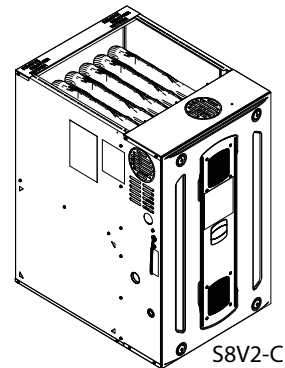


Submittal

Link Communicating or 24 Volt Gas-Fired 2 Stage Induced Draft Furnaces with Variable Speed Motor 80,000 BTUH

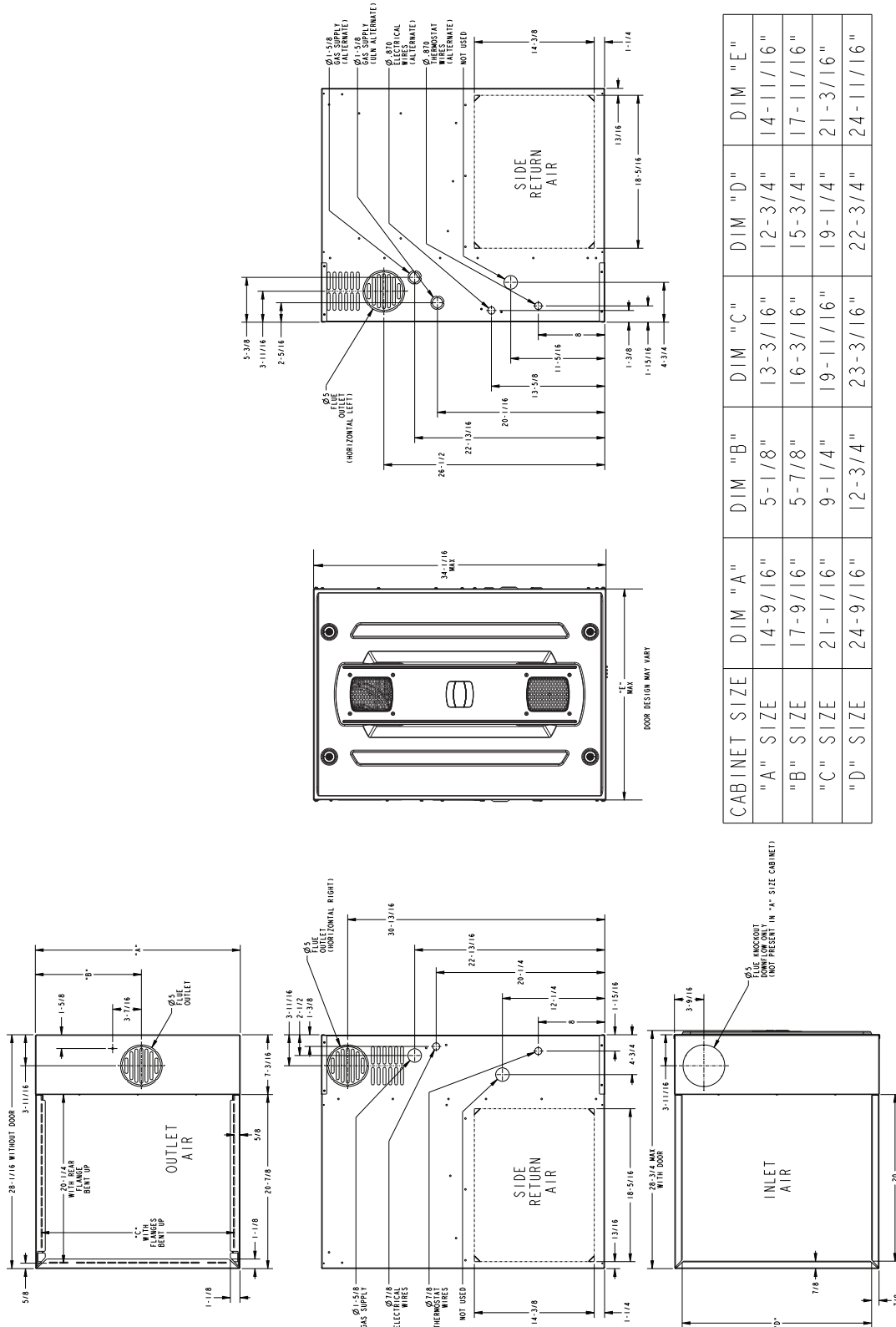
S8V2B080M4PC/D

Note: Models that have a "D" in the 12th digit designating they meet California less than 40 ng/J (NOx) emissions requirements.



Note: Graphics in this document are for representation only. Actual model may differ in appearance.

Outline Drawing



CABINET SIZE	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"
"A" SIZE	14-9/16"	5-1/8"	13-3/16"	12-3/4"	14-11/16"
"B" SIZE	17-9/16"	5-7/8"	16-3/16"	15-3/4"	17-11/16"
"C" SIZE	21-1/16"	9-1/4"	19-11/16"	19-1/4"	21-3/16"
"D" SIZE	24-9/16"	12-3/4"	23-3/16"	22-3/4"	24-11/16"

$\phi 5$ ANKOROUT DIMENSIONAL NOT PRESENT IN "A" SIZE CABINET

Product Specification

Model	S8V2B080M4PC ^(a) S8V2B080M4PD ^(a)
Type	Upflow / Horizontal / Downflow
RATINGS ^(b)	
1st Stage Input BTUH	52,000
1st Stage Capacity BTUH (ICS)	41,200
2nd Stage Input BTUH	80,000
2nd Stage Capacity BTUH (ICS) ^(c)	65,800
1st Stage Temp. Rise (Min. - Max.) °F	30 - 60
2nd Stage Temp. Rise (Min. - Max.) °F	30 - 60
AFUE - Rating ^(c)	80
Return Air Temp. (Min. - Max.) °F	55°F - 80°F
BLOWER DRIVE	DIRECT
Diameter - Width (in.)	11 X 8
No. Used	1
Speeds (No.) ^(d)	Variable
CFM vs. in. w.g.	See Fan Performance Table
Motor HP	3/4
R.P.M.	Variable
Volts / Ph / Hz	120 / 1 / 60
FLA	8
COMBUSTION FAN - Type	PSC
Drive - No. Speeds	Direct - 2
Motor HP - RPM	3200/2900
Volts/Ph/Hz	120 / 1 / 60
FLA	0.33
Inducer Orifice	1.75
FILTER - Furnished?	No
Type Recommended	High Velocity

Model	S8V2B080M4PC ^(a) S8V2B080M4PD ^(a)
Hi Vel. (No.-Size-Thk.)	1 - 16 X 25 - 1 in.
VENT PIPE DIAMETER - Min. (in.) ^(e)	4 Round
HEAT EXCHANGER - Type	Aluminized Steel
Gauge (Fired)	20 - 19
ORIFICES - Main	
Nat. Gas Qty. - Drill Size	4 - 45
L.P. Gas Qty. - Drill Size	4 - 56
GAS VALVE	Redundant - Two Stage
PILOT SAFETY DEVICE - Type	120 V SiNi Igniter
BURNERS - QTY	4
POWER CONN. - V/Ph/HZ ^(f)	120 / 1 / 60
Ampacity (Amps)	10.5
Max. Overcurrent Protection (Amps)	15
PIPE CONN. SIZE (IN.)	1/2
DIMENSIONS	H x W x D
Uncrated (in.)	34 x 17.5 x 28.75
Crated (in.)	35.5 x 19.5 x 30.87
WEIGHT	
Shipping (Lbs.)/Net (Lbs.)	137/129

- ^(a) Central Furnace heating designs are certified to ANSI Z21.47 - latest edition.
- ^(b) 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.
- ^(c) Based on U.S. government standard tests.
- ^(d) Direct drive variable speed blower motor is an ECM constant airflow blower motor.
- ^(e) Refer to the Installation, Operation, and Maintenance Manual.
- ^(f) The above wiring specifications are in accordance with National Electric Code, however, installations must comply with local codes.

Airflow Tables

Table 1. S8V2B080M4P Heating Airflow

S8V2B080M4P Furnace Heating Airflow (CFM), Temp. Rise (°F), and Power (Watts) vs. External Static Pressure with Filter (iwc)								
				1st Stage Capacity = 41,200 2nd Stage Capacity = 65,800				
Heating	Airflow Setting	Target Airflow		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Heating 1st Stage	Low	689	CFM	692	684	678	670	664
			Temp. Rise	56	56	57	57	58
			Watts	50	93	136	179	222
	Medium Low ^(a)	865	CFM	854	858	861	864	867
			Temp. Rise	45	45	45	45	45
			Watts	78	125	173	221	268
	Medium	956	CFM	947	941	936	930	924
			Temp. Rise	41	41	42	42	42
			Watts	100	151	201	252	302
	High	1040	CFM	1033	1019	1005	991	978
			Temp. Rise	37	38	38	39	40
			Watts	121	174	227	280	334
Heating 2nd Stage	Low	1060	CFM	1071	1068	1065	1061	1058
			Temp. Rise	56	56	56	56	57
			Watts	107	180	254	327	401
	Medium Low ^(a)	1330	CFM	1320	1318	1315	1313	1311
			Temp. Rise	45	45	45	45	45
			Watts	211	287	364	441	517
	Medium	1470	CFM	1460	1453	1446	1439	1432
			Temp. Rise	41	41	42	42	42
			Watts	305	383	460	538	615
	High	1600	CFM	1591	1579	1568	1556	1545
			Temp. Rise	38	38	38	38	38
			Watts	393	471	550	628	707

^(a) Factory Setting

Table 2. S8V2B080M4P Cooling Airflow

S8V2B080M4P Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter (iwc)							
Outdoor Tonnage - "Odt" (tons)	Airflow Setting - "CPC" (CFM/ton)		EXTERNAL STATIC PRESSURE (IN. W. C.)				
			0.1	0.3	0.5	0.7	0.9
1.5	450	CFM / WATTS	692 / 42	684 / 78	678 / 119	672 / 163	667 / 212
	420	CFM / WATTS	647 / 37	639 / 71	632 / 110	626 / 153	621 / 201
	400	CFM / WATTS	617 / 33	609 / 66	602 / 105	596 / 147	591 / 194
	370	CFM / WATTS	572 / 28	563 / 60	556 / 97	550 / 139	545 / 185
	350	CFM / WATTS	542 / 26	533 / 56	526 / 92	520 / 134	515 / 180
	330	CFM / WATTS	512 / 23	502 / 53	495 / 88	489 / 129	484 / 175
	310	CFM / WATTS	481 / 21	472 / 49	465 / 84	459 / 125	453 / 170
	290	CFM / WATTS	450 / 18	443 / 46	450 / 82	450 / 123	417 / 166
2.0	450	CFM / WATTS	915 / 82	909 / 126	903 / 175	897 / 226	893 / 281
	420	CFM / WATTS	856 / 69	849 / 112	843 / 158	838 / 207	833 / 260
	400	CFM / WATTS	817 / 62	809 / 103	803 / 147	798 / 195	793 / 247
	370	CFM / WATTS	757 / 52	749 / 90	743 / 133	737 / 179	732 / 229
	350	CFM / WATTS	717 / 46	709 / 83	703 / 124	697 / 169	692 / 218
	330	CFM / WATTS	677 / 40	669 / 76	662 / 116	657 / 160	652 / 208
	310	CFM / WATTS	637 / 35	629 / 69	622 / 108	616 / 151	611 / 199
	290	CFM / WATTS	597 / 31	589 / 63	582 / 101	576 / 143	571 / 190

Table 2. S8V2B080M4P Cooling Airflow (continued)

S8V2B080M4P Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter (iwc)							
Outdoor Tonnage - "Odt" (tons)	Airflow Setting - "CPC" (CFM/ton)		EXTERNAL STATIC PRESSURE (IN. W. C.)				
			0.1	0.3	0.5	0.7	0.9
2.5	450	CFM / WATTS	1135 / 143	1130 / 196	1124 / 253	1120 / 312	1115 / 375
	420	CFM / WATTS	1062 / 119	1056 / 170	1050 / 224	1045 / 281	1041 / 340
	400	CFM / WATTS	1013 / 106	1007 / 154	1002 / 206	997 / 261	992 / 319
	370	CFM / WATTS	940 / 87	933 / 133	927 / 182	922 / 235	917 / 290
	350	CFM / WATTS	891 / 76	884 / 120	878 / 167	872 / 218	868 / 272
	330	CFM / WATTS	841 / 66	834 / 108	828 / 154	823 / 203	818 / 255
	310	CFM / WATTS	792 / 57	784 / 97	778 / 141	772 / 188	768 / 239
	290	CFM / WATTS	742 / 49	734 / 87	728 / 129	722 / 175	717 / 225
3.0	450	CFM / WATTS	1353 / 230	1348 / 292	1343 / 358	1339 / 426	1335 / 496
	420	CFM / WATTS	1266 / 192	1261 / 250	1256 / 312	1252 / 377	1247 / 444
	400	CFM / WATTS	1208 / 169	1203 / 225	1198 / 285	1193 / 347	1189 / 412
	370	CFM / WATTS	1121 / 138	1115 / 191	1110 / 247	1105 / 306	1101 / 367
	350	CFM / WATTS	1062 / 120	1056 / 170	1051 / 224	1046 / 281	1041 / 340
	330	CFM / WATTS	1004 / 103	997 / 151	992 / 203	987 / 258	982 / 315
	310	CFM / WATTS	945 / 88	938 / 134	932 / 184	927 / 236	922 / 292
	290	CFM / WATTS	886 / 75	879 / 119	873 / 166	867 / 216	863 / 270
3.5	450	CFM / WATTS	1568 / 349	1564 / 420	1559 / 494	1556 / 571	1552 / 650
	420	CFM / WATTS	1468 / 289	1463 / 356	1459 / 427	1455 / 499	1451 / 574
	400	CFM / WATTS	1401 / 253	1396 / 318	1392 / 385	1387 / 455	1383 / 528
	370	CFM / WATTS	1300 / 206	1295 / 266	1290 / 330	1286 / 396	1282 / 464
	350	CFM / WATTS	1232 / 178	1227 / 235	1222 / 296	1218 / 359	1213 / 425
	330	CFM / WATTS	1165 / 153	1159 / 207	1154 / 265	1149 / 326	1145 / 389
	310	CFM / WATTS	1096 / 130	1091 / 182	1085 / 237	1080 / 295	1076 / 356
	290	CFM / WATTS	1028 / 110	1022 / 159	1016 / 212	1011 / 267	1007 / 325
4.0 ^(a)	450	CFM / WATTS	1780 / 503	1776 / 584	1773 / 667	1769 / 753	1766 / 841
	420	CFM / WATTS	1667 / 416	1663 / 492	1659 / 570	1656 / 651	1652 / 734
	400	CFM / WATTS	1592 / 364	1587 / 436	1583 / 512	1579 / 590	1576 / 670
	370	CFM / WATTS	1477 / 294	1473 / 362	1469 / 433	1464 / 506	1461 / 581
	350 ^(a)	CFM / WATTS	1401 / 253	1396 / 318	1392 / 385	1387 / 455	1383 / 528
	330	CFM / WATTS	1324 / 217	1319 / 278	1314 / 342	1310 / 409	1306 / 478
	310	CFM / WATTS	1247 / 184	1242 / 242	1237 / 303	1232 / 367	1228 / 433
	290	CFM / WATTS	1169 / 154	1164 / 209	1159 / 267	1154 / 328	1150 / 392

^(a) Factory Setting

General Features

COMMUNICATING MODE

Furnace is shipped ready to be connected in communicating mode.

A/T LINK360A2VVUA Link Smart Thermostat and System Controller must be ordered separately.

COMFORT CONTROL

Link communicating technology seamlessly connects each of the system's components, allowing for advanced diagnostics, system performance updates, and optional remote monitoring that can help keep the system running at optimal performance levels throughout its lifetime.

ALTERNATE 24V MODE

Furnace is field configurable to 24V non-communicating mode.

NATURAL GAS MODELS

Central Heating furnace designs are certified by Intertek 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 is a solid state device which continuously monitors for presence of flame when the system is in the heating mode of operation. Dual solenoid combination gas valve and regulator provide additional safety.

QUICK HEATING

Durable, cycle tested, heavy gauge **tubular 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 discharge of gas fumes to the outside.

BURNERS

Multiport, Inshot burners will give years of quiet and efficient service. All models can be converted to **L.P. gas** with LP conversion kit.

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.

ENERGY EFFICIENT OPERATION

Air-Tite™ cabinet design is certified to <1% air leakage per ASHRAE 193 "Method of Test for Determining the Airtightness of HVAC Equipment."

AIR DELIVERY

The highly efficient, variable speed blower motor delivers consistent airflow and will switch from heating to cooling speeds on demand from the room thermostat.

STYLING

Heavy gauge steel and "wrap-around" cabinet construction is used in the cabinet with baked-on enamel finish for strength and beauty. Every orientation has at least two venting options. There are no knockouts on cabinet.

FEATURES AND GENERAL OPERATION

The S-Series furnace utilizes a 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 switches.

Features and Benefits

LINK COMMUNICATION OR 24 VOLT CONTROL

Seamless connection between system components to monitor system performance and efficiency

Diagnostics and configuration capability through Mobile App

Field configurable to 24 volt non-communicating mode

80% AFUE on S8V2 FURNACE MODELS

Lowers utility bills

ELECTRICALLY EFFICIENT

Efficient airflow design reduces electrical energy use

34 INCH TALL

Lighter, easier to move and fit into tight spaces like short basements or tight closets

Works great with larger, high-efficiency coils

No knockouts

4-WAY MULTI-POISE

12 SKU's — Upflow / Downflow / Horizontal Left / Horizontal Right

Added application flexibility and reduction in specification errors

AIRFLOW

At least 400 CFM/ton at 0.5 in. H₂O external static pressure

REGULATORY

All models are air tight; 1% or less air leakage as per ASHRAE 193

Open vestibule design provides a full 34" high open vestibule for ease of installation and service

DIMENSIONS

Width is industry standard: 17.5"

Depth remains approximately 28"

Cabinet is compatible with industry standard coils, as well as, other accessories

INTEGRATED FURNACE CONTROL

Setup / Status / Diagnostics / Digital Display

No dip switches

Last six errors stored

Dry contact EAC and HUM connections

All Molex connections; no spade terminals

Low voltage labeled above and below

Rain shield over IFC keeps condensate off the control

TUBULAR ALUMINIZED STEEL HEAT EXCHANGER

VORTICA II BLOWER, DESIGNED EXCLUSIVELY FOR THE S-SERIES FURNACE

Improved airflow efficiency

Durable, easy to clean, housing

Single piece belly band/ motor arm assembly

Blower deck has full-length rails for easy removal and replacement, regardless of poise

FOUR-WAY MULTI-POISE (UPFLOW, DOWNFLOW, HORIZONTAL LEFT AND RIGHT)

Easier to specify

Shipped ready to install (no conversion kits required)

Every model has at least two venting options

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.



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