.

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. Built-in bottom pan and alternate bottom, left or right side return air connection provision.

FEATURES AND GENERAL OPERATION

The XL90 High Efficiency Gas Furnaces employ an Adaptive Heat Up Silicon Nitride Hot Surface Ignition system, which eliminates the waste of a constant burning pilot. 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 pressure switch.

Contents

General Features	2
Features and Benefits	4
Standard Equipment	4
Optional Equipment	5
General Data	6-7
TUX2B060A9362A	
TUX2B080A9422A	
TUX2C100A9482A	
TUX2D120A9602A	
TDX2B060A9362A	
TDX2B080A9422A	
TDX2C100A9482A	
TDX2D120A9602A	
Performance Data	8-9
Venting Tables	10-11
Electrical Data	12-13
Field Wiring	14-15
Twinning Field Wiring	16-17
Dimensions	18-19



Features and Benefits

XL 90 STANDARD EQUIPMENT

- Direct Drive - 4 speed PSC Motor
- Silicon Nitride Igniter with adaptive heat up
- Variable speed induced draft blower
- Direct/Non-Direct vent option
- Fused 24 volt control circuit
- Manual reset burner safety switches
- Power supply 115/1/60
- Convertible to horizontal on left side
- 2-stage gas valve
- PVC venting-1 or 2 pipe option
- Accessory hook-up capability
- Integrated solid state control with self-diagnostics
- Attractive color accents
- Heavy gauge aluminized steel heat exchanger
- Multi-port In-shot burners
- Single wire twinning
- Hinged blower door *
- Perfect fit door latches*
- Insulated blower door*
- Gasketed blower door*
- Internal filter rack*
- Standard filter sizes
- Two tone color
- Multi-port In-shot burners
- Complete front service access
- Left/right gas connection
- Adjustable fan off times
- Optional L.P conversion kit
- Selectable cooling fan off delay eliminates need for BAY24X045 time delay kit
- **Lifetime limited primary heat exchanger or secondary heat exchanger warranty to original owner (Residential use)**
- **5 Year limited parts warranty**

* (Upflow only)



Features and Benefits

XL 90 OPTIONAL EQUIPMENT

Thermostat, 2-Stage Heat / 1-Stage Cooling	TAYSTAT241 []
Thermostat, Electronic Programmable 2-Stage Heating	TAYSTAT302C []
Thermostat, Mechanical Heating Only With Fan Switch	TAYSTAT303C []
Thermostat, Heating/Cooling Single Stage (Mounts Horizontally)	AY28X092 []
Thermostat, Heating/Cooling Single Stage (Mounts Vertically)	BAYSTAT305 []
Thermostat, Electronic Programmable 1-Stage Heating/1-Stage Cooling	TAYSTAT300C []
Propane Conversion Kit	BAYLPKT210A []
Electronic Air Filter, "Perfect Fit" Super Efficiency (14-1/2" Wide Gas Furnace)	TFE145A9FR0 []
Electronic Air Filter, "Perfect Fit" Super Efficiency (17-1/2" Wide Gas Furnace)	TFE175A9FR0 []
Electronic Air Filter, "Perfect Fit" Super Efficiency (21" Wide Gas Furnace)	TFE210A9FR0 []
Electronic Air Filter, "Perfect Fit" Super Efficiency (24-1/2" Wide Gas Furnace)	TFE245A9FR0 []
Electronic Air Filter, "Perfect Fit" High Efficiency (14-1/2" Wide Gas Furnace)	TFM145A9FR0 []
Electronic Air Filter, "Perfect Fit" High Efficiency (17-1/2" Wide Gas Furnace)	TFM175A9FR0 []
Electronic Air Filter, "Perfect Fit" High Efficiency (21" Wide Gas Furnace)	TFM210A9FR0 []
Electronic Air Filter, "Perfect Fit" High Efficiency (24-1/2" Wide Gas Furnace)	TFM245A9FR0 []
Electronic Air Filter, "Perfect Fit" Standard Efficiency (14-1/2" Wide Gas Furnace)	TFP145A9FR0 []
Electronic Air Filter, "Perfect Fit" Standard Efficiency (17-1/2" Wide Gas Furnace)	TFP175A9FR0 []
Electronic Air Filter, "Perfect Fit" Standard Efficiency (21" Wide Gas Furnace)	TFP210A9FR0 []
Electronic Air Filter, "Perfect Fit" Standard Efficiency (24-1/2" Wide Gas Furnace)	TFP245A9FR0 []
Coil Enclosure (14-1/2" Wide Cabinets)	BAYCLE1400C []
Coil Enclosure (17-1/2" Wide Cabinets)	BAYCLE1700C []
Coil Enclosure (21" Wide Cabinets)	BAYCLE2100C []
Coil Enclosure (24-1/2" Wide Cabinets)	BAYCLE2400C []
Downflow Subbase	BAYBASE205 []
Side Filter Rack	BAYFLTR200 []
Filter Kit/Horizontal Conversion TUX060,080-R	BAYFLTR203 []
Filter Kit/Horizontal Conversion TUX100-R	BAYFLTR204 []
Filter Kit/Horizontal Conversion TUX120-R	BAYFLTR205 []
Filter Accessory Kit	BAYFLTR317 []
Filter Accessory Kit	BAYFLTR321 []
Filter Accessory Kit	BAYFLTR324 []
High Altitude Pressure Switch Kit	BAYHALT245① []
High Altitude Pressure Switch Kit	BAYHALT246① []
High Altitude Pressure Switch Kit	BAYHALT247① []
Concentric Vent Kit TUX Furnaces	BAYVENT100A []
Sidewall Vent Termination Kit All 2 Pipe Direct Vent Furnaces	BAYVENT200B []
Manufactured/Mobile Home Kit All 2 Pipe Direct Vent Furnaces	BAYMFGH100A []
Filter Rack Kit	BAYRACK960A []
Cleanable Filter (14.5"/17.5" wide Upflow models)	BAYFLTR317 []
Cleanable Filter (21" wide Upflow models)	BAYFLTR321 []
Cleanable Filter (24.5" wide Upflow models)	BAYFLTR324 []

① Optional kit allows 200 ft. max. vent length from 5,000-12,000 feet above sea level. See installer's guide.



General Data

TUX2 PRODUCT SPECIFICATIONS^①

MODEL	TUX2B060A9362A	TUX2B080A9422A	TUX2C100A9482A	TUX2D120A9602A
RATINGS^②				
1st Stage Input BTUH	39000	52000	65000	72000
1st Stage Capacity BTUH (ICS) ^③	36000	48000	60000	66600
2nd Stage Input BTUH	60000	80000	100000	120000
2nd Stage Capacity BTUH (ICS) ^③	56000	73000	93000	112000
AFUE (ICS)	93.0	92.5	93.0	92.5
Temp. Rise (Min.-Max.) °F.	30 - 60	35 - 65	35 - 65	40 - 70
BLOWER DRIVE				
	DIRECT	DIRECT	DIRECT	DIRECT
Dia.-Width (In.)	10 x 7	10 x 8	10 x 10	11 x 10
No. Used	1	1	1	1
Speeds (No.)	4	4	4	4
CFM vs. in. w.g.	SEE FAN PERF. TABLE	SEE FAN PERF. TABLE	SEE FAN PERF. TABLE	SEE FAN PERF. TABLE
Motor HP	1/3	1/3	1/2	3/4
R.P.M.	1075	1075	1075	1100
Volts/Ph/Hz	115/1/60	115/1/60	115/1/60	115/1/60
COMBUSTION FAN - TYPE				
	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive - No. Speeds	DIRECT - VARIABLE	DIRECT - 1	DIRECT - VARIABLE	DIRECT - VARIABLE
Motor HP - RPM	1/15 - 5000	1/15 - 5000	1/15 - 5000	1/15 - 5000
Volts/Ph/Hz	33 - 110/3/60 - 180	33 - 110/3/60 - 180	33 - 110/3/60 - 180	33 - 110/3/60 - 180
FL Amps	1.0	1.0	1.0	1.0
FILTER — Furnished?				
	NO	NO	NO	NO
Type Recommended	HIGH VELOCITY	HIGH VELOCITY	HIGH VELOCITY	HIGH VELOCITY
Filter (No.-Size-Thk.)	1 - 17 X 25 - 1 IN	1 - 17 X 25 - 1 IN	1 - 20 X 25 - 1 IN	1 - 24 X 25 - 1 IN
VENT — Size (In.)				
	2 ROUND	2 ROUND	2 ROUND	3 ROUND
HEAT EXCHANGER				
Type-Fired	ALUMINIZED STEEL TYPE 1	ALUMINIZED STEEL TYPE 1	ALUMINIZED STEEL TYPE 1	ALUMINIZED STEEL TYPE 1
-Unfired				
Gauge (Fired)	20	20	20	20
ORIFICES — Main				
Nat. Gas Qty. — Drill Size	3 - 45	4 - 45	5 - 45	6 - 45
L.P. Gas Qty. — Drill Size	3 - 56	4 - 56	5 - 56	6 - 56
GAS VALVE				
	REDUNDANT - TWO STAGE	REDUNDANT - TWO STAGE	REDUNDANT - SINGLE STAGE	REDUNDANT - SINGLE STAGE
DIRECT IGNITION DEVICE				
Type	HOT SURFACE	HOT SURFACE	HOT SURFACE	HOT SURFACE
BURNERS — Type				
	IN-SHOT	IN-SHOT	IN-SHOT	IN-SHOT
Number	3	4	5	6
POWER CONN. — V/Ph/Hz^④				
	115/1/60	115/1/60	115/1/60	115/1/60
Ampacity (In Amps)	8.7	9.5	13.1	13.5
Max. Overcurrent Protection (Amps)	15	15	20	20
PIPE CONN. SIZE (IN.)				
	1/2	1/2	1/2	1/2
DUCT CONN.				
	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING
DIMENSIONS				
	H X W X D	H X W X D	H X W X D	H X W X D
Crated (In.)	41-3/4 X 19-1/2 X 30-1/2	41-3/4 X 19-1/2 X 30-1/2	41-3/4 X 23 X 30-1/2	41-3/4 X 26-1/2 X 30-1/2
Uncrated	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING
WEIGHT				
Shipping (Lbs.)/Net (Lbs.)	158 / 146	168 / 156	197 / 185	206 / 193

① Central Furnace heating designs are certified by AGA and CSA.

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.



General Data

TDX2 PRODUCT SPECIFICATIONS^①

MODEL	TDX2B060A9362A	TDX2B080A9422A	TDX2C100A9482A	TDX2D120A9602A
RATINGS^②				
1st Stage Input BTUH	39000	52000	65000	78000
1st Stage Capacity BTUH (ICS) ^③	36000	48000	60000	72000
2nd Stage Input BTUH	60000	80000	100000	120000
2nd Stage Capacity BTUH (ICS) ^③	55000	74000	93000	111000
AFUE (ICS)	92.0	92.5	93.0	92.5
Temp. Rise (Min.-Max.) °F.	35 - 65	40 - 70	45 - 75	45 - 75
BLOWER DRIVE				
	DIRECT	DIRECT	DIRECT	DIRECT
Dia.-Width (In.)	10 x 8	11 x 8	11 x 10	11 x 10
No. Used	1	1	1	1
Speeds (No.)	4	4	4	4
CFM vs. in. w.g.	SEE FAN PERF. TABLE	SEE FAN PERF. TABLE	SEE FAN PERF. TABLE	SEE FAN PERF. TABLE
Motor HP	1/3	1/2	1/2	3/4
R.P.M.	1075	1075	1075	1075
Volts/Ph/Hz	115/1/60	115/1/60	115/1/60	115/1/60
COMBUSTION FAN - TYPE				
	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
Drive - No. Speeds	DIRECT - VARIABLE	DIRECT - VARIABLE	DIRECT - VARIABLE	DIRECT - VARIABLE
Motor HP - RPM	1/15 - 5000	1/15 - 5000	1/15 - 5000	1/15 - 5000
Volts/Ph/Hz	33 - 110/3/60 - 180	33 - 110/3/60 - 180	33 - 110/3/60 - 180	33 - 110/3/60 - 180
FL Amps	1.0	1.0	1.0	1.0
FILTER — Furnished?				
	NO	NO	NO	NO
Type Recommended	HIGH VELOCITY	HIGH VELOCITY	HIGH VELOCITY	HIGH VELOCITY
Filter (No.-Size-Thk.)	2 - 14 X 20 X 1	2 - 14 X 20 X 1	2 - 16 X 20 X 1	2 - 16 X 20 X 1
VENT — Size (In.)				
	2 ROUND	2 ROUND	2 ROUND	3 ROUND
HEAT EXCHANGER				
Type -Fired	ALUMINIZED STEEL TYPE 1	ALUMINIZED STEEL TYPE 1	ALUMINIZED STEEL TYPE 1	ALUMINIZED STEEL TYPE 1
-Unfired				
Gauge (Fired)	20	20	20	20
ORIFICES — Main				
Nat. Gas. Qty. — Drill Size	3 - 45	4 - 45	5 - 45	6 - 45
L.P. Gas Qty. — Drill Size	3 - 56	4 - 56	5 - 56	6 - 56
GAS VALVE				
	REDUNDANT - TWO STAGE	REDUNDANT - TWO STAGE	REDUNDANT - TWO STAGE	REDUNDANT - TWO STAGE
DIRECT IGNITION DEVICE				
Type	HOT SURFACE IGNITER	HOT SURFACE IGNITER	HOT SURFACE IGNITER	HOT SURFACE IGNITER
BURNERS — Type				
	IN-SHOT	IN-SHOT	IN-SHOT	IN-SHOT
Number	3	4	5	6
POWER CONN. — V/Ph/Hz^④				
	115/1/60	115/1/60	115/1/60	115/1/60
Ampacity (In Amps)	9.5	11.3	13.1	13.5
Max. Overcurrent Protection (Amps)	15	15	20	20
PIPE CONN. SIZE (IN.)				
	0.50	0.50	0.50	0.50
DUCT CONN.				
	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING
DIMENSIONS				
	H X W X D	H X W X D	H X W X D	H X W X D
Crated (In.)	41-3/4 X 19-1/2 X 30-1/2	41-3/4 X 19-1/2 X 30-1/2	41-3/4 X 23 X 30-1/2	41-3/4 X 26-1/2 X 30-1/2
Uncrated	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING	SEE OUTLINE DRAWING
WEIGHT				
Shipping (Lbs.)/Net (Lbs.)	160 / 145	168 / 158	185 / 175	206 / 196

① Central Furnace heating designs are certified by AGA and CSA.

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.



Upflow Performance Data

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
*UX2B060A9362A	4 - HIGH - Black	1394	1359	1314	1260	1196	1122	1038	945	853
	3 - MED.-HIGH - Blue	1250	1232	1202	1160	1106	1040	962	873	771
	2 - MED.-LOW - Yellow	1102	1092	1069	1034	986	925	852	766	668
	1 - LOW - Red	957	944	922	891	853	806	750	686	614
*UX2B080A9422A	4 - HIGH - Black	1748	1683	1615	1544	1470	1393	1314	1232	1147
	3 - MED.-HIGH - Blue	1375	1367	1347	1314	1268	1210	1139	1056	960
	2 - MED.-LOW - Yellow	1178	1167	1147	1119	1082	1036	982	919	847
	1 - LOW - Red	859	863	856	839	811	772	723	663	592
*UX2C100A9482A	4 - HIGH - Black	2054	1980	1906	1826	1746	1649	1551	1428	1305
	3 - MED.-HIGH - Blue	1932	1875	1818	1746	1673	1577	1481	1371	1260
	2 - MED.-LOW - Yellow	1762	1720	1677	1615	1552	1463	1373	1266	1158
	1 - LOW - Red	1558	1546	1533	1477	1421	1350	1278	1175	1071
*UX2D120A9602A	4 - HIGH - Black	2454	2406	2358	2310	2261	2184	2106	2017	1928
	3 - MED.-HIGH - Blue	2105	2092	2078	2045	2012	1950	1887	1826	1765
	2 - MED.-LOW - Yellow	1747	1742	1736	1720	1703	1677	1651	1593	1535
	1 - LOW - Red	1445	1447	1449	1440	1430	1400	1369	1325	1280

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

NOTE: See page 11 for factory heat & cool speed tap settings

CFM VS. TEMPERATURE RISE														
MODEL	Cubic Feet Per Minute (CFM)													
	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
*UX2B060A9362A	56	50	45	42	39	36								
*UX2B080A9422A			61	56	51	48	44	42						
*UX2C100A9482A					64	60	56	52	49	46	44	42		
*UX2D120A9602A								63	59	56	53	50	48	46

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



Downflow Performance Data

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
TDX2B060A9362A	4 - HIGH - Black	1487	1425	1362	1286	1209	1125	1040	935	830
	3 - MED.-HIGH - Blue	1342	1291	1240	1182	1124	1047	989	869	769
	2 - MED.-LOW - Yellow	1181	1147	1113	1061	1009	943	877	779	681
	1 - LOW - Red	877	863	849	820	791	739	686	612	537
TDX2B080A9422A	4 - HIGH - Black	1547	1498	1445	1386	1323	1254	1180	1101	1016
	3 - MED.-HIGH - Blue	1487	1436	1382	1325	1265	1202	1137	1069	998
	2 - MED.-LOW - Yellow	1388	1348	1302	1249	1191	1126	1056	979	896
	1 - LOW - Red	1263	1234	1196	1150	1095	1032	960	879	790
TDX2C100A9482A	4 - HIGH - Black	1892	1827	1762	1688	1614	1531	1448	1354	1260
	3 - MED.-HIGH - Blue	1779	1726	1672	1605	1538	1460	1381	1291	1200
	2 - MED.-LOW - Yellow	1630	1587	1544	1485	1426	1362	1297	1208	1119
	1 - LOW - Red	1444	1416	1388	1348	1308	1246	1184	1108	1032
TDX2D120A9602A	4 - HIGH - Black	2213	2138	2062	2001	1939	1863	1786	1706	1625
	3 - MED.-HIGH - Blue	2057	2000	1943	1883	1822	1752	1681	1595	1508
	2 - MED.-LOW - Yellow	1765	1733	1700	1652	1603	1552	1500	1424	1347
	1 - LOW - Red	1468	1452	1435	1409	1382	1336	1290	1225	1159

CFM VS. TEMPERATURE RISE																	
MODEL	Cubic Feet Per Minute (CFM)																
	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
TDX2B060A9362A	63	56	51	46	42	39	36	34									
TDX2B080A9422A			68	61	56	52	48	45	42	40							
TDX2C100A9482A						65	60	56	53	50	47	44	42	40	38	37	35
TDX2D120A9602A								67	63	59	56	53	51	48	46	44	42



Maximum Vent Length Table

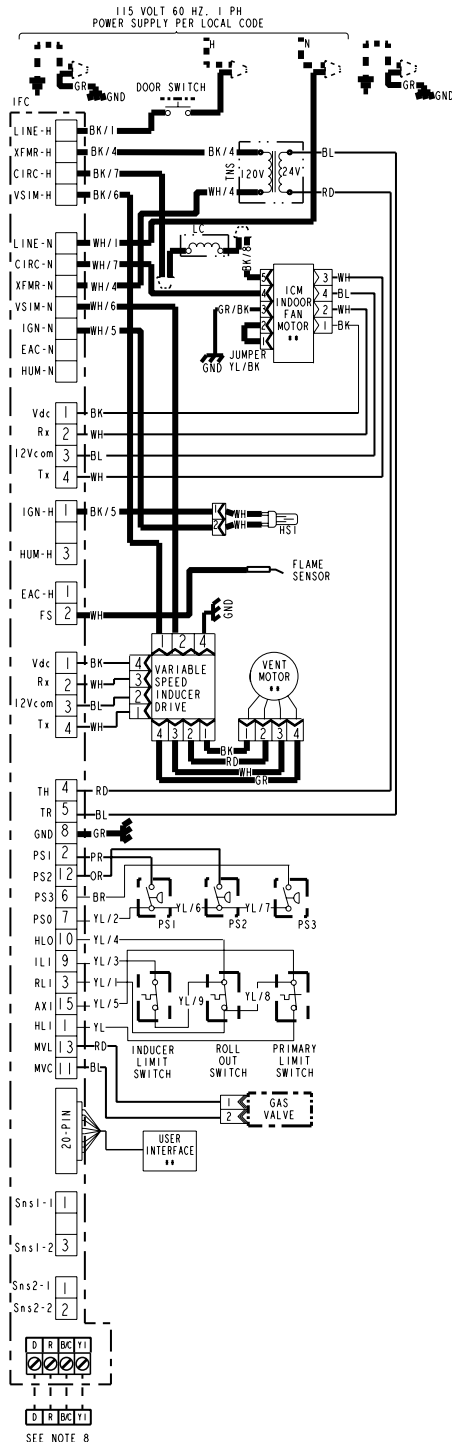
VENT LENGTH TABLE			
ALTITUDE	MAXIMUM TOTAL EQUIVALENT LENGTH IN FEET FOR VENT AND INLET AIR (SEE NOTES)		
0-7,000 Feet	2 INCH PIPE	2.5 INCH PIPE	3 INCH PIPE
UX/DX2B060A9362A	200	200	200
UX/DX2B080A9422A	50	120	200
UX/DX2C100A9482A	Not Allowed	60	200
UX/DX2D120A9602A	Not Allowed	Not Allowed	200
7,000-9,500 Feet	2 INCH PIPE	2.5 INCH PIPE	3 INCH PIPE
UX/DX2B060A9362A	100	100	100
UX/DX2B080A9422A	25	60	100
UX/DX2C100A9482A	Not Allowed	30	100
UX/DX2D120A9602A	Not Allowed	Not Allowed	100
9,500-12,000 Feet	2 INCH PIPE	2.5 INCH PIPE	3 INCH PIPE
UX/DX2B060A9362A	50	50	50
UX/DX2B080A9422A	Not Allowed	30	50
UX/DX2C100A9482A	Not Allowed	Not Allowed	50
UX/DX2D120A9602A	Not Allowed	Not Allowed	50

NOTES: * - First letter may be "A" or "T"

1. Minimum vent length for all models: 3' horizontal and vertical.
2. DO NOT MIX PIPE DIAMETERS IN THE SAME LENGTH OF PIPE OUTSIDE THE FURNACE CABINET (Except adapters at the top of the furnace). If different inlet and vent pipe sizes are used, the vent pipe must adhere to the maximum length limit shown in the table above (See note 6 below for exception). The inlet pipe can be of a larger diameter, but never smaller than the vent pipe.
3. MAXIMUM PIPE LENGTHS MUST NOT BE EXCEEDED! THE LENGTH SHOWN IS NOT A COMBINED TOTAL, IT IS THE MAXIMUM LENGTH OF EACH (Vent or Inlet air pipes).
4. One SHORT radius 90° elbow is equivalent to 10' of 3" pipe and one LONG radius elbow is equivalent to 6' of 3" pipe. One 90° elbow is equivalent to 7½' of 2½" pipe or 5' of 2" pipe. Two 45° elbows equal one 90° elbow.
5. The termination tee or bend must be included in the total number of elbows. If the BAYAIR30AVENTA termination kit is used, the equivalent length of pipe is 5 feet. BAYVENT200B equivalent length is 0 feet.
6. Pipe adapters are field supplied (except 120).

Electrical Data

*UX2 SCHEMATIC DIAGRAM



DIAGNOSTIC CODES (SEE NOTE 10)

RED LED - FAULT Data - 1 Flash every 20 seconds	
2 FLASHES - SYSTEM LOCKOUT RETRIES OR RECYCLES EXCEEDED	6 FLASHES - 115 VOLT AC POWER REVERSED OR IGNITER FAULT
3 FLASHES - PRESSURE SWITCH FAULT	7 FLASHES - GAS VALVE CIRCUIT ERROR
4 FLASHES - OPEN LIMIT SWITCH	8 FLASHES - LOW FLAME SENSE SIGNAL
5 FLASHES - FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT	9 FLASHES - OPEN INDUCER LIMIT
	10 FLASHES - COMMUNICATION FAULT
	CONTINUOUS ON - INTERNAL CONTROL FAILURE
GREEN LED - STATUS	
SLOW FLASH - NORMAL, NO CALL FOR HEAT	
FAST FLASH - NORMAL, CALL FOR HEAT PRESENT	
GREEN AND RED LED'S ON CONTINUOUS - INTERNAL CONTROL FAILURE	
GREEN AND RED LED'S OFF CONTINUOUS - FUSE OPEN	

WARNING

HAZARDOUS VOLTAGE
DISCONNECT ALL ELECTRICAL POWER
INCLUDING REMOTE DISCONNECTS
BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE
SERVICING CAN CAUSE SEVERE PERSONAL
INJURY OR DEATH.

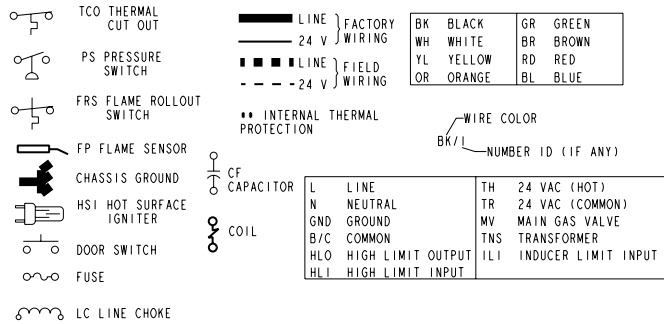
CAUTION

USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE
TO THE EQUIPMENT.

INTEGRATED FURNACE CONTROL

REPLACE WITH PART CNT 04829 OR EQUIVALENT
ELECTRICAL RATING
INPUT: 25 V.A.C. - 60 HZ.
XFMR SEC. CURRENT: 450 MA. + MV LOAD
MV OUTPUT: 1.5 A @ 24 V.A.C.
IND OUTPUT: 3 PHASE OUTPUT
IGN OUTPUT: 2.0 A @ 120V.A.C.
CIRC. BLOWER OUTPUT: 14.5 FLA,
25 LRA @ 120 VAC
HUMIDIFIER & AIR CLEANER
MAX. LOAD: 1.0 A @ 120 VAC

TIMINGS
PREPURGE: 0 SEC.; INTERPURGE: 60 SEC.
POST PURGE: 5 SECONDS
IGNITOR WARMUP: 20 SECONDS
IAP: 3; TFI: 5 SECONDS
RETRIES: 2; RECYCLES: 10
HEAT ON DELAY: 45 SECONDS
COOL ON DELAY: 0 SECONDS
AUTO RESTART: 60 MINUTES
AUTO RESTART PURGE: 15 SECONDS

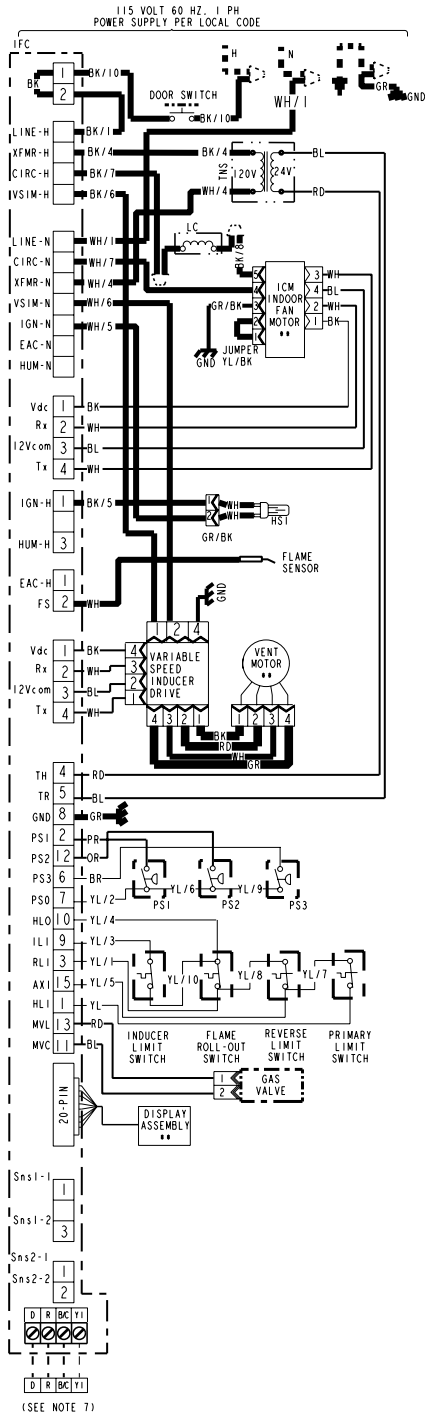


NOTES:

- IF ANY OF THE ORIGINAL WIRING AS SUPPLIED WITH THIS FURNACE MUST BE REPLACED, IT MUST BE WITH WIRE HAVING A TEMPERATURE RATING OF AT LEAST 105 C.
- USER INTERFACE MUST BE INSTALLED FOR PROPER FURNACE INSTALLATION & SET-UP.
- CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN IT'S ORIGINAL UNIT.
- THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.
- REVERSE FLOW SWITCH NOT PRESENT ON MODELS LISTED IN TABLE "A". CONTROL INPUT IS JUMPERED USING YL/5.
- USED FOR *UX3100A9V4* AND *UX3D120A9V5* MODELS ONLY.
- ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.
- Y1 IS OUTPUT TO NON-COMMUNICATING OUTDOOR UNIT.
- USED FOR *UX100R9V4* AND *UX120R9V5* MODELS ONLY.
- ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.

Electrical Data

*DX2 Schematic Diagram



DIAGNOSTIC CODES (SEE NOTE 9)			
RED LED - FAULT Data - 1 Flash every 20 seconds			
2 FLASHES - SYSTEM LOCKOUT RETRIES OR RECYCLES EXCEEDED	6 FLASHES - 115 VOLT AC POWER REVERSED OR IGNITER FAULT		
3 FLASHES - PRESSURE SWITCH FAULT	7 FLASHES - GAS VALVE CIRCUIT ERROR		
4 FLASHES - OPEN LIMIT SWITCH	8 FLASHES - LOW FLAME SENSE SIGNAL		
5 FLASHES - FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT	9 FLASHES - OPEN INDUCER LIMIT		
	10 FLASHES - COMMUNICATION FAULT		
GREEN LED - STATUS			
SLOW FLASH - NORMAL, NO CALL FOR HEAT			
FAST FLASH - NORMAL, CALL FOR HEAT PRESENT			
GREEN AND RED LED'S ON CONTINUOUS - INTERNAL CONTROL FAILURE			
GREEN AND RED LED'S OFF CONTINUOUS - FUSE OPEN			

WARNING	CAUTION
HAZARDOUS VOLTAGE	USE COPPER CONDUCTORS ONLY!
DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.	UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.	FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

INTEGRATED FURNACE CONTROL

REPLACE WITH PART CNT 04829 OR EQUIVALENT

ELECTRICAL RATING
 INPUT: 25 V.A.C., 60 HZ.
 XFMR SEC. CURRENT: 450 MA. + MV LOAD
 MV OUTPUT: 1.5 A @ 24 V.A.C.
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 25 LRA @ 120 VAC
 HUMIDIFIER & AIR CLEANER
 MAX. LOAD: 1.0 A @ 120 VAC

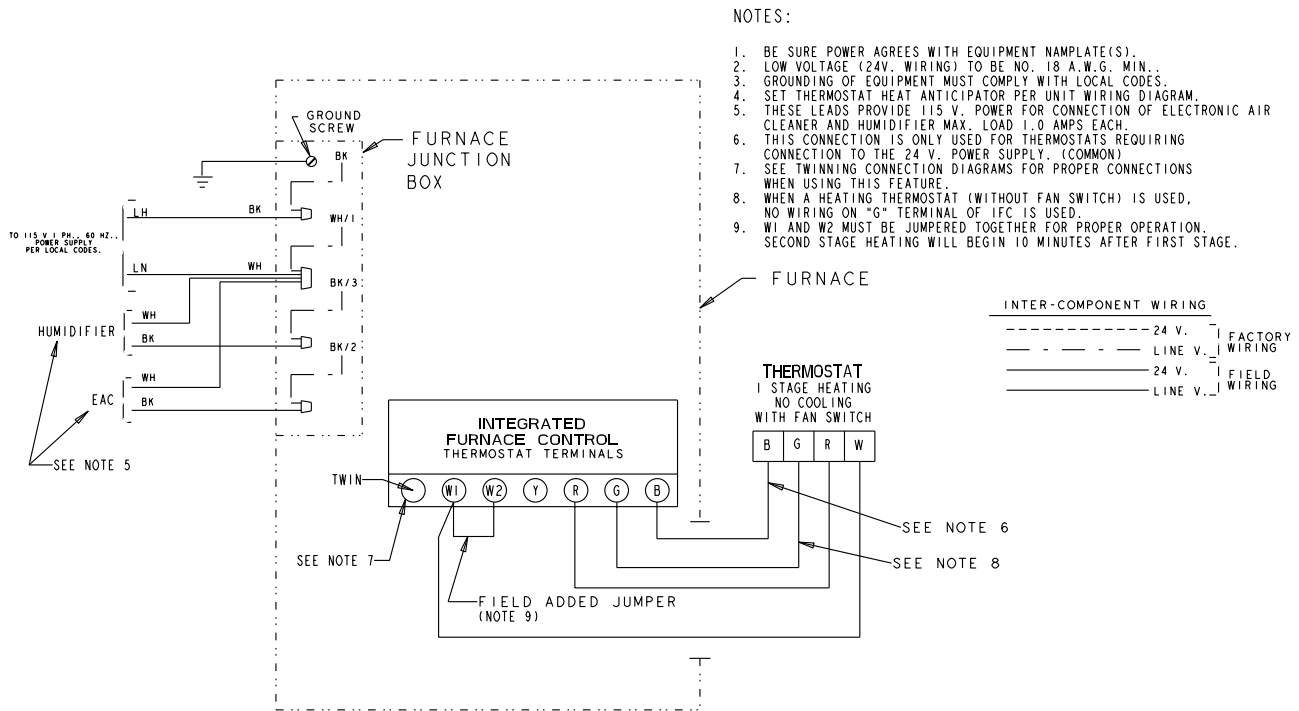
TIMINGS
 PREPURGE: 0 SEC.; INTERPURGE: 60 SEC.
 POST PURGE: 5 SECONDS
 IGNITOR WARMUP: 20 SECONDS
 IAP: 3; TFI: 5 SECONDS
 RETRIES: 2; RECYCLES: 10
 HEAT ON DELAY: 45 SECONDS
 COOL ON DELAY: 0 SECONDS
 AUTO RESTART: 60 MINUTES
 AUTO RESTART PURGE: 15 SECONDS

TCO THERMAL CUT OUT	LINE 24 V WIRING	<table border="1"> <tr> <td>BK BLACK</td> <td>GR GREEN</td> </tr> <tr> <td>WH WHITE</td> <td>BR BROWN</td> </tr> <tr> <td>YL YELLOW</td> <td>RD RED</td> </tr> <tr> <td>OR ORANGE</td> <td>BL BLUE</td> </tr> </table>	BK BLACK	GR GREEN	WH WHITE	BR BROWN	YL YELLOW	RD RED	OR ORANGE	BL BLUE		
BK BLACK	GR GREEN											
WH WHITE	BR BROWN											
YL YELLOW	RD RED											
OR ORANGE	BL BLUE											
PS PRESSURE SWITCH	LINE 24 V WIRING											
FRS FLAME ROLLOUT SWITCH	** INTERNAL THERMAL PROTECTION	WIRE COLOR										
FP FLAME SENSOR	CF CAPACITOR	BK/1 NUMBER ID (IF ANY)										
CHASSIS GROUND	COIL	<table border="1"> <tr> <td>L LINE</td> <td>TH 24 VAC (HOT)</td> </tr> <tr> <td>N NEUTRAL</td> <td>TR 24 VAC (COMMON)</td> </tr> <tr> <td>GND GROUND</td> <td>MV MAIN GAS VALVE</td> </tr> <tr> <td>B/C COMMON</td> <td>TNS TRANSFORMER</td> </tr> <tr> <td>HLO HIGH LIMIT OUTPUT</td> <td>ILI INDUCER LIMIT INPUT</td> </tr> </table>	L LINE	TH 24 VAC (HOT)	N NEUTRAL	TR 24 VAC (COMMON)	GND GROUND	MV MAIN GAS VALVE	B/C COMMON	TNS TRANSFORMER	HLO HIGH LIMIT OUTPUT	ILI INDUCER LIMIT INPUT
L LINE	TH 24 VAC (HOT)											
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B/C COMMON	TNS TRANSFORMER											
HLO HIGH LIMIT OUTPUT	ILI INDUCER LIMIT INPUT											
HSI HOT SURFACE IGNITER	FUSE											
DOOR SWITCH	LC LINE CHOKE											

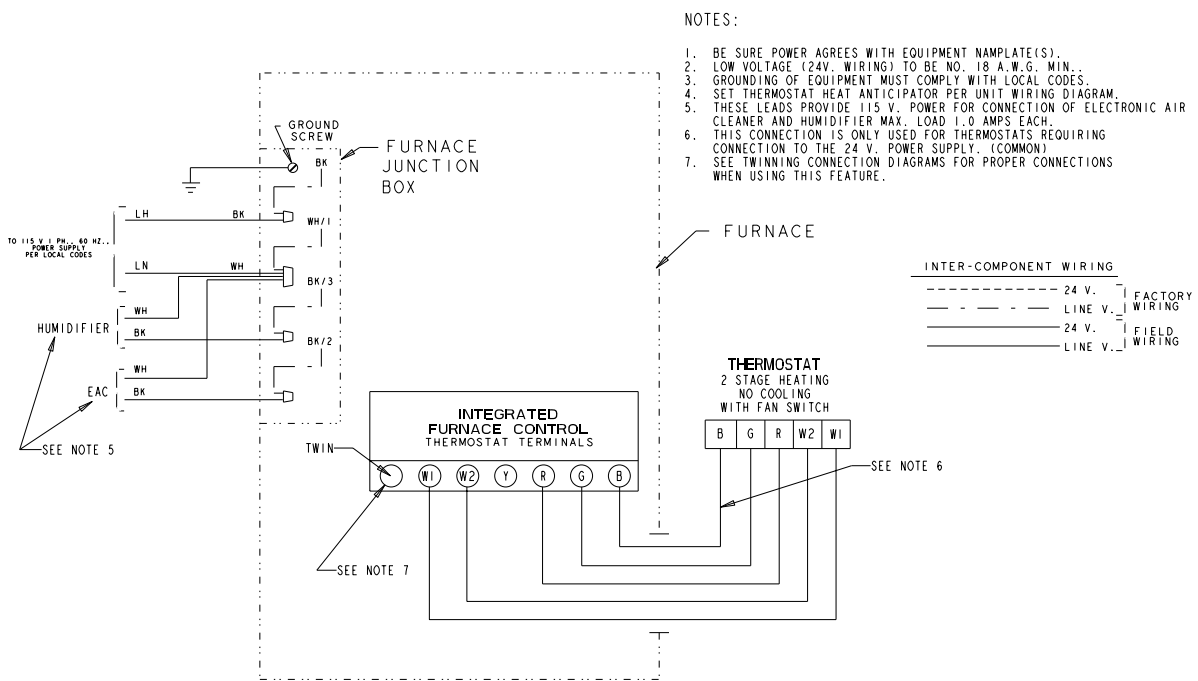
- NOTES:**
- IF ANY OF THE ORIGINAL WIRING AS SUPPLIED WITH THIS FURNACE MUST BE REPLACED, IT MUST BE WITH WIRE HAVING A TEMPERATURE RATING OF AT LEAST 105 C.
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 - CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN IT'S ORIGINAL UNIT.
 - THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.
 - USED FOR *DX3C100A9V4* AND *DX3D120A9V5* MODELS ONLY.
 - ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.
 - Y1 IS OUTPUT TO NON-COMMUNICATING OUTDOOR UNIT.
 - USED FOR *UX100R9V4* AND *UX120R9V5* MODELS ONLY.
 - ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.

Field Wiring

FIELD WIRING DIAGRAM FOR SINGLE STAGE HEATING ONLY

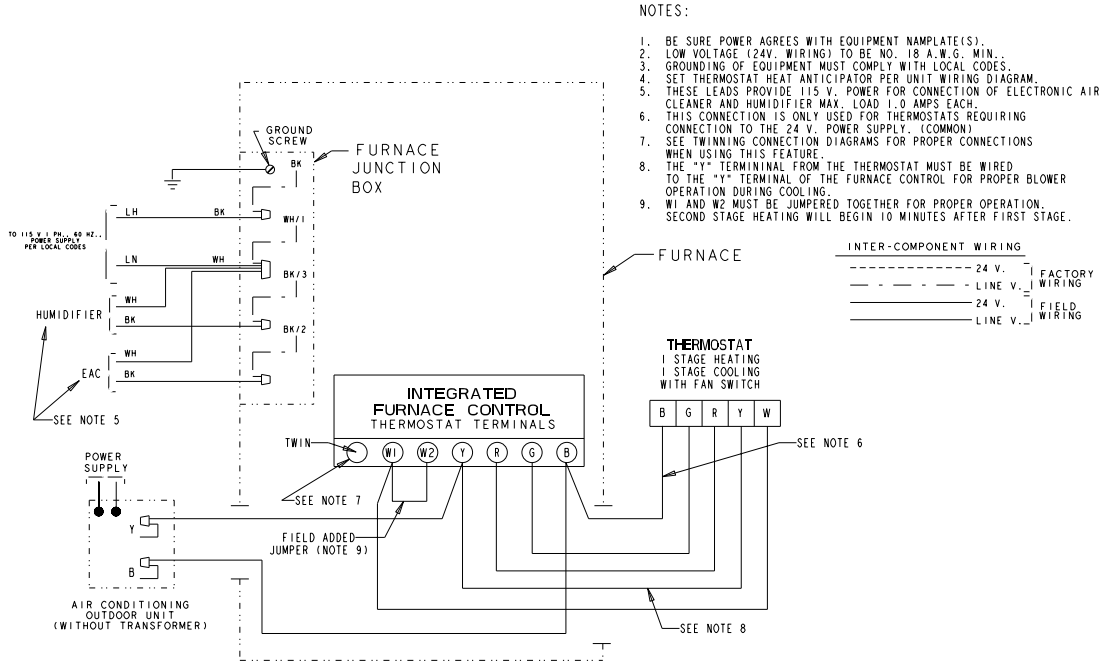


FIELD WIRING DIAGRAM FOR TWO STAGE HEATING ONLY

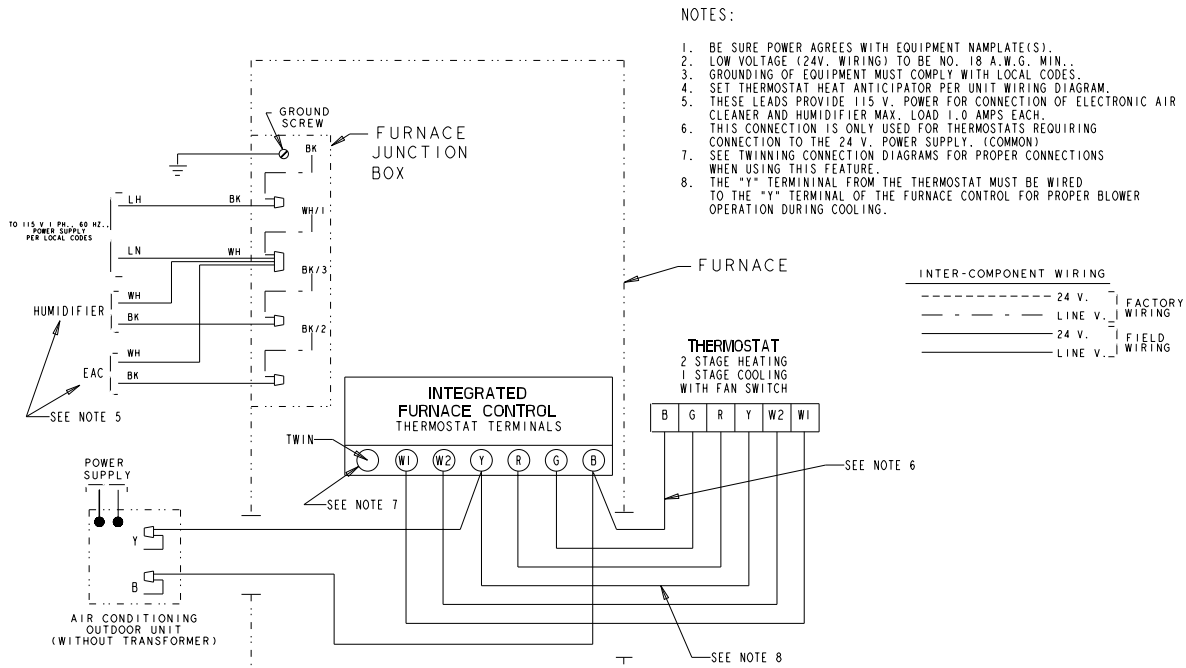


Field Wiring

FIELD WIRING DIAGRAM FOR SINGLE STAGE HEATING/COOLING (OUTDOOR SECTION WITHOUT TRANSFORMER)

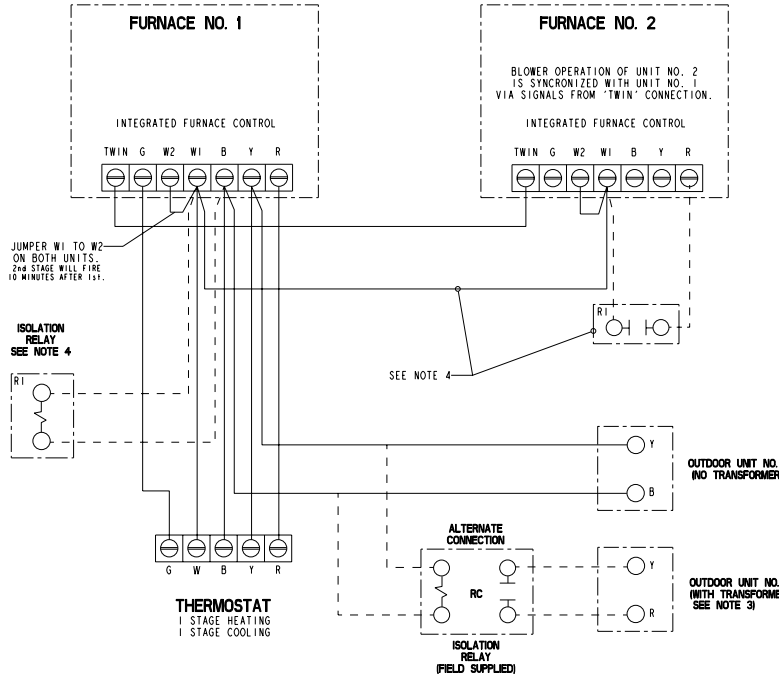


FIELD WIRING DIAGRAM FOR TWO STAGE HEATING/ SINGLE STAGE COOLING (OUTDOOR SECTION WITHOUT TRANSFORMER)



Twinning Field Wiring

TWINNING CONNECTION DIAGRAM
FOR TWINNING UX/DX-R FURNACES
1 STAGE HEAT / 1 STAGE COOLING THERMOSTAT

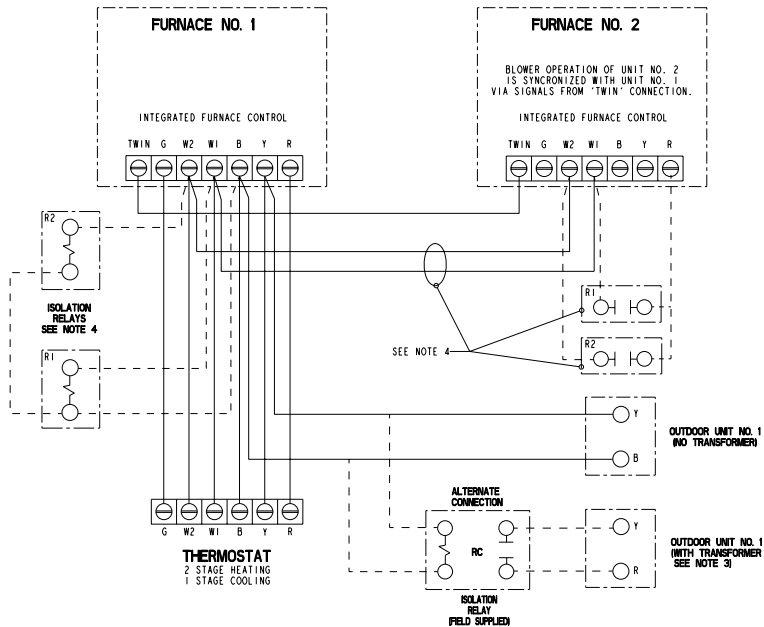


NOTES:

1. BOTH FURNACES MUST BE POWERED FROM THE SAME 115 V. LEG OF CIRCUIT PANEL.
2. INSURE 24 V. FURNACE TRANSFORMERS ARE IN PHASE. PRIOR TO COMPLETING CONNECTIONS, CHECK VOLTAGE BETWEEN 'R' TERMINALS OF EACH FURNACE. IF VOLTAGE IS GREATER THAN 10 V., REVERSE THE BL AND RD SECONDARY LEADS ON ONE OF THE FURNACE TRANSFORMERS.
3. IF OUTDOOR UNIT HAS A 24 V. TRANSFORMER, AN ISOLATION RELAY MUST BE INSTALLED. (FIELD SUPPLIED - USE PILOT DUTY RELAY ('RC'), SUCH AS RLY0975.) SEE ALT. CONNECTION.
4. IF CURRENT EXCEEDS THERMOSTAT CURRENT RATING, USE ISOLATION RELAYS ('R1') AS SHOWN. (DO NOT CONNECT W1 TO W1). ISOLATION RELAYS NOT NEEDED IF THERMOSTAT CONTACTS ARE RATED AT 1.0 A OR ABOVE.

----- ALTERNATE WIRING CONFIGURATION
SEE NOTE 4.

TWINNING CONNECTION DIAGRAM
FOR TWINNING UX/DX-R FURNACES
2 STAGE HEAT / 1 STAGE COOLING THERMOSTAT



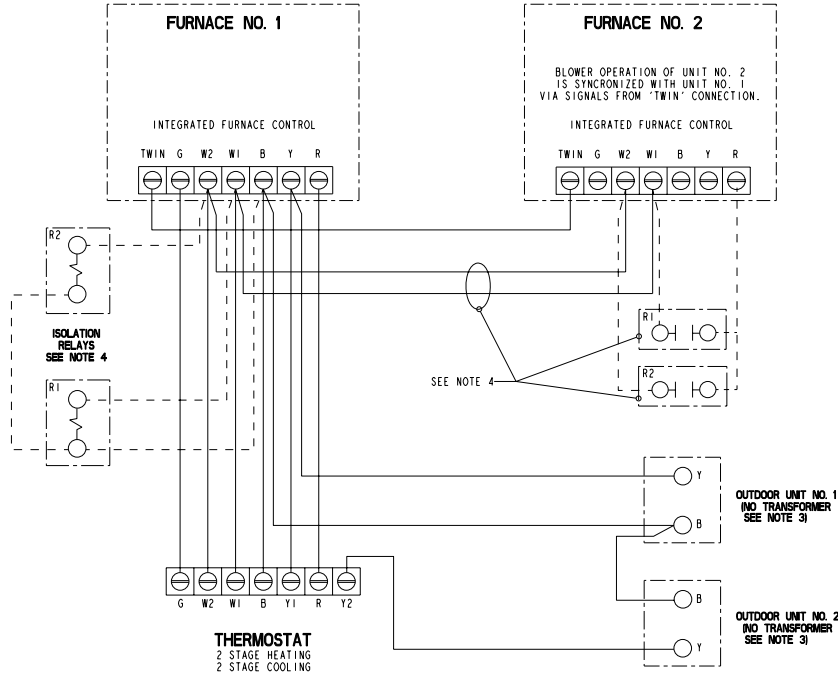
NOTES:

1. BOTH FURNACES MUST BE POWERED FROM THE SAME 115 V. LEG OF CIRCUIT PANEL.
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3. IF OUTDOOR UNIT HAS A 24 V. TRANSFORMER, AN ISOLATION RELAY MUST BE INSTALLED. (FIELD SUPPLIED - USE PILOT DUTY RELAY ('RC'), SUCH AS RLY0975.) SEE ALT. CONNECTION.
4. IF CURRENT EXCEEDS THERMOSTAT CURRENT RATING, USE ISOLATION RELAYS ('R1' & 'R2') AS SHOWN. (DO NOT CONNECT W1 TO W1 OR W2 TO W2). ISOLATION RELAYS NOT NEEDED IF THERMOSTAT CONTACTS ARE RATED AT 1.0 A OR ABOVE.

----- ALTERNATE WIRING CONFIGURATION
SEE NOTE 4.

Twinning Field Wiring

TWINNING CONNECTION DIAGRAM
 FOR TWINNING UX/DX-R FURNACES
 2 STAGE HEAT / 2 STAGE COOLING THERMOSTAT



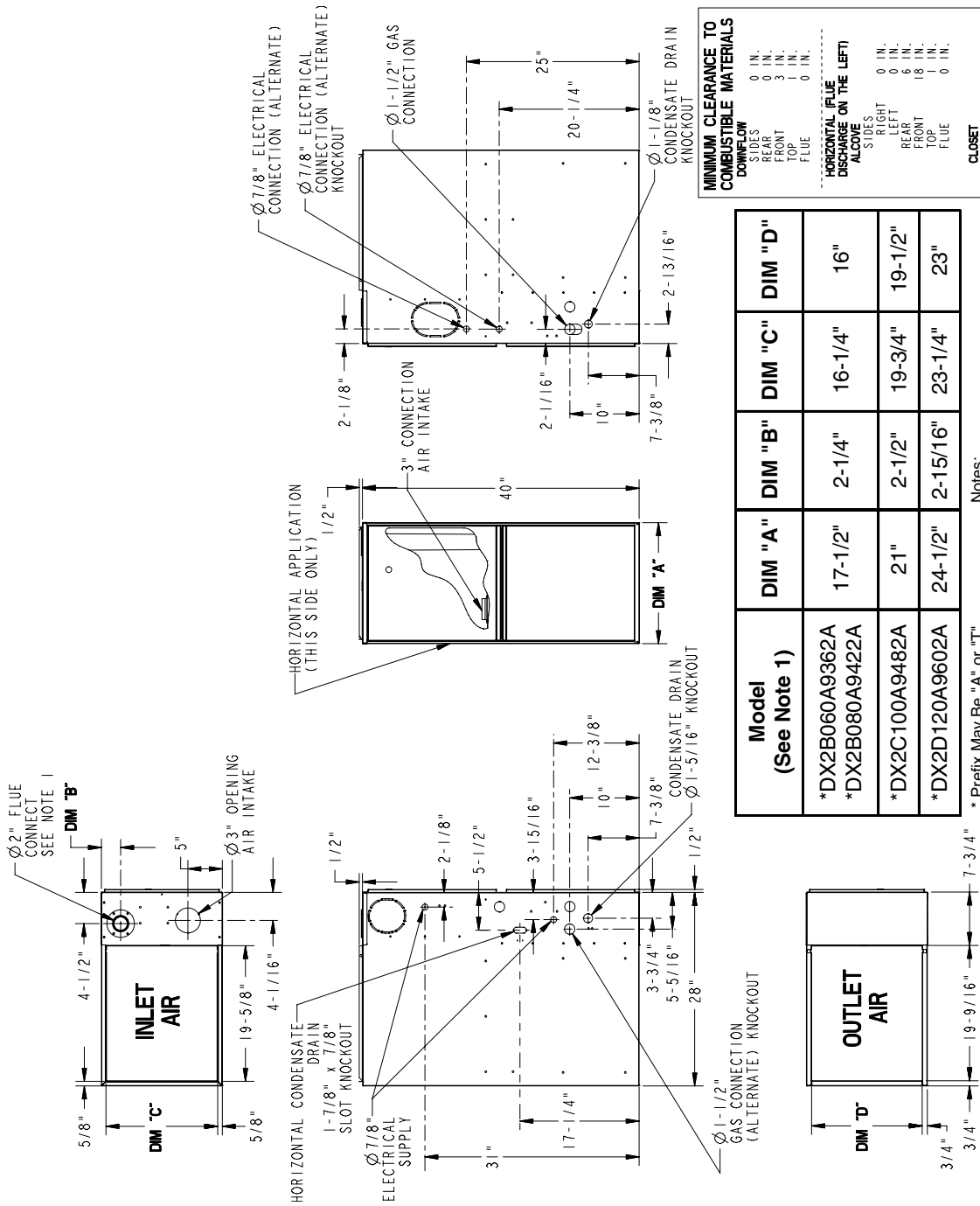
NOTES:

1. BOTH FURNACES MUST BE POWERED FROM THE SAME 115 V. LEG OF CIRCUIT PANEL.
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--- ALTERNATE WIRING CONFIGURATION
 SEE NOTE 4.

*DX2 DOWNFLOW / HORIZONTAL OUTLINE DRAWING

(ALL DIMENSIONS ARE IN INCHES)



MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS	
DOWNFLOW	0 IN.
SIDES	0 IN.
REAR	3 IN.
FRONT	1 IN.
TOP	1 IN.
FLUE	0 IN.
HORIZONTAL FLUE DISCHARGE ON THE LEFT	
SIDES	0 IN.
LEFT	0 IN.
REAR	6 IN.
FRONT	18 IN.
TOP	1 IN.
FLUE	0 IN.
CLOSET	
SIDES	1 IN.
RIGHT	1 IN.
LEFT	3 IN.
REAR	3 IN.
FRONT	3 IN.
TOP	1 IN.
FLUE	0 IN.

Model (See Note 1)	DIM "A"	DIM "B"	DIM "C"	DIM "D"
*DX2B060A9362A	17-1/2"	2-1/4"	16-1/4"	16"
*DX2B080A9422A	21"	2-1/2"	19-3/4"	19-1/2"
*DX2C100A9482A	24-1/2"	2-15/16"	23-1/4"	23"

Notes:
 1. Diameter of Vent Pipe may be limited to 2-1/2" or 3" on some models at different altitudes. Refer to the Vent Length Table for proper application.

* Prefix May Be "A" or "T"

From Dwg. 21C341885 Rev. 1



Trane
A business of American Standard Companies
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Tyler, TX 75707

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