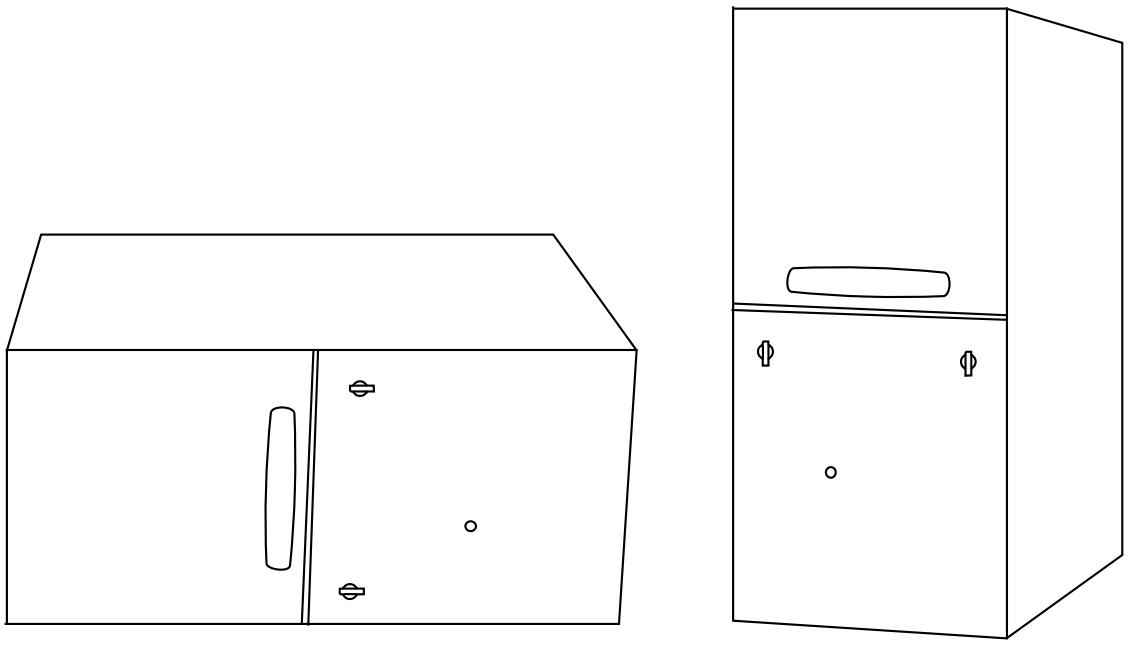
TRANE®

Upflow/Horizontal 90% 2-Stage, Variable Speed Gas-Fired Condensing Furnace with Whole House Air Cleaner

XV90i

TUX2B060AFV3VA, TUX2B080AFV3VA, TUX2C100AFV4VA, TUX2D120AFV5VA



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Features Summary

WHOLE HOUSE AIR CLEANER
The Whole House Air Cleaner uses advanced technology to remove up to 99.98% of allergens from the filtered air and removes particles down to .3 microns in size. Cleaning intervals of 1-3 months are typical, depending on the home environment.

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
Multiport In-shot burners will give years of quiet and efficient service. All models can be converted to L.P. gas.

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 humidifier.

CONDENSATE DRAIN
Built-in trap which can drain from either side when the furnace is installed upflow.

AIR DELIVERY
The variable 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 bottom return air connection.

FEATURES AND GENERAL OPERATION
The XV90i High Efficiency Gas Furnaces employ a 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.

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Contents

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Features and Benefits

XV90i STANDARD EQUIPMENT

- Whole House Air Cleaner
- Upflow/Horizontal
- Power supply 115/1/60
- 2-stage gas valve
- Variable speed venter
- Variable speed ECM blower motor
- Silicon Nitride hot surface igniter with adaptive heat up
- Integrated solid state control
- Variable speed induced draft blower
- Fused 24 Volt control circuit
- Manual reset flame roll out switches
- PVC venting - 1 or 2 pipe option
- Attractive color accents
- Heavy gauge aluminized steel heat exchanger
- Multi-port In-shot burners
- Complete front service access
- Slide out blower assembly
- Insulated bower door
- Gasketed blower door
- Two tone color
- Integrated solid state control with self-diagnostics
- Direct / Non-direct Vent Capability
- Optional L.P. conversion kit
- Left/right gas connection
- Accessory hook-up capability
- Selectable cooling fan off delay eliminates need for BAY24X045time delay kit
- Enhanced cooling control

Features and Benefits

XV90i OPTIONAL EQUIPMENT

Comfort Control, XL803, Programmable 7 Day, 3-Ht, 2-Cl ..... TCONT803AS32DA [ ]
Comfort Control, XR402, Electric, 3-Ht, 2-Cl (Non-programmable) ..... TCONT402AN32DA [ ]
For additional comfort control choices, see the product catalog or quick select handbook
Propane Conversion Kit ..... BAYLPKT210B [ ]
Coil Enclosure (14-1/2" Wide Cabinets) ..... BAYCLE14A1422A [ ]
Coil Enclosure (17-1/2" Wide Cabinets) ..... BAYCLE17A1722A [ ]
Coil Enclosure (21" Wide Cabinets) ..... BAYCLE21A2130A [ ]
Coil Enclosure (24-1/2" Wide Cabinets) ..... BAYCLE24A2430A[ ]
High Altitude Switch ..... BAYHALT249 [ ]
Masonry Chimney Vent Kit ..... BAYVENT800B [ ]
Downflow Sub-base ..... BAYBASE205 [ ]
Concentric Vent Kit ..... BAYAIR30AVENTA [ ]
Sidewall Vent Termination Kit ..... BAYVENT200B [ ]
Manufactured / Mobile Home Kit ..... BAYMFGH100A [ ]

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General Data

Product Specifications ①

MODEL	*UX2B060AFV3VA	*UX2B080AFV3VA	*UX2C100AFV4VA	*UX2D120AFV5VA
TYPE	Upflow / Horizontal	Upflow / Horizontal	Upflow / Horizontal	Upflow / Horizontal
RATINGS ②				
1st Stage Input BTUH	39,000	52,000	65,000	72,000
1st Stage Capacity BTUH (ICS) ③	36,000	48,000	60,000	66,600
2nd Stage Input BTUH	60,000	80,000	100,000	120,000
2nd Stage Capacity BTUH (ICS) ③	56,000	73,000	93,000	112,000
Temp. rise (Min.-Max.) °F.	35 - 65	35 - 65	35 - 65	40 - 70
AFUE (%)	93.0	92.5	93.0	92.5
BLOWER DRIVE	DIRECT	DIRECT	DIRECT	DIRECT
Diameter - Width (In.)	10 x 7	10 x 8	11 x 10	10 x 10
No. Used	1	1	1	1
Speeds (No.)	Variable	Variable	Variable	Variable
CFM vs. in. w.g.	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table
Motor HP	1/2	1/2	3/4	1
R.P.M.	Variable	Variable	Variable	Variable
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 - R.P.M	1/50 - 5000	1/50 - 5000	1/50 - 5000	1/50 - 5000
Volts / Ph / Hz	33 - 110/3/60 - 180	33 - 110/3/60 - 180	33 - 110/3/60 - 180	33 - 110/3/60 - 180
FLA	1.0	1.0	1.0	1.0
FILTER — Furnished?	Yes	Yes	Yes	Yes
Type	Whole House Air Cleaner	Whole House Air Cleaner	Whole House Air Cleaner	Whole House Air Cleaner
Max. Indoor Relative Humidity ⑤	65%	65%	65%	65%
VENT — Size (in.)	2 Round	2 Round	3 Round	3 Round
HEAT EXCHANGER				
Type -Fired	Aluminized Steel - Type I	Aluminized Steel - Type I	Aluminized Steel - Type I	Aluminized Steel - Type I
-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
PILOT SAFETY DEVICE				
Type	Hot Surface Ignition	Hot Surface Ignition	Hot Surface Ignition	Hot Surface Ignition
BURNERS — Type	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
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
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 (In.)	40 x 17-1/2 x 28-1/2	40 x 17-1/2 x 28-1/2	40 x 21 x 28-1/2	40 x 24-1/2 x 28-1/2
WEIGHT				
Shipping (Lbs.) / Net (Lbs.)	161 / 149	171 / 159	200 / 188	209 / 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.
⑤ The FIELD CHARGER may require more frequent cleaning in homes with high indoor relative humidity (greater than 65% RH). Consult your service professional about cleaning intervals.

Performance Data

Heating	*UX2C060AFV3VA Furnace Heating Airflow (CFM) and Power (watts) vs. External Static Pressure With Filter									
		Airflow Setting	Dip Switch Setting			External Static Pressure				
			SW7	SW8		0.1	0.3	0.5	0.7	0.9
	Heating 1st Stage	Low	ON	ON	CFM	672	691	677	669	652
					Temp. Rise	50	49	50	50	52
					Watts	70	106	138	172	202
		Medium Low	OFF	ON	CFM	738	757	757	724	713
					Temp. Rise	46	44	44	46	47
					Watts	84	123	160	187	225
		Medium**	ON	OFF	CFM	800	823	806	800	782
					Temp. Rise	42	41	42	42	43
					Watts	103	143	177	216	253
		High	OFF	OFF	CFM	900	920	925	926	824
					Temp. Rise	37	37	36	36	41
					Watts	130	177	222	268	270
	Heating 2nd Stage	Low	ON	ON	CFM	928	955	953	950	834
					Temp. Rise	56	54	54	54	62
					Watts	143	194	237	282	276
		Medium Low	OFF	ON	CFM	1042	1059	1063	1051	877
					Temp. Rise	50	49	49	49	59
					Watts	186	243	294	338	292
		Medium**	ON	OFF	CFM	1152	1166	1157	1081	901
					Temp. Rise	45	44	45	48	57
					Watts	244	304	353	359	307
		High	OFF	OFF	CFM	1289	1287	1259	1118	951
					Temp. Rise	40	40	41	46	54
					Watts	336	397	432	382	331

Cooling	*UX2C060AFV3VA Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter											
	Unit Outdoor	Airflow Setting	Dip Switch Setting					External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
	1.5	Low (350 CFM/Ton)	ON	ON	OFF	ON	CFM	621	610	610	594	581
							Watts	63	90	121	150	181
		Normal (400 CFM/ton)	ON	ON	OFF	OFF	CFM	673	688	686	665	650
							Watts	72	105	139	172	204
		High (450 CFM/ton)	ON	ON	ON	OFF	CFM	736	754	753	726	715
							Watts	86	124	160	189	226
	2	Low (350 CFM/Ton)	OFF	ON	OFF	ON	CFM	767	776	769	750	730
							Watts	93	128	164	197	232
		Normal (400 CFM/ton)	OFF	ON	OFF	OFF	CFM	841	853	854	847	824
							Watts	112	154	196	235	269
		High (450 CFM/ton)	OFF	ON	ON	OFF	CFM	925	955	955	949	837
							Watts	140	196	238	282	279
	2.5	Low (350 CFM/Ton)	ON	OFF	OFF	ON	CFM	904	927	925	922	830
							Watts	133	181	225	269	274
		Normal (400 CFM/ton)	ON	OFF	OFF	OFF	CFM	1030	1051	1052	1047	870
							Watts	183	238	288	355	291
		High (450 CFM/ton)	ON	OFF	ON	OFF	CFM	1160	1161	1160	1078	890
							Watts	251	304	356	357	303
	3	Low (350 CFM/Ton)	OFF	OFF	OFF	ON	CFM	1070	1088	1090	1069	879
							Watts	204	259	310	351	296
		Normal (400 CFM/ton)	OFF	OFF	OFF	OFF	CFM	1216	1201	1204	1098	923
							Watts	285	330	389	370	316
		High (450 CFM/ton)	OFF	OFF	ON	OFF	CFM	1339	1349	1280	1134	971
							Watts	373	448	449	398	345

Notes:
1. * First letter may be "A" or "T".
2. ** Factory setting.
3. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
4. For variable speed low speed airflows are approximately 30% of listed values.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.

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Performance Data

Heating	*UX2B080AFV3VA Furnace Heating Airflow (CFM) and Power (watts) vs. External Static Pressure With Filter									
		Airflow Setting	Dip Switch Setting			External Static Pressure				
			SW7	SW8		0.1	0.3	0.5	0.7	0.9
	Heating 1st Stage	Low	ON	ON	CFM	736	755	770	774	766
					Temp. Rise	61	59	58	58	58
					Watts	83	123	161	205	250
		Medium Low	OFF	ON	CFM	810	854	872	877	875
					Temp. Rise	55	52	51	51	51
					Watts	100	153	194	242	293
		Medium**	ON	OFF	CFM	904	968	978	977	977
					Temp. Rise	49	46	46	46	46
					Watts	128	198	246	288	340
		High	OFF	OFF	CFM	1092	1120	1113	1116	1116
					Temp. Rise	41	40	40	40	40
					Watts	203	275	320	365	422
	Heating 2nd Stage	Low	ON	ON	CFM	1049	1083	1088	1076	1080
					Temp. Rise	65	63	63	64	63
					Watts	185	257	308	343	396
		Medium Low	OFF	ON	CFM	1360	1359	1371	1316	1196
					Temp. Rise	50	50	50	52	57
					Watts	364	450	531	540	484
		Medium**	ON	OFF	CFM	1351	1357	1375	1314	1198
					Temp. Rise	51	50	50	52	57
					Watts	372	454	530	538	487
		High	OFF	OFF	CFM	1351	1376	1359	1318	1212
					Temp. Rise	51	50	50	52	57
					Watts	369	465	517	542	496

Cooling	*UX2B080AFV3VA Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter											
	Unit Outdoor	Airflow Setting	Dip Switch Setting					External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
	2	Low (350 CFM/Ton)	ON	ON	OFF	ON	CFM	646	659	672	656	640
							Watts	65	96	135	171	202
		Normal (400 CFM/ton)	ON	ON	OFF	OFF	CFM	732	750	769	764	761
							Watts	81	120	162	201	248
		High (450 CFM/ton)	ON	ON	ON	OFF	CFM	811	848	872	875	874
							Watts	101	153	195	243	292
	2.5	Low (350 CFM/Ton)	OFF	ON	OFF	ON	CFM	790	807	832	839	832
							Watts	96	137	181	227	275
		Normal (400 CFM/ton)	OFF	ON	OFF	OFF	CFM	896	956	968	967	967
							Watts	127	194	239	285	337
		High (450 CFM/ton)	OFF	ON	ON	OFF	CFM	1055	1084	1096	1078	1084
							Watts	191	253	309	346	401
	3	Low (350 CFM/Ton)	ON	OFF	OFF	ON	CFM	953	1007	1012	1013	1005
							Watts	149	218	269	309	357
		Normal (400 CFM/ton)	ON	OFF	OFF	OFF	CFM	1129	1147	1146	1153	1138
							Watts	224	292	346	407	443
		High (450 CFM/ton)	ON	OFF	ON	OFF	CFM	1275	1298	1306	1296	1185
							Watts	313	399	475	526	477
	3.5	Low (350 CFM/Ton)	OFF	OFF	OFF	ON	CFM	1146	1158	1164	1174	1148
							Watts	233	298	358	419	448
		Normal (400 CFM/ton)	OFF	OFF	OFF	OFF	CFM	1343	1364	1370	1317	1200
							Watts	363	449	518	546	486
		High (450 CFM/ton)	OFF	OFF	ON	OFF	CFM	1346	1364	1371	1327	1194
							Watts	361	449	526	545	485

Notes:
1. * First letter may be "A" or "T".
2. ** Factory setting.
3. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
4. For variable speed low speed airflows are approximately 30% of listed values.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.

Performance Data

	*UX2C100AFV4VA	Furnace Heating Airflow (CFM) and Power (watts) vs. External Static Pressure With Filter							
		Airflow	Dip Switch Setting			External Static Pressure				
		Setting	SW7	SW8		0.1	0.3	0.5	0.7	0.9
Heating	Heating 1st Stage	Low	ON	ON	CFM	903	940	944	953	958
					Temp. Rise	62	60	59	59	58
					Watts	104	155	201	253	308
		Medium Low	OFF	ON	CFM	999	1016	1042	1066	1070
					Temp. Rise	56	55	54	53	52
					Watts	129	178	237	301	359
		Medium**	ON	OFF	CFM	1090	1145	1190	1206	1207
					Temp. Rise	51	49	47	46	46
					Watts	156	227	300	370	434
		High	OFF	OFF	CFM	1234	1291	1328	1342	1339
					Temp. Rise	45	43	42	42	42
					Watts	211	296	375	448	517
	Heating 2nd Stage	Low	ON	ON	CFM	1256	1321	1341	1351	1340
					Temp. Rise	69	65	64	64	64
					Watts	221	313	383	457	521
		Medium Low	OFF	ON	CFM	1398	1449	1451	1457	1420
					Temp. Rise	62	59	59	59	61
					Watts	293	382	455	535	577
		Medium**	ON	OFF	CFM	1557	1595	1626	1609	1438
					Temp. Rise	55	54	53	54	60
					Watts	395	493	597	668	597
		High	OFF	OFF	CFM	1748	1781	1795	1640	1476
					Temp. Rise	49	48	48	53	58
					Watts	548	667	761	695	627

	*UX2C100AFV4VA Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter											
	Unit	Airflow	Dip Switch Setting					External Static Pressure				
	Outdoor	Setting	SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
Cooling	**2.5**	Low (350 CFM/Ton)	ON	ON	OFF	ON	CFM	855	886	907	905	906
							Watts	95	142	193	241	289
		Normal (400 CFM/ton)	ON	ON	OFF	OFF	CFM	983	1002	1032	1044	1056
							Watts	128	178	236	295	355
		High (450 CFM/ton)	ON	ON	ON	OFF	CFM	1077	1116	1160	1181	1185
							Watts	154	219	293	361	429
	3	Low (350 CFM/Ton)	OFF	ON	OFF	ON	CFM	1020	1042	1076	1100	1099
							Watts	136	192	256	320	381
		Normal (400 CFM/ton)	OFF	ON	OFF	OFF	CFM	1155	1216	1247	1260	1262
							Watts	185	263	337	404	473
		High (450 CFM/ton)	OFF	ON	ON	OFF	CFM	1309	1372	1387	1392	1362
							Watts	249	341	419	495	543
	3.5	Low (350 CFM/Ton)	ON	OFF	OFF	ON	CFM	1170	1239	1269	1274	1275
							Watts	186	276	350	414	483
		Normal (400 CFM/ton)	ON	OFF	OFF	OFF	CFM	1365	1418	1433	1425	1371
							Watts	278	369	452	518	550
		High (450 CFM/ton)	ON	OFF	ON	OFF	CFM	1544	1568	1602	1573	1408
							Watts	387	480	587	641	579
	4	Low (350 CFM/Ton)	OFF	OFF	OFF	ON	CFM	1350	1407	1430	1425	1374
							Watts	270	362	448	516	557
		Normal (400 CFM/ton)	OFF	OFF	OFF	OFF	CFM	1554	1581	1612	1597	1424
							Watts	387	486	590	652	585
		High (450 CFM/ton)	OFF	OFF	ON	OFF	CFM	1758	1798	1784	1628	1469
							Watts	552	681	754	689	619

Notes:
1. * First letter may be "A" or "T".
2. ** Factory setting.
3. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
4. For variable speed low speed airflows are approximately 30% of listed values.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.

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Performance Data

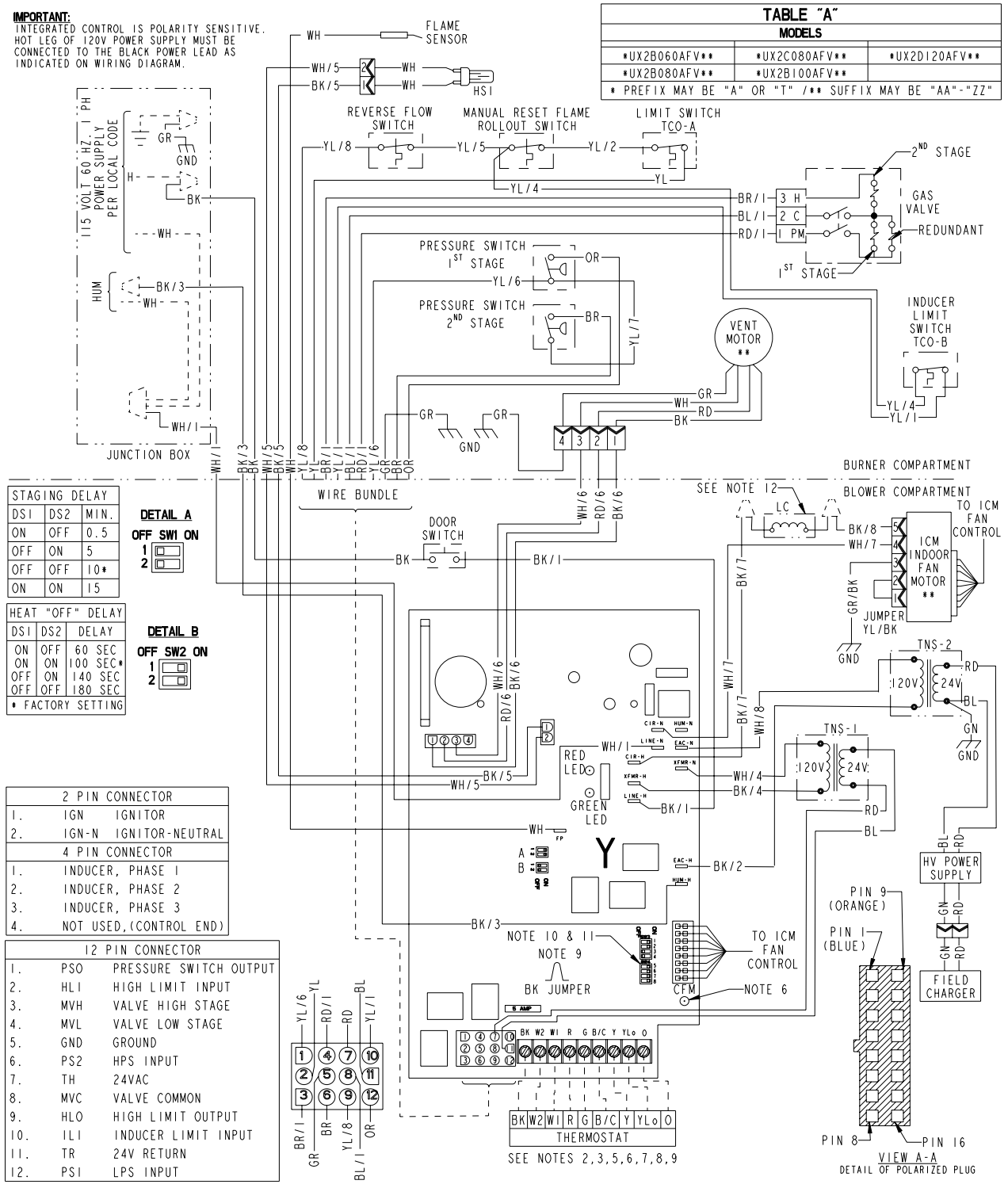
	*UX2D120AFV5VA	Furnace Heating Airflow (CFM) and Power (watts) vs. External Static Pressure With Filter								
		Airflow Setting	Dip Switch Setting			External Static Pressure				
			SW7	SW8		0.1	0.3	0.5	0.7	0.9
Heating	Heating 1st Stage	Low	ON	ON	CFM	1048	1077	1095	1090	1093
					Temp. Rise	64	62	61	61	61
					Watts	204	262	319	360	405
		Medium Low	OFF	ON	CFM	1199	1205	1221	1231	1248
					Temp. Rise	56	55	55	54	54
					Watts	262	314	377	444	512
		Medium**	ON	OFF	CFM	1327	1365	1389	1404	1404
					Temp. Rise	50	49	48	48	48
					Watts	320	397	472	548	613
		High	OFF	OFF	CFM	1592	1616	1633	1629	1458
					Temp. Rise	42	41	41	41	46
					Watts	477	565	643	718	657
	Heating 2nd Stage	Low	ON	ON	CFM	1740	1746	1743	1658	1482
					Temp. Rise	59	59	59	62	69
					Watts	626	709	779	780	709
		Medium Low	OFF	ON	CFM	1955	1960	1834	1694	1529
					Temp. Rise	53	52	56	61	67
					Watts	837	928	871	810	745
		Medium**	ON	OFF	CFM	2123	1997	1871	1737	1578
					Temp. Rise	48	51	55	59	65
					Watts	1031	971	912	854	787
		High	OFF	OFF	CFM	2179	2066	1949	1817	1660
					Temp. Rise	47	50	53	57	62
					Watts	1111	1058	1000	941	869

	*UX2D120AFV5VA Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter											
	Unit Outdoor	Airflow Setting	Dip Switch Setting					External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
Cooling	3.5	Low (350 CFM/Ton)	OFF	ON	OFF	ON	CFM	1219	1230	1246	1252	1271
							Watts	214	271	337	399	472
		Normal (400 CFM/ton)	OFF	ON	OFF	OFF	CFM	1425	1451	1481	1496	1431
							Watts	320	398	480	561	583
		High (450 CFM/ton)	OFF	ON	ON	OFF	CFM	1642	1671	1681	1645	1466
							Watts	461	554	635	678	608
	4	Low (350 CFM/Ton)	ON	OFF	OFF	ON	CFM	1431	1456	1475	1481	1422
							Watts	316	395	470	543	570
		Normal (400 CFM/ton)	ON	OFF	OFF	OFF	CFM	1697	1710	1720	1639	1458
							Watts	498	583	660	668	596
		High (450 CFM/ton)	ON	OFF	ON	OFF	CFM	1916	1932	1825	1681	1510
							Watts	690	797	764	707	635
	5	Low (350 CFM/Ton)	OFF	OFF	OFF	ON	CFM	1840	1866	1823	1679	1502
							Watts	623	725	760	705	632
		Normal (400 CFM/ton)	OFF	OFF	OFF	OFF	CFM	2121	1996	1868	1731	1567
							Watts	928	871	811	754	686
		High (450 CFM/ton)	OFF	OFF	ON	OFF	CFM	2173	2050	1929	1797	1641
							Watts	995	934	880	818	753

Notes:
1. * First letter may be "A" or "T".
2. ** Factory setting.
3. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
4. For variable speed low speed airflows are approximately 30% of listed values.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.

Electrical Data

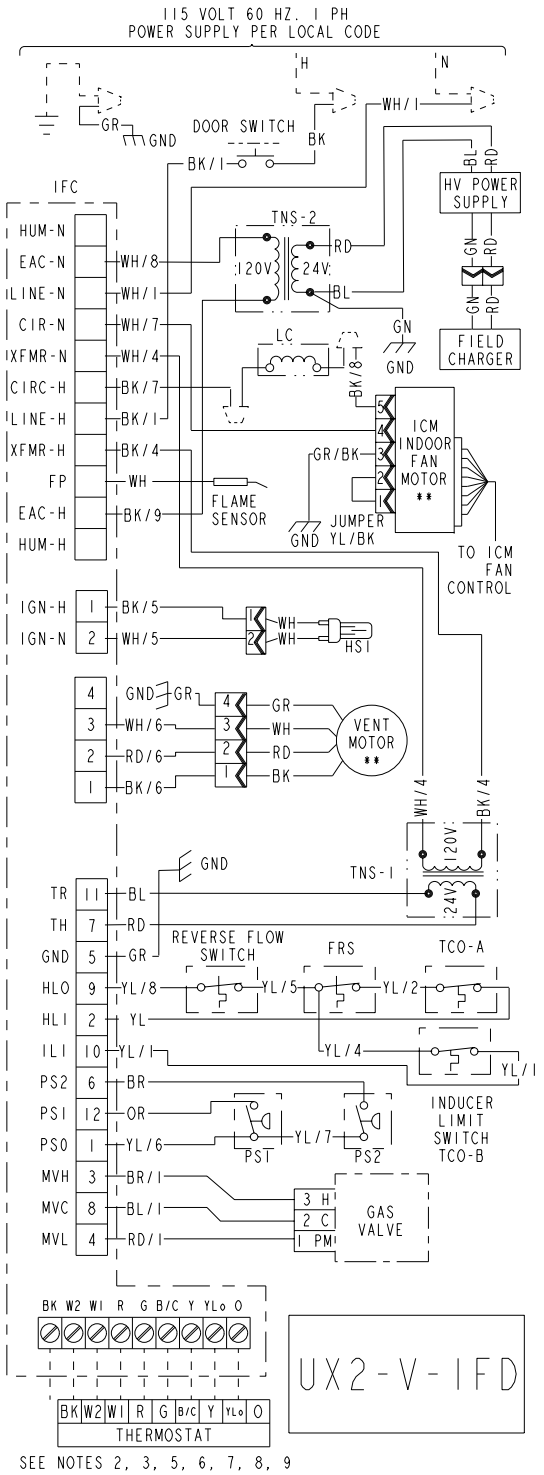
WIRING DIAGRAM FOR GAS FURNACES



PUB. NO. 22-1803-05

Electrical Data

SCHEMATIC DIAGRAM FOR GAS FURNACES



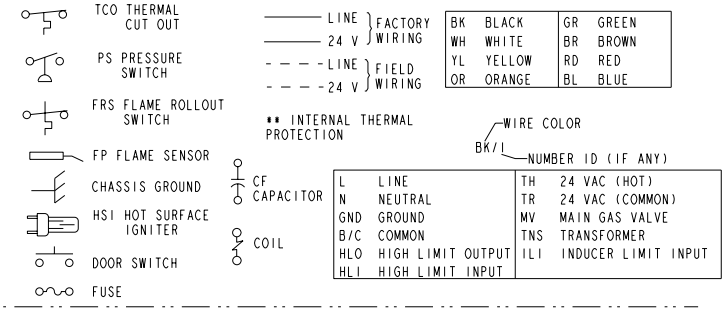
DIAGNOSTIC CODES (SEE NOTE 13)	
RED LED - LitePort tm Data - 1 Flash every 20 seconds	
2 FLASHES - SYSTEM LOCKOUT RETRIES OR RECYCLES EXCEEDED	6 FLASHES - 115 VOLT AC POWER REVERSED OR IGNITER FAULT
3 FLASHES - PRESSURE SWITCH FAULT	7 FLASHES - GAS VALVE CIRCUIT ERROR
	8 FLASHES - LOW FLAME SENSE SIGNAL
4 FLASHES - OPEN LIMIT SWITCH	9 FLASHES - OPEN INDUCER LIMIT
5 FLASHES - FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT	10 FLASHES - INDUCER 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 - FUSE OPEN OR INTERNAL CONTROL FAILURE	

WARNING ⚠	CAUTION ⚠
HAZARDOUS VOLTAGE DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.	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 04678 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
HUMIDIFER
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



BK	BLACK	GR	GREEN
WH	WHITE	BR	BROWN
YL	YELLOW	RD	RED
OR	ORANGE	BL	BLUE

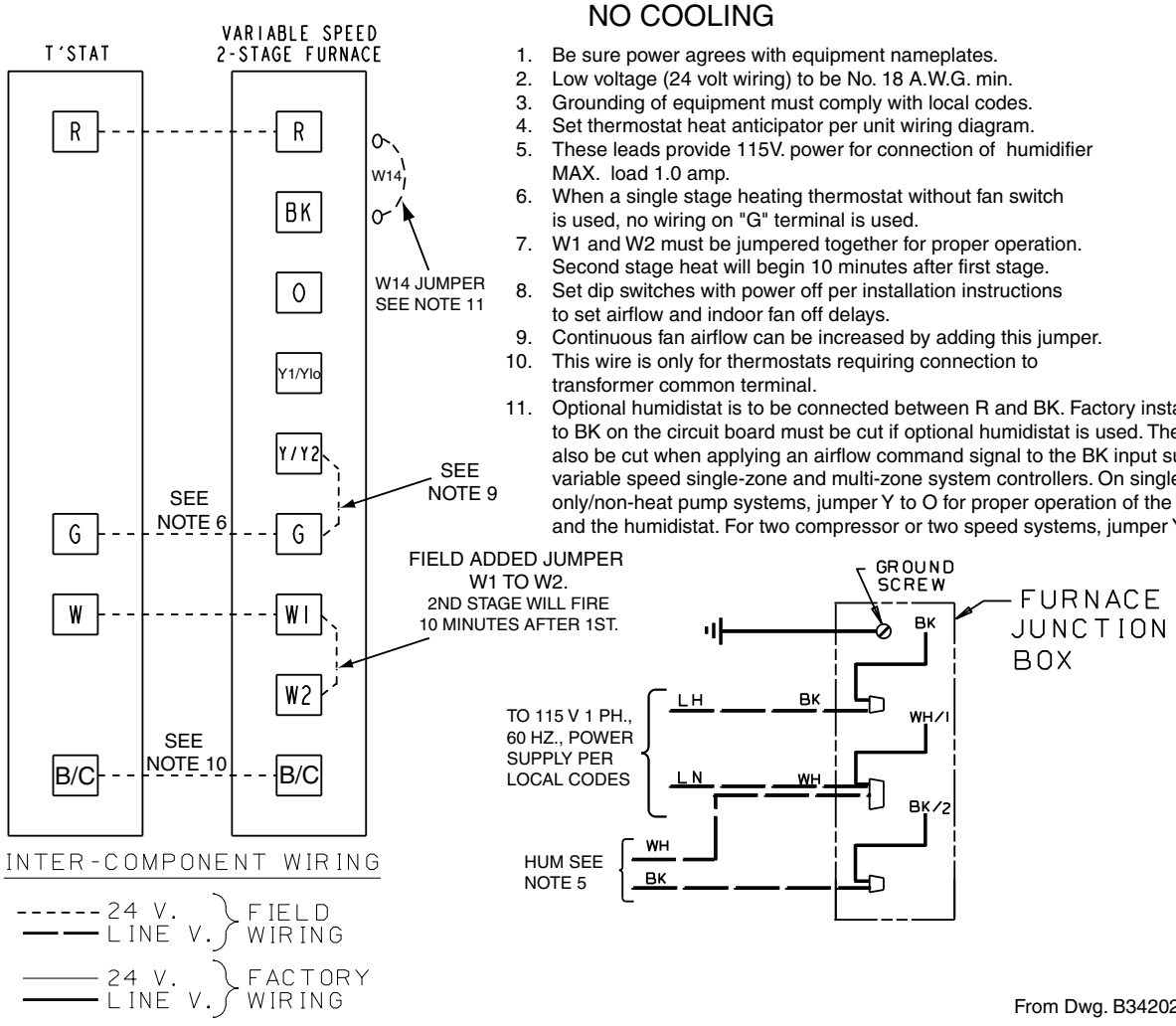
L	LINE	TH	24 VAC (HOT)
N	NEUTRAL	TR	24 VAC (COMMON)
GND	GROUND	MV	MAIN GAS VALVE
B/C	COMMON	TNS	TRANSFORMER
HLO	HIGH LIMIT OUTPUT	ILI	INDUCER LIMIT INPUT
HLI	HIGH LIMIT INPUT		

NOTES:

1. 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.
2. THERMOSTAT HEAT ANTICIPATOR SETTING: FIRST STAGE.38 AMPS, SECOND STAGE .13 AMPS. IF SETTING IS NOT FIXED ON THERMOSTAT, FOR SINGLE STAGE HEATING THERMOSTAT SET AT .51 AMPS.
3. FOR PROPER OPERATION OF COOLING SPEED, "Y" TERMINAL MUST BE CONNECTED TO THE ROOM THERMOSTAT.
4. THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC HUMIDIFIER (HUM). MAX. LOAD:
5. JUMPER W1 AND W2 FOR SINGLE STAGE HEATING THERMOSTAT, SECOND STAGE WILL BE ENERGIZED, DELAYED PER STAGING DELAY SETTING.
6. GREEN LIGHT (CFM) FLASHES ONCE PER 100 CFM COMMAND.
7. FOR HEAT PUMP SYSTEMS Y AND O MUST BE CONNECTED TO THE LOW-VOLTAGE TERMINAL BOARD.
8. FOR TWO SPEED SYSTEMS, USE YLO FOR LOW SPEED AND Y FOR HIGH SPEED CONNECTION TO THE LOW-VOLTAGE TERMINAL BOARD.
9. OPTIONAL HUMIDSTAT IS TO BE CONNECTED BETWEEN THE "R" AND "BK". FACTORY INSTALLED JUMPER "R" TO "BK" (BK JUMPER) ON THE CIRCUIT BOARD MUST BE CUT IF OPTIONAL HUMIDSTAT IS USED. THE JUMPER MUST ALSO BE CUT WHEN APPLYING AN AIRFLOW COMMAND SIGNAL TO THE "BK" INPUT SUCH AS WITH THE VARIABLE SPEED SINGLE-ZONE AND MULTI-ZONE SYSTEM CONTROLLERS. ON SINGLE SPEED COOLING ONLY / NON-HEAT PUMP SYSTEMS, JUMPER "Y" TO "O" FOR PROPER OPERATION OF THE DELAY PROFILES AND THE HUMIDSTAT. FOR TWO COMPRESSOR OR TWO SPEED SYSTEMS, JUMPER "YLO" TO "O".
10. SEE INDOOR MOTOR AIRFLOW SELECTION CHART, LOCATED IN THE FURNACE FOR DIP SWITCH SETTINGS TO SET AIRFLOW AND COOLING OFF DELAYS.
11. POWER MUST BE OFF WHEN DIP SWITCHES ARE SET.
12. USED FOR *UD2C100AFV4* AND *UD2C120AFV5* MODELS ONLY.
13. 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 VARIABLE SPEED 2 STAGE FURNACE
1 STAGE HEATING
USING A 1 STAGE HEATING THERMOSTAT
NO COOLING



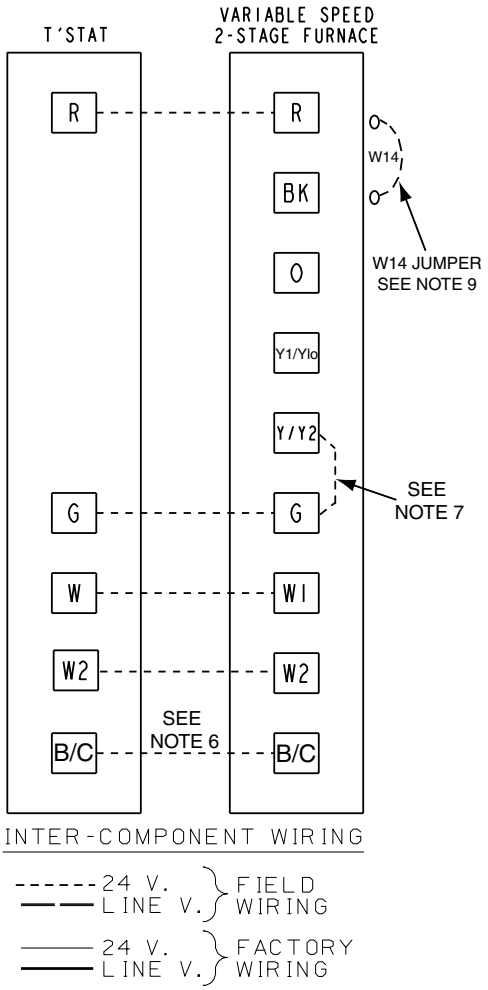
1. Be sure power agrees with equipment nameplates.
2. Low voltage (24 volt wiring) to be No. 18 A.W.G. min.
3. Grounding of equipment must comply with local codes.
4. Set thermostat heat anticipator per unit wiring diagram.
5. These leads provide 115V. power for connection of humidifier MAX. load 1.0 amp.
6. When a single stage heating thermostat without fan switch is used, no wiring on "G" terminal is used.
7. W1 and W2 must be jumpered together for proper operation. Second stage heat will begin 10 minutes after first stage.
8. Set dip switches with power off per installation instructions to set airflow and indoor fan off delays.
9. Continuous fan airflow can be increased by adding this jumper.
10. This wire is only for thermostats requiring connection to transformer common terminal.
11. Optional humidistat is to be connected between R and BK. Factory installed jumper R to BK on the circuit board must be cut if optional humidistat is used. The jumper must also be cut when applying an airflow command signal to the BK input such as with the variable speed single-zone and multi-zone system controllers. On single speed cooling only/non-heat pump systems, jumper Y to O for proper operation of the delay profiles and the humidistat. For two compressor or two speed systems, jumper YLo to O.

From Dwg. B342027 Rev. 0

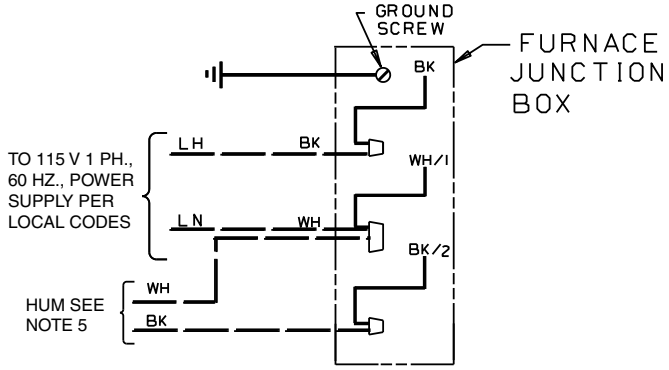
PUB. NO. 22-1803-05

Field Wiring

FIELD WIRING DIAGRAM FOR VARIABLE SPEED 2 STAGE FURNACE
2 STAGE HEATING
USING A 2 STAGE HEATING THERMOSTAT
NO COOLING



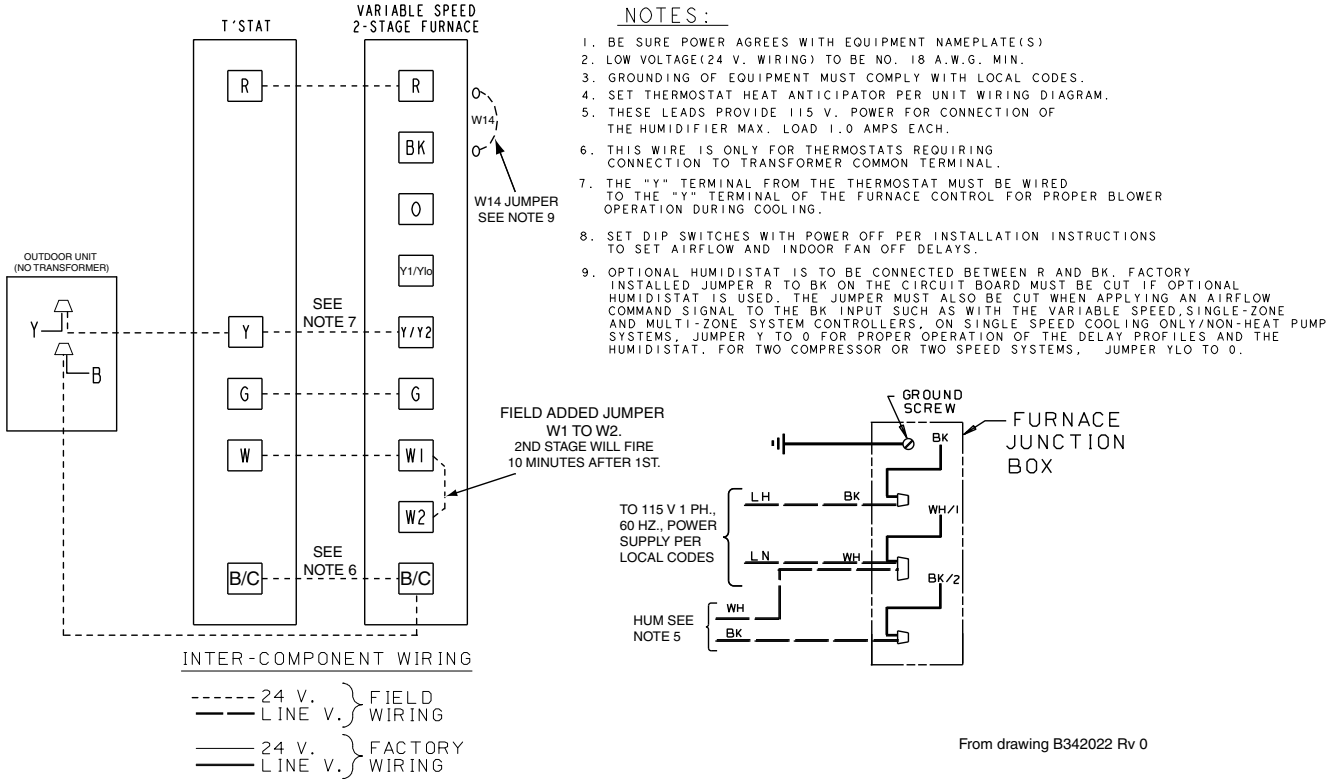
1. Be sure power agrees with equipment nameplates.
2. Low voltage (24 volt wiring) to be No. 18 A.W.G. min.
3. Grounding of equipment must comply with local codes.
4. Set thermostat heat anticipator per unit wiring diagram.
5. These leads provide 115V. power for connection of humidifier MAX. load 1.0 amp.
6. This wire is only for thermostats requiring connection to transformer common terminal.
7. Continuous fan airflow can be increased by adding this jumper.
8. Set dip switches with power off per installation instructions to set airflow and indoor fan off delays.
9. Optional humidistat is to be connected between R and BK. Factory installed jumper R to BK on the circuit board must be cut if optional humidistat is used. The jumper must also be cut when applying an airflow command signal to the BK input such as with the variable speed single-zone and multi-zone system controllers. On single speed cooling only/non-heat pump systems, jumper Y to O for proper operation of the delay profiles and the humidistat. For two compressor or two speed systems, jumper YLo to O.



From Dwg. B342025 Rev. 0

Field Wiring

FIELD WIRING DIAGRAM FOR VARIABLE SPEED 2 STAGE FURNACE
1 STAGE HEATING, 1 STAGE COOLING
USING A 1 STAGE HEATING, 1 STAGE COOLING THERMOSTAT
(OUTDOOR SECTION WITHOUT TRANSFORMER)



NOTES:

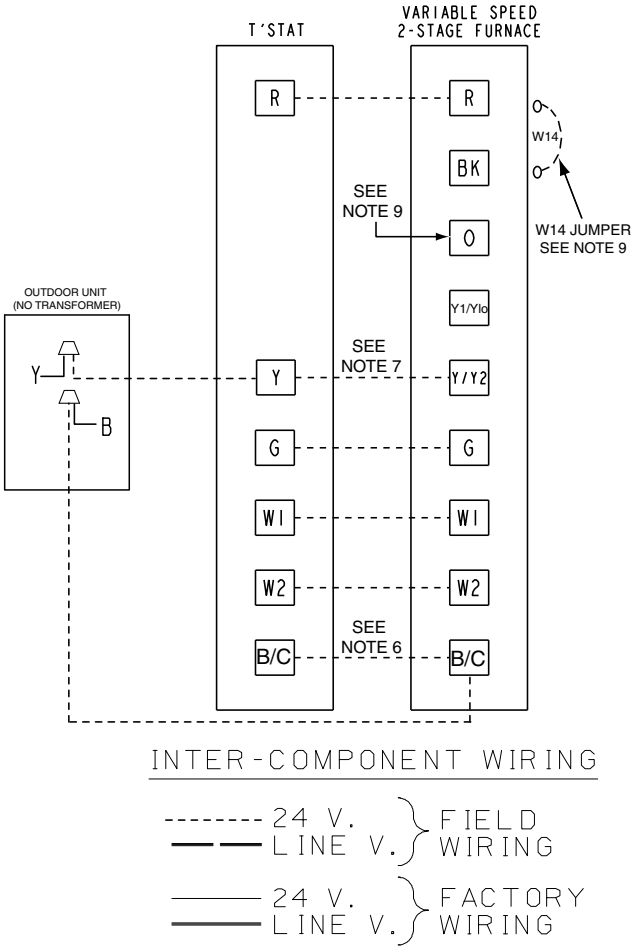
1. BE SURE POWER AGREES WITH EQUIPMENT NAMEPLATE(S)
2. LOW VOLTAGE(24 V. WIRING) TO BE NO. 18 A.W.G. MIN.
3. GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. SET THERMOSTAT HEAT ANTICIPATOR PER UNIT WIRING DIAGRAM.
5. THESE LEADS PROVIDE 115 V. POWER FOR CONNECTION OF THE HUMIDIFIER MAX. LOAD 1.0 AMPS EACH.
6. THIS WIRE IS ONLY FOR THERMOSTATS REQUIRING CONNECTION TO TRANSFORMER COMMON TERMINAL.
7. THE "Y" TERMINAL FROM THE THERMOSTAT MUST BE WIRED TO THE "Y" TERMINAL OF THE FURNACE CONTROL FOR PROPER BLOWER OPERATION DURING COOLING.
8. SET DIP SWITCHES WITH POWER OFF PER INSTALLATION INSTRUCTIONS TO SET AIRFLOW AND INDOOR FAN OFF DELAYS.
9. OPTIONAL HUMIDISTAT IS TO BE CONNECTED BETWEEN R AND BK. FACTORY INSTALLED JUMPER R TO BK ON THE CIRCUIT BOARD MUST BE CUT IF OPTIONAL HUMIDISTAT IS USED. THE JUMPER MUST ALSO BE CUT WHEN APPLYING AN AIRFLOW COMMAND SIGNAL TO THE BK INPUT SUCH AS WITH THE VARIABLE SPEED,SINGLE-ZONE AND MULTI-ZONE SYSTEM CONTROLLERS, ON SINGLE SPEED COOLING ONLY/NON-HEAT PUMP SYSTEMS, JUMPER Y TO O FOR PROPER OPERATION OF THE DELAY PROFILES AND THE HUMIDISTAT. FOR TWO COMPRESSOR OR TWO SPEED SYSTEMS, JUMPER YLO TO O.

From drawing B342022 Rv 0

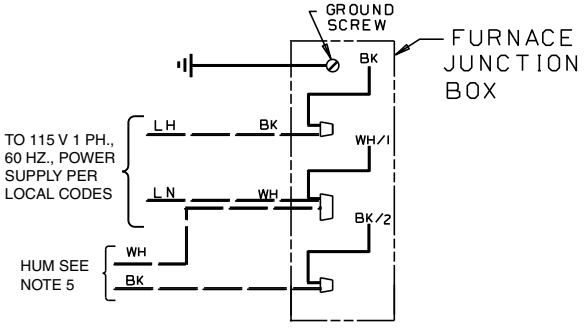
PUB. NO. 22-1803-05

Field Wiring

FIELD WIRING DIAGRAM FOR VARIABLE SPEED 2 STAGE FURNACE
2 STAGE HEATING, 1 STAGE COOLING
USING A 2 STAGE HEATING, 1 STAGE COOLING THERMOSTAT
(OUTDOOR SECTION WITHOUT TRANSFORMER)



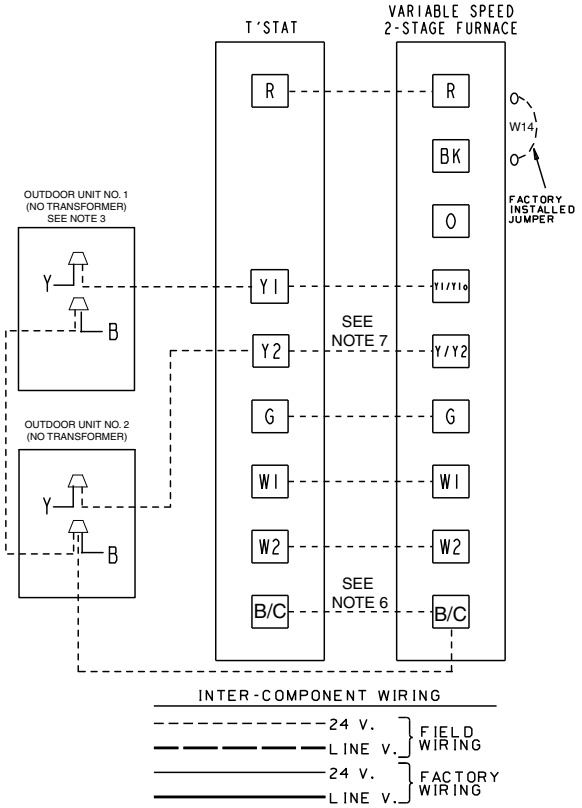
NOTE:
1.) BE SURE POWER AGREES WITH EQUIPMENT NAMEPLATE(S).
2.) LOW VOLTAGE (24V. WIRING) TO BE NO. 18AWG MIN..
3.) GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL BUILDING CODES.
4.) SET THERMOSTAT HEAT ANTICIPATOR PER UNIT WIRING DIAGRAM.
5.) THESE LEADS PROVIDE 115V. POWER FOR CONNECTION OF THE HUMIDIFIER. MAX. LOAD 1.0 AMPS EACH.
6.) THIS WIRE IS ONLY FOR THERMOSTATS REQUIRING CONNECTION TO TRANSFORMER COMMON TERMINAL.
7.) THE "Y" TERMINAL FROM THE THERMOSTAT MUST BE WIRED TO THE "Y" TERMINAL OF THE FURNACE CONTROL FOR PROPER BLOWER OPERATION DURING COOLING.
8.) SET DIP SWITCHES WITH POWER OFF PER INSTALLATION INSTRUCTIONS TO SET AIRFLOW AND INDOOR FAN OFF DELAYS.
9.) OPTIONAL HUMIDISTAT IS TO BE CONNECTED BETWEEN "R" AND "BK". FACTORY INSTALLED JUMPER "R" TO "BK" ON THE CIRCUIT BOARD MUST BE CUT IF OPTIONAL HUMIDISTAT IS USED. THE JUMPER MUST ALSO BE CUT WHEN APPLYING AN AIRFLOW COMMAND SIGNAL TO THE "BK" INPUT SUCH AS WITH THE VARIABLE SPEED SINGLE-ZONE AND MULTI-ZONE SYSTEM CONTROLERS. ON SINGLE SPEED COOLING ONLY / NON-HEAT PUMP SYSTEMS, JUMPER "Y" TO "O" FOR PROPER OPERATION OF THE DELAY PROFILES AND THE HUMIDISTAT. FOR TWO COMPRESSOR OR TWO SPEED SYSTEMS, JUMPER "YLO" TO "O".



From Dwg. B342020 Rev. 0

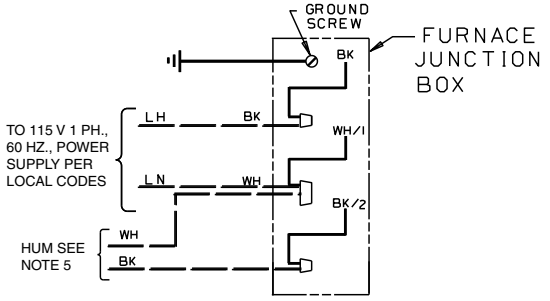
Field Wiring

FIELD WIRING DIAGRAM FOR VARIABLE SPEED 2 STAGE FURNACE
2 STAGE HEATING, 2 STAGE COOLING
(OUTDOOR SECTION WITHOUT TRANSFORMER)



NOTES:

1. BE SURE POWER AGREES WITH EQUIPMENT NAMEPLATE(S)
2. LOW VOLTAGE(24 V. WIRING) TO BE NO. 18 A.W.G. MIN.
3. GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
4. SET THERMOSTAT HEAT ANTICIPATOR PER UNIT WIRING DIAGRAM.
5. THESE LEADS PROVIDE 115 V. POWER FOR CONNECTION OF THE HUMIDIFIER MAX. LOAD 1.0 AMPS EACH.
6. THIS WIRE IS ONLY FOR THERMOSTATS REQUIRING CONNECTION TO TRANSFORMER COMMON TERMINAL.
7. THE "Y2" TERMINAL FROM THE THERMOSTAT MUST BE WIRED TO THE "Y" TERMINAL OF THE FURNACE CONTROL FOR PROPER BLOWER OPERATION DURING COOLING.
8. SET DIP SWITCHES WITH POWER OFF PER INSTALLATION INSTRUCTIONS TO SET AIRFLOW AND INDOOR FAN OFF DELAYS.
9. OPTIONAL HUMIDISTAT IS TO BE CONNECTED BETWEEN R AND BK. FACTORY INSTALLED JUMPER R TO BK ON THE CIRCUIT BOARD MUST BE CUT IF OPTIONAL HUMIDISTAT IS USED. THE JUMPER MUST ALSO BE CUT WHEN APPLYING AN AIRFLOW COMMAND SIGNAL TO THE BK INPUT SUCH AS WITH THE VARIABLE SPEED SINGLE-ZONE AND MULTI-ZONE SYSTEM CONTROLLERS, ON SINGLE SPEED COOLING ONLY/NON-HEAT PUMP SYSTEMS, JUMPER Y TO O FOR PROPER OPERATION OF THE DELAY PROFILES AND THE HUMIDISTAT. FOR TWO COMPRESSOR OR TWO SPEED SYSTEMS, JUMPER Y1 TO O.

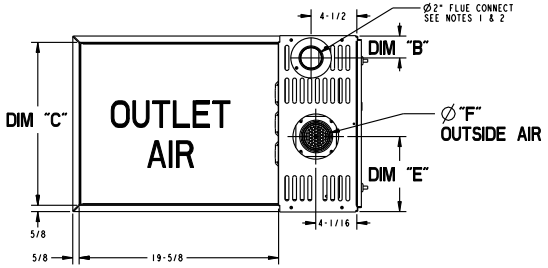


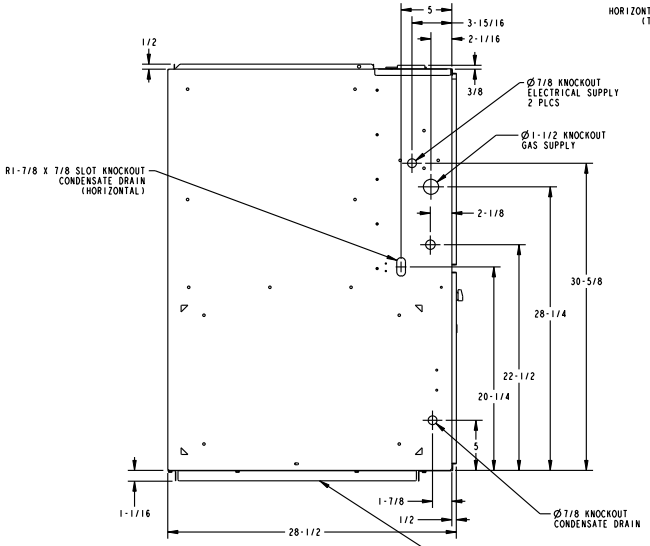
From Dwg. B342018 Rev. 0

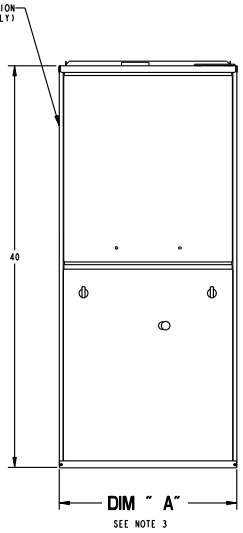
PUB. NO. 22-1803-05

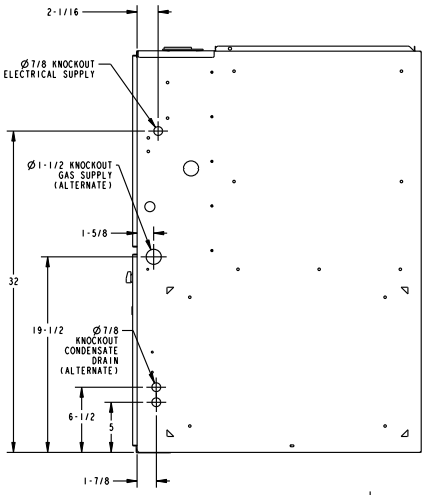
*UX2 UPFLOW / HORIZONTAL OUTLINE DRAWING

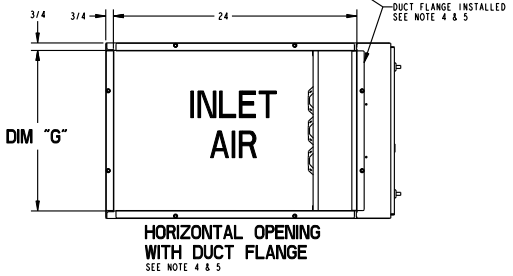
(ALL DIMENSIONS ARE IN INCHES)



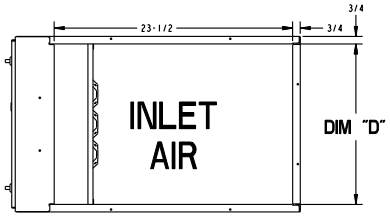








HORIZONTAL OPENING
WITH DUCT FLANGE
SEE NOTE 4 & 5



VERTICAL OPENING

NOTES:
1. *UX2D120AFV5V REQUIRES 3" DIAMETER VENT PIPE.
   *UX2C100AFV4V REQUIRES 2-1/2" OR 3"
   DIAMETER VENT PIPE.
2. 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.
3. MUST HAVE 24" MINIMUM CLEARANCE IN FRONT OF FURNACE FOR THE COLLECTION CELL REMOVAL (CLOSET DOOR OPENED)
4. DUCT FLANGES MUST BE USED WHEN THE FURNACE IS INSTALLED IN THE HORIZONTAL POSITION.
5. FACTORY SUPPLIED BLUNT TIP SCREWS MUST BE USED WHEN INSTALLING THE DUCT FLANGES.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS	
UPFLOW	
SIDES	0 IN.
REAR	0 IN.
FRONT	3 IN. SEE NOTE 3
TOP	1 IN.
FLUE	0 IN.
HORIZONTAL (FLUE DISCHARGE ON THE LEFT)	
ALCOVE	
SIDES	
RIGHT	0 IN.
LEFT	0 IN.
REAR	6 IN.
FRONT	24 IN.
TOP	1 IN.
FLUE	0 IN.
CLOSET	
SIDES	
RIGHT	1 IN.
LEFT	1 IN.
REAR	3 IN.
FRONT	3 IN. SEE NOTE 3
TOP	1 IN.
FLUE	0 IN.

MODEL (SEE NOTE 1 & 2)	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"
*UX2B060AFV3V** *UX2B080AFV3V**	17-1/2"	2-1/4"	16-1/4"	16"	7-1/2"	2"	16"
*UX2C100AFV4V**	21"	2-1/2"	19-3/4"	19 1/2"	9"	3"	19 1/2"
*UX2D120AFV5V**	24-1/2"	2-15/16"	23-1/4"	23"	10"	3"	23"

* PREFIX LETTER MAY BE "A" OR "T"
** SUFFIX LETTERS MAY BE "A" - "Z"

Bottom Return ONLY

Dimensions

NOTES

Literature Order Number	22-1803-05
File Number	22-1803-05
Supersedes	22-1803-04
Date	04/09

Trane
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Tyler, TX 75707
www.trane.com