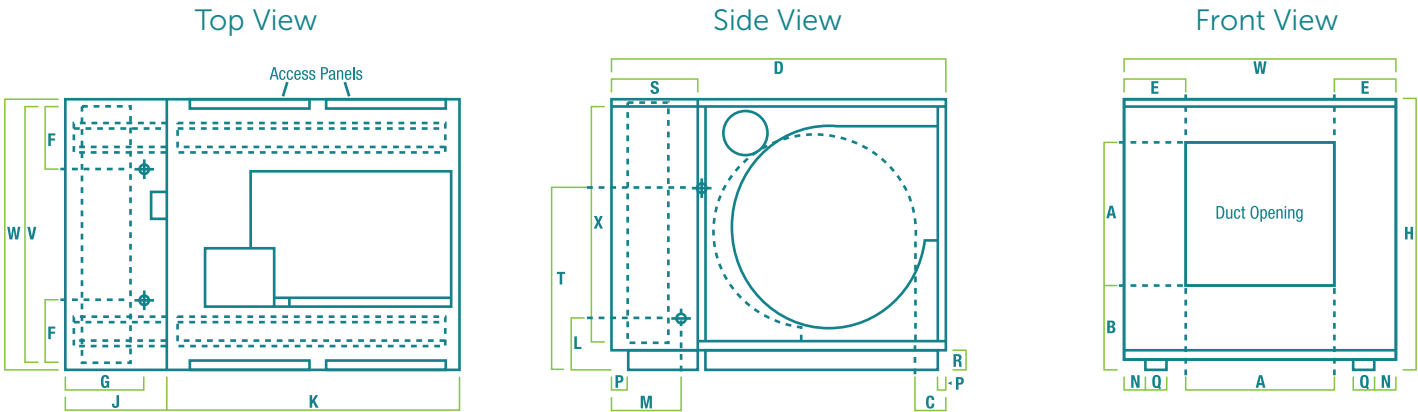


DIMENSIONS & SPECIFICATIONS

SINGLE INLET MODEL DIMENSIONS
SPD09 (Down Discharge) and SPS09 (Side Discharge)



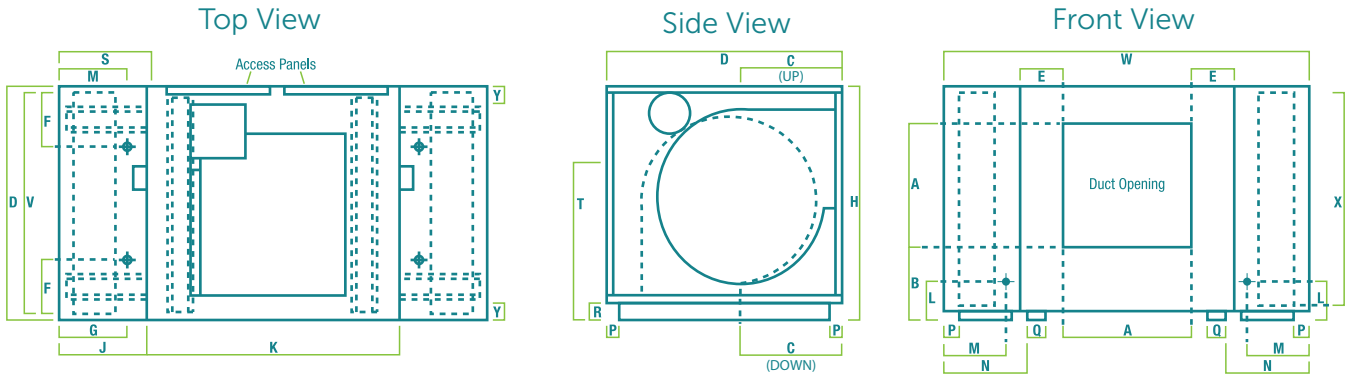
SPS09/SPD09 SINGLE INLET; 1 WET SECTION REQUIRED

				Duct Location				Drain Location		Media Cabin.	Blower Cabin.	Water Service Loc.		Electric Service Loc.		Blower Wheel			Blower Pulley	Skid Location				Media Dimension		Pad Area	
				Side		Down		F	G	J	K	L	M	S	T				Dia.	N	P	Q	R	X	V	Sq.Ft.	
	H	W	D	A	B	C	E	F	G	J	K	L	M	S	T					Dia.	N	P	Q	R	X	V	Sq.Ft.
WS08	51½	49 ¹ / ₈	66	26¾	17	3	11¼	13	13 ³ / ₈	17	49 ¹ / ₈	7¼	12 ³ / ₈	18	35½	24	24	1 ³ / ₁₆	13	2	1 ⁵ / ₈	4	2½	44 ⁵ / ₈	48	14.8	
WS12	51½	49 ¹ / ₈	70	26¾	17	3	11¼	13	17 ³ / ₈	21	49 ¹ / ₈	7¼	16 ³ / ₈	22	35½	24	24	1 ³ / ₁₆	13	2	1 ⁵ / ₈	4	2½	44 ⁵ / ₈	48	14.8	

- 1. Drain is 3/4" male hose thread.
- 2. Water service can be left or right for 1/4" tubing.
- 3. 7/8" knockout for running electrical service.

DUAL INLET MODEL DIMENSIONS

SPD18 (Down Discharge), SPD18 (Side Discharge) and SPU18 (Up Discharge)



SPS/SPD/SPU18 DUAL INLET; 2 WET SECTIONS REQUIRED

				Duct Location				Drain Location		Media Cabin.	Blower Cabin.	Water Service Loc.		Electric Service Loc.		Blower Wheel			Blower Pulley	Skid Location				Media Dimension		Pad Area	
				Side		Down		F	G	J	K	L	M	S	T	Dia.		Width Shaft	Dia.	N	P	Q	R	X	V	Sq.Ft.	
H	W	D	A	B	C	E																					
WS08	51½	83⅞	49⅞	31¾	17¾	15¼	8¾	13	13⅜	17	49⅞	7¼	12⅜	18	35½	28	28	1⅜	18	19	1⅝	2	4	2½	44⅝	48	14.8
WS12	51½	91⅞	49⅞	31¾	17¾	15¼	8¾	13	17⅜	21	49⅞	7¼	16⅜	22	35½	28	28	1⅜	18	23	1⅝	4	4	2½	44⅝	48	14.8

- 1.Drain is 3/4" male hose thread.
- 2.Water service can be left or right for 1/4" tubing.
- 3.7/8" knockout for running electrical service.

PREMIUM
INDUSTRIAL
PRODUCTS

ENGINEERED DESIGN
FOR MAXIMUM COOLING EFFICIENCIES

HIGH EFFICIENCY MEDIA

GALVANIZED POWDER COATED STEEL CABINET
for durability.

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for quiet vibration free operation.

SOLID SHAFT
for durability and noise reduction.

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for adjustable air volume control

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provides years of service

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CITY OF LOS ANGELES APPROVED



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natural cooling



SPS/SPD09 SHEAVE SELECTION

Motor HP	Sheave	Bore	Blower RPM / Sheave Turns Open											
	description	Diám Int.	5	4 ½	4	3 ½	3	2 ½	2	1 ½	1	½	0	
Three Phase Motor Blower RPM @ 1750 Motor RPM / Sheave Turns Open														Package #
¾	1VL34	5⁄8	256	269	283	296	310	323	337	350	363	377	390	RF050185
1	1VL34	7⁄8	256	269	283	296	310	323	337	350	363	377	390	RF050186
¾	1VL40	5⁄8	323	337	350	363	377	390	404	417	431	444	458	RF050096
1, 1½, 2	1VL40	7⁄8	323	337	350	363	377	390	404	417	431	444	458	RF050184
¾	1VL44	5⁄8	377	390	404	417	431	444	458	471	485	498	512	RF050112
1, 1½, 2	1VL44	7⁄8	377	390	404	417	431	444	458	471	485	498	512	RF050111
3	1VL44	1 1⁄8	377	390	404	417	431	444	458	471	485	498	512	RF050139
1½, 2	1VP50	7⁄8	458	471	485	498	512	525	538	552	565	579	592	RF050138
3	1VP50	1 1⁄8	458	471	485	498	512	525	538	552	565	579	592	RF050180

SPS/SPD18 SHEAVE SELECTION

Motor HP	Sheave	Bore	Blower RPM / Sheave Turns Open											
	description	Diám. Int.	5	4 ½	4	3 ½	3	2 ½	2	1 ½	1	½	0	Package #
Three Phase Motor Blower RPM @ 1750 Motor RPM / Sheave Turns Open														
1, 1½, 2	1VL34	7/8	185	194	204	214	224	233	243	253	263	272	282	RF050186
1, 1½, 2	1VL40	7/8	233	243	253	263	272	282	292	301	311	321	331	RF050184
1, 1½, 2	1VL44	7/8	272	282	292	301	311	321	331	340	350	360	369	RF050111
1, 1½, 2	1VP50	7/8	331	340	350	360	369	379	389	399	408	418	428	RF050138
3	2VP42	1 ^{1⁄8}	253	263	272	282	292	301	311	321	331	340	350	RF050118
3, 5	2VP50	1 ^{1⁄8}	331	340	350	360	369	379	389	399	408	418	428	RF050828
5	2VP60	1 ^{1⁄8}	408	418	428	438	447	457	467	476	486	496	506	RF050829
7½	2VP60	1 ^{3⁄8}	408	418	428	438	447	457	467	476	486	496	506	RF050120

ELECTRICAL SPECIFICATIONS

Model Discharge S/D	Motor Part Number	Three Phase Motor					PUMP				
		HP	208v~	230V~	460V~	Shaft	Model	Volts	Amps	Watts	GPH
SPS/SPD09	OP110433	1	3.6	3.6	1.7	7/8	RF041681	115	1.2	80	300
SPS/SPD09	OP110519	1.5	4.6	4.6	2.2	7/8					
SPS/SPD09	OP110688	2	7.1	7.1	3.3	7/8					
SPS/SPD09	OP110734	3	8.7	8.4	4.2	1-1/8	RF041680	230	.6	80	300
SPS/SPD18	OP110734	3	8.7	8.4	4.2	1-1/8					
SPS/SPD18	OP110436	5	14.2	13.0	6.5	1-1/8					
SPS/SPD18	OP112560	7.5	20.9	19.2	9.6	1-3/8					

* Single phase motors are available upon request.

Note: Pumps are available in 115 volt and 230 volt models. As a result, transforming or separate circuiting may be required for other voltages.

Your local **Symphony** representative is ready to assist you in unit selection and application.

The world leader in evaporative cooling technology, **Symphony**, is continually involved in the process of product improvement. **Symphony**, therefore reserves the right to change specifications and/or the design without prior notice. To obtain the most current product information and/or specifications, visit the Impco web site at **www.symphonyamerica.com**

BLEED RATES

Blower Model	Blower Motor HP						
	3/4	1	1½	2	3	5	7½
SPS/SPD09	7	8	9	10	10	–	–
SPS/SPD18	–	11	13	14	16	18	20

SIZING INSTRUCTIONS*

Follow these steps to properly size the **Industrial Symphony Coolers**. The performance or Sensible Heat Capacity of any cooler is a function of both the CFM and saturation efficiency (which determines the delivered air discharge temperature). Sizing by only considering CFM may result in an improperly sized application.

1. Determine design conditions:
Outdoor Dry-Bulb DB1
Outdoor Wet-Bulb WB1
Indoor Dry-Bulb T1
2. Determine design sensible heat load (Btuh)
3. Determine leaving air temperature (LAT):
LAT = DB1 - [(DB1 - WB) * EFF]
where EFF 0.80 for 8” media or 0.90 for 12” media

4. Determine CFM required:
CFM = 0.925 * Sensible Heat Load
(T1 - LAT)
5. Determine the cooler(s) required:
Refer to the specification / air flow chart below.

6. Use sizing program to account for various CFM requirements:
This will result in more accurate sizing.

CERTIFIED AIR DELIVERY CFM AT VARIOUS EXTERNAL STATIC PRESSURES

Inches Water Gauge. AMCA Licensed Ratings.

Operating			Belt information				0		0	.2	.2	.5	.5	.7	.7	1.0
Model	Weight	BHP	Quantity	Down	Side	Up	CFM	RPM	CFM	RPM	CFM	RPM	CFM	RPM	CFM	RPM
SPS/SPD with WS08																
	560	¾	1	AX78	AX80		6390	298	5710	320	4200	373	3200	408	2060	460
	570	1	1	AX78	AX80		7030	329	6420	349	5280	386	4160	426	2940	473
	575	1½	1	AX78	AX80		8050	376	7530	394	6630	422	5840	449	4440	499
	580	2	1	AX78	AX80		8860	414	8400	430	7590	455	6970	475	5660	523
	590	3	1	AX78	A82*		9050	422	9050	459	9050	508	8570	524	7730	552
SPS/SPD with WS12																
	600	¾	1	AX78	AX80		6250	298	5550	321	4070	371	3140	407	1980	458
	610	1	1	AX78	AX80		6880	328	6250	349	5130	386	4060	425	2900	471
	615	1½	1	AX78	AX80		7880	376	7320	393	6430	424	5620	450	4350	498
	620	2	1	AX78	AX80		8670	414	8160	429	7380	456	6760	476	5510	520
	630	3	1	AX78	A82*		9050	422	9050	458	8820	509	8340	526	7520	553
SPS/SPD18 with WS08																
	818	1	1	A95*	A95*	A95	9720	214	8650	235	6670	276	4540	326	2740	379
	823	1½	1	A95*	A95*	A95	11130	245	10230	263	8600	294	7030	329	4690	387
	828	2	1	A95*	A95*	A95	12250	270	11460	286	10010	313	8960	335	6280	395
	838	3	2	A97	A97	A95	14020	309	13350	323	12130	345	11250	362	9810	393
	858	5	2	A97	A97	A95			16080	378	15090	396	14390	409	13280	430
	898	7½	2	A100*	A100*	A95	Not recommended		18100	418	17760	445	17130	455	16210	473
SPS/SPD18 with WS12																
	908	1	1	A95*	A95*	A95	9680	216	8530	237	6490	279	4390	329	2630	376
	913	1½	1	A95*	A95*	A95	11080	248	10080	265	8420	296	6930	330	4600	388
	918	2	1	A95*	A95*	A95	12190	273	11260	288	9860	315	8730	337	6150	398
	928	3	2	A97	A97	A95	13950	312	13130	325	11960	348	11070	364	9630	396
	948	5	2	A97	A97	A95	16540	370	15820	380	14890	399	14190	412	13060	433

Do not exceed listed RPM, water entrainment may occur.

* Available at: www.symphonyamerica.com