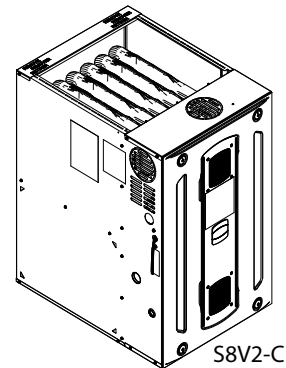


Submittal

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

S8V2C080M5PC/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.

Product Specification

Model	S8V2C080M5PC ^(a) S8V2C080M5PD ^(a)
Type	Upflow / Horizontal / Downflow
RATINGS ^(b)	
1st Stage Input BTUH	52,000
1st Stage Capacity BTUH (ICS)	41,800
2nd Stage Input BTUH	80,000
2nd Stage Capacity BTUH (ICS) ^(c)	64,800
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 11
No. Used	1
Speeds (No.) ^(d)	Variable
CFM vs. in. w.g.	See Fan Performance Table
Motor HP	1
R.P.M.	Variable
Volts / Ph / Hz	120 / 1 / 60
FLA	10
COMBUSTION FAN - Type	PSC
Drive - No. Speeds	Direct - 2
Motor HP - RPM	3200/2700
Volts/Ph/Hz	120 / 1 / 60
FLA	0.30
Inducer Orifice	1.80
FILTER - Furnished?	No
Type Recommended	High Velocity

Model	S8V2C080M5PC ^(a) S8V2C080M5PD ^(a)
Hi Vel. (No.-Size-Thk.)	1 - 20 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)	13.0
Max. Overcurrent Protection (Amps)	15
PIPE CONN. SIZE (IN.)	1/2
DIMENSIONS	H x W x D
Uncrated (in.)	34 x 21 x 28.75
Crated (in.)	35.5 x 23 x 30.87
WEIGHT	
Shipping (Lbs.)/Net (Lbs.)	142/134

- ^(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. S8V2C080M5P Heating Airflow

S8V2C080M5P Furnace Heating Airflow (CFM), Temp. Rise (°F), and Power (Watts) vs. External Static Pressure with Filter (iwc)								
				1st Stage Capacity = 41,800 2nd Stage Capacity = 64,800				
Heating	Airflow Setting	Target Airflow		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Heating 1st Stage	Low	748	CFM	771	741	711	682	652
			Temp. Rise	50	52	54	56	58
			Watts	46	90	134	178	221
	Medium Low ^(a)	878	CFM	879	854	830	805	781
			Temp. Rise	44	45	46	47	48
			Watts	59	116	174	232	290
	Medium	943	CFM	958	948	938	929	919
			Temp. Rise	40	41	41	42	42
			Watts	70	132	194	256	318
	High	1073	CFM	1035	1026	1016	1007	997
			Temp. Rise	37	38	38	39	40
			Watts	90	150	210	271	331
Heating 2nd Stage	Low	1150	CFM	1175	1159	1142	1126	1109
			Temp. Rise	50	51	52	53	53
			Watts	105	174	243	312	381
	Medium Low ^(a)	1350	CFM	1387	1373	1359	1345	1331
			Temp. Rise	43	43	43	44	44
			Watts	154	243	333	422	512
	Medium	1450	CFM	1446	1444	1443	1441	1439
			Temp. Rise	41	41	41	41	41
			Watts	94	215	336	457	577
	High	1650	CFM	1642	1621	1601	1580	1560
			Temp. Rise	36	36	37	37	38
			Watts	279	373	467	561	655

^(a) Factory Setting

Table 2. S8V2C080M5P Cooling Airflow

S8V2C080M5P 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	1057 / 107	1057 / 168	1055 / 231	1051 / 296	1047 / 363
	420	CFM / WATTS	982 / 91	980 / 149	976 / 209	972 / 270	968 / 334
	400	CFM / WATTS	932 / 82	928 / 137	924 / 194	919 / 254	914 / 316
	370	CFM / WATTS	856 / 69	850 / 121	844 / 174	838 / 231	832 / 290
	350	CFM / WATTS	806 / 62	797 / 111	790 / 162	783 / 217	777 / 274
	330	CFM / WATTS	755 / 55	744 / 101	735 / 151	728 / 204	721 / 260
	310	CFM / WATTS	704 / 48	691 / 92	681 / 140	672 / 191	665 / 246
	290	CFM / WATTS	652 / 42	637 / 84	625 / 130	616 / 180	608 / 233
3.0	450	CFM / WATTS	1279 / 164	1284 / 237	1285 / 311	1283 / 387	1280 / 463
	420	CFM / WATTS	1190 / 139	1194 / 207	1194 / 277	1192 / 348	1188 / 421
	400	CFM / WATTS	1131 / 124	1133 / 189	1132 / 256	1130 / 324	1126 / 394
	370	CFM / WATTS	1042 / 104	1041 / 164	1039 / 227	1036 / 291	1032 / 357
	350	CFM / WATTS	982 / 91	980 / 149	976 / 209	972 / 270	968 / 334
	330	CFM / WATTS	922 / 80	918 / 135	913 / 192	908 / 251	903 / 312
	310	CFM / WATTS	861 / 70	855 / 122	849 / 176	843 / 232	838 / 292
	290	CFM / WATTS	800 / 61	792 / 110	784 / 161	778 / 215	771 / 273

Table 2. S8V2C080M5P Cooling Airflow (continued)

S8V2C080M5P 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
3.5	450	CFM / WATTS	1498 / 238	1505 / 324	1508 / 410	1507 / 497	1504 / 585
	420	CFM / WATTS	1396 / 201	1402 / 281	1404 / 362	1404 / 443	1401 / 525
	400	CFM / WATTS	1328 / 179	1333 / 255	1335 / 332	1334 / 410	1331 / 489
	370	CFM / WATTS	1225 / 148	1229 / 219	1229 / 290	1227 / 363	1224 / 437
	350	CFM / WATTS	1156 / 130	1158 / 197	1158 / 265	1156 / 334	1152 / 405
	330	CFM / WATTS	1087 / 114	1087 / 176	1086 / 241	1083 / 307	1079 / 375
	310	CFM / WATTS	1017 / 98	1016 / 158	1013 / 219	1009 / 282	1005 / 347
4.0	290	CFM / WATTS	947 / 85	944 / 141	939 / 198	935 / 259	930 / 321
	450	CFM / WATTS	1714 / 332	1721 / 431	1724 / 530	1724 / 629	1720 / 728
	420	CFM / WATTS	1599 / 279	1607 / 371	1609 / 463	1609 / 556	1606 / 649
	400	CFM / WATTS	1522 / 247	1529 / 335	1532 / 422	1532 / 511	1529 / 599
	370	CFM / WATTS	1406 / 204	1412 / 285	1414 / 366	1414 / 448	1411 / 531
	350	CFM / WATTS	1328 / 179	1333 / 255	1335 / 332	1334 / 410	1331 / 489
	330	CFM / WATTS	1250 / 155	1254 / 227	1254 / 300	1253 / 374	1250 / 449
4.5	310	CFM / WATTS	1171 / 134	1173 / 201	1173 / 270	1171 / 340	1168 / 412
	290	CFM / WATTS	1091 / 115	1092 / 178	1091 / 243	1088 / 309	1084 / 377
	450	CFM / WATTS	1926 / 449	1933 / 561	1935 / 672	1934 / 784	1929 / 895
	420	CFM / WATTS	1799 / 376	1807 / 480	1809 / 584	1808 / 688	1805 / 792
	400	CFM / WATTS	1714 / 332	1721 / 431	1724 / 530	1724 / 629	1720 / 728
	370	CFM / WATTS	1585 / 273	1592 / 364	1595 / 455	1595 / 547	1592 / 639
	350	CFM / WATTS	1498 / 238	1505 / 324	1508 / 410	1507 / 497	1504 / 585
5.0 ^(a)	330	CFM / WATTS	1411 / 206	1417 / 287	1419 / 368	1418 / 450	1416 / 534
	310	CFM / WATTS	1323 / 177	1328 / 253	1330 / 330	1329 / 407	1326 / 486
	290	CFM / WATTS	1235 / 151	1239 / 222	1239 / 294	1238 / 367	1234 / 442
	450	CFM / WATTS	2135 / 590	2140 / 715	2141 / 839	2137 / 964	2131 / 1088
	420	CFM / WATTS	1996 / 493	2003 / 609	2004 / 725	2002 / 841	1997 / 956
	400	CFM / WATTS	1903 / 435	1910 / 545	1912 / 655	1911 / 765	1906 / 875
	370	CFM / WATTS	1761 / 356	1769 / 458	1772 / 559	1771 / 661	1767 / 763
5.0 ^(a)	350 ^(a)	CFM / WATTS	1666 / 310	1674 / 405	1677 / 501	1676 / 501	1673 / 694
	330	CFM / WATTS	1570 / 267	1578 / 357	1580 / 448	1580 / 538	1577 / 630
	310	CFM / WATTS	1474 / 229	1481 / 313	1483 / 398	1483 / 484	1480 / 570
	290	CFM / WATTS	1377 / 194	1383 / 273	1385 / 353	1384 / 433	1381 / 515

^(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: 21"

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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