SPECIFIED CONTROLS

Specification Sheet

VAV Diffuser Assembly

SC-VD-XX-SD

Used in commercial zoning applications

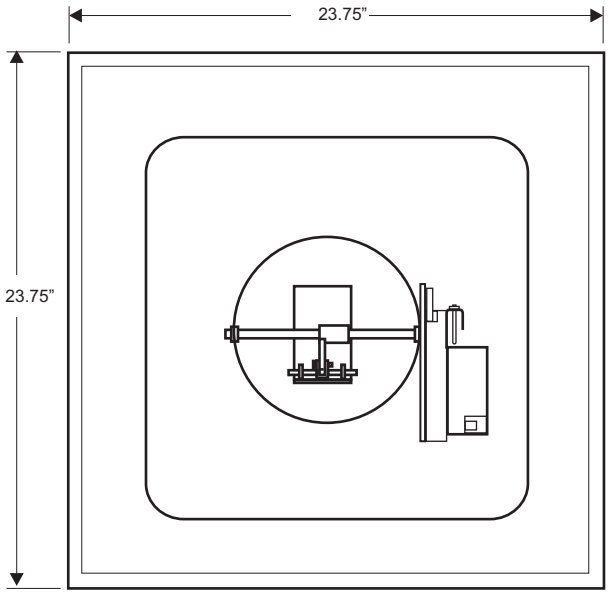
APPLICATION:

The Model SC-VD-XX-SD VAV Diffuser includes a diffuser and modulating actuator. The SC-VD-XX-SD can be used as an auxiliary damper when wired to a SC-VD-XX diffuser actuator in applications where more than one diffuser is required in a single zone.

AVAILABLE SIZES:

Face Size: 24" X 24" (23.75" x 23.75")

Neck Size: 6", 8" for 12" x 12" face size
6", 8", 10", 12", 14" for 24" x 24" face size



TOP VIEW

CONSTRUCTION:

Face Plate: Removable 18 gauge steel with baked white enamel finish

Back Cone: Unitary stamped 18 gauge steel

DIFFUSER ACTUATOR:

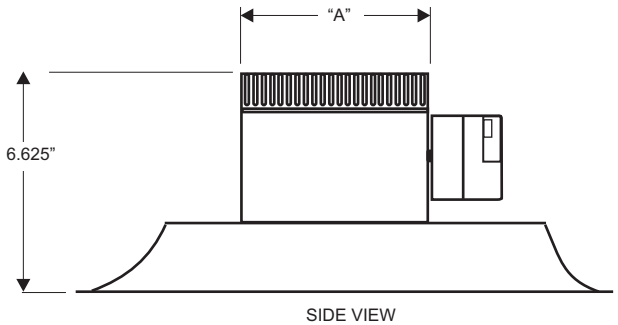
24 VAC, 2VA, 3-wire floating point actuator

OPERATION:

Diffuser: Integral modulating disk that continually regulates supply air volume in response to thermostat control

Air Volume Range: 118 to 710 cfm

Static Pressure: Not to exceed .25" W.C.



SIDE VIEW

COMPONENTS:

Diffuser and actuator

AIR HANDLER CONTROL:

Space thermostat
Discharge air controller

WARRANTY:

Diffuser: 5 Years

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888.359.0365
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ENGINEERING DATA

SC-VD-XX-SD 24” x 24” SC-VD-XX-SD Auxiliary VAV Diffuser Assembly

Part Number and Neck Size	Neck Velocity (FPM)	300	400	500	600	700	800	900	1000	1200	1400
	Velocity Pressure	0.006	0.01	0.016	0.022	0.031	0.04	0.051	0.062	0.09	0.122
SC-VD-06-SD 6” Ak = 0.19	Airflow (CFM)	60	80	100	120	140	160	180	200	240	280
	Total Pressure	0.009	0.011	0.017	0.025	0.034	0.044	0.057	0.070	0.100	0.135
	Horizontal Throw	1-1-2	1-1-4	1-2-4	1-3-5	2-3-6	2-4-7	3-4-8	3-4-9	4-5-11	4-6-11
	Noise Criteria	<15	<15	<15	<15	<15	<15	17	21	28	34
SC-VD-08-SD 8” Ak=0.26	Airflow (CFM)	105	140	175	210	245	280	315	350	420	490
	Total Pressure	0.011	0.018	0.028	0.040	0.055	0.072	0.091	0.112	0.162	0.220
	Horizontal Throw	1-2-4	2-3-6	2-4-7	3-4-9	3-5-10	4-6-12	4-6-12	5-7-13	6-9-14	7-10-15
	Noise Criteria	<15	<15	<15	<15	<15	17	21	25	32	38
SC-VD-10-SD 10” Ak=0.34	Airflow (CFM)	165	220	275	330	385	440	495	550	660	770
	Total Pressure	0.017	0.029	0.043	0.060	0.082	0.108	0.136	0.168	0.243	0.331
	Horizontal Throw	2-3-7	3-4-8	3-5-10	4-6-12	5-7-13	5-8-14	6-9-15	7-10-16	8-12-18	10-13-19
	Noise Criteria	<15	<15	<15	<15	15	20	24	28	35	41
SC-VD-12-SD 12” Ak=0.40	Airflow (CFM)	240	310	390	470	550	630	710	790	940	1100
	Total Pressure	0.023	0.037	0.059	0.085	0.115	0.151	0.191	0.237	0.338	0.461
	Horizontal Throw	2-4-7	4-5-11	5-7-14	5-8-15	6-9-16	7-11-17	8-12-18	9-14-19	11-15-21	13-16-23
	Noise Criteria	<15	<15	<15	<15	18	23	27	31	38	43
SC-VD-14-SD 14” Ak=0.51	Airflow (CFM)	320	430	530	640	750	860	960	1070	1280	1500
	Total Pressure	0.031	0.050	0.078	0.114	0.155	0.202	0.256	0.316	0.453	0.619
	Horizontal Throw	3-4-8	4-7-13	6-8-16	7-10-17	8-12-19	9-13-20	10-15-21	11-16-23	13-17-25	15-19-27
	Noise Criteria	<15	<15	<15	<15	20	25	29	33	40	45

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Units: Total Pressure = in. wc; Velocity Pressure -= in. wc; Effective Area (Ak) = ft.².
4. Throw - feet at 150 fpm, 100 fpm and 50 fpm terminal velocities.
5. NC is based upon 10dB room absorption (Re: 10^{-12}watts) evaluated at 125 thru 4000 Hz octave bands.
6. Flow hoods are recommended for system balancing.

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