

KD100

- > Rectangular VAV
- > Multi-Blade
- > Double Wall

DESCRIPTION

Our rectangular VAV units contain multiple air tight damper blades and airflow averaging grid within a robust galvanised casing.

Our multi-blade rectangular VAV units are available in many sizes 100 mm blade increments. The units can also provide Constant Air Volume.

- ### STANDARDS
- Casing exceeds leakage EN 1751, 1998 Class B
 - Damper blade rubber seal leakage exceeds EN 1751 Class 2

CONSTRUCTION

Single wall 1.25 mm thick galvanised steel casing.

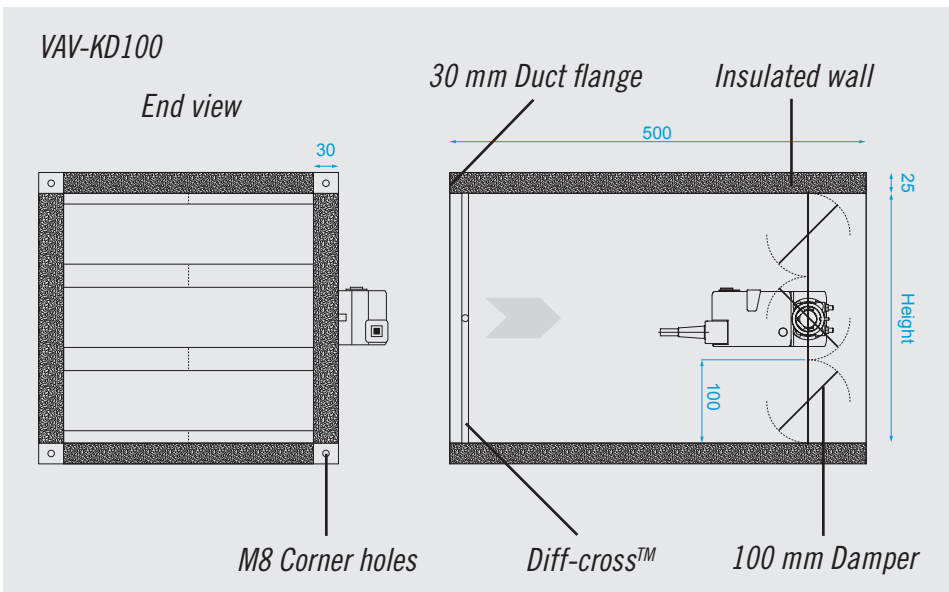
- Options:**
- ASK/ASL Attenuator
 - Polyester Powder Coating

MODELS

- VAV-KS1:**
Rectangular single wall
- VAV-KD1:**
Rectangular double wall
- VAV-KS 100:**
Single blade rectangular single wall
- VAV-KD 100:**
Multi blade rectangular double wall

NOTES

Minimum velocity 1.5 m/s. Controller actuator included. All dimensions are given in mm. Requires 3x diameter straight approach for effective operation.



DIMENSIONAL DATA (mm)	
Width	Height
Min 200	Min 110
100 mm increments	
Max 1000	Max 1010

RADIATED SOUND

Radiated sound allowance according to VDI2081 is 5dB/oct for room attenuation and 4dB/oct for ceiling attenuation total 9dB/oct. Double wall radiated figures are based on duct work being acoustically lagged 3 m either side of the unit.

DISCHARGE SOUND ALLOWANCE						
Calculated according to VDI 2081						
Hz	125	250	500	1K	2K	4K
dB	10	8	7	8	8	8

DISCHARGE SOUND ALLOWANCE										
Calculated according to VDI 2081										
l/s	139	278	417	556	695	834	1111	1389	1667	10000
dB/oct	0	3	6	10	13	14	16	17	18	19

KD100 - SELECTION DATA

SUPPLY SELECTION DATA												
900 x 210	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	378	2 (+10)	43	49	56	30	34	40	23	28	34
4	756	6 (+39)	43	49	55	38	40	44	30	34	39	
6	1,134	13	44	50	56	X	X	X	34	38	43	
8	1,512	23	44	50	56	X	X	X	40	43	47	

SUPPLY SELECTION DATA												
600 x 310	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	372	3 (+7)	43	49	56	30	35	41	23	28	34
4	744	7 (+28)	43	49	55	38	41	44	30	34	39	
6	1,116	14	43	50	56	X	X	X	34	38	43	
8	1,488	25	44	50	56	X	X	X	40	43	47	

900 x 310	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	558	2 (+7)	42	48	56	30	34	40	25	29	36
4	1,116	6 (+28)	43	49	55	38	40	44	32	36	41	
6	1,674	13	43	49	56	X	X	X	36	40	45	
8	2,232	23	44	50	55	X	X	X	42	45	50	

1200 x 310	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	744	2 (+7)	42	48	55	30	35	40	26	31	36
4	1,488	6 (+28)	43	49	55	38	41	44	33	38	42	
6	2,232	12	43	49	55	X	X	X	37	41	46	
8	2,976	22	44	50	55	X	X	X	43	47	51	

600 x 410	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	492	3 (+7)	43	49	56	31	36	44	24	29	35
4	984	7 (+28)	43	49	55	38	41	46	31	35	40	
6	1,476	14	43	49	56	X	X	X	35	39	44	
8	1,968	25	43	49	55	X	X	X	41	44	49	

900 x 410	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	738	2 (+7)	42	48	56	31	36	43	26	31	37
4	1,476	6 (+28)	43	49	55	38	41	45	33	37	43	
6	2,214	13	43	49	56	X	X	X	37	41	47	
8	2,952	23	44	50	56	X	X	X	43	46	52	

1200 x 410	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	984	2 (+7)	42	48	55	31	36	43	27	32	38
4	1,968	6 (+28)	43	48	55	38	42	45	34	39	44	
6	2,952	12	43	49	55	X	X	X	38	43	48	
8	3,936	22	44	50	55	X	X	X	44	48	53	

600 x 510	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	612	3 (+7)	42	48	56	32	39	47	25	30	36
4	1,224	7 (+27)	43	49	55	38	42	48	32	36	41	
6	1,836	14	43	49	56	X	X	X	36	40	45	
8	2,448	25	44	50	56	X	X	X	42	45	50	

900 x 510	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	918	2 (+7)	42	48	55	32	38	46	27	31	38
4	1,836	6 (+27)	43	48	55	37	42	47	34	38	44	
6	2,754	13	43	49	56	X	X	X	38	42	48	
8	3,672	23	44	50	56	X	X	X	44	47	53	

KEY INFORMATION

100 Pa 200 Pa 400 Pa System Static Pressure.
Discharge and Radiated Sound (LpA)

VEL = Velocity in (m/s)

VOL = Volume in (l/s)

KD100 - SELECTION DATA

SUPPLY SELECTION DATA												
1200 x 510	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,224	2 (+7)	42	48	55	32	38	46	28	33	39
4	2,448	6 (+27)	42	48	55	38	42	47	35	40	45	
6	3,672	12	44	49	56	X	X	X	39	44	49	
8	4,896	22	45	50	57	X	X	X	45	49	54	

SUPPLY SELECTION DATA												
600 x 610	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	732	3 (+7)	42	48	55	26	31	36	26	31	36
4	1,464	7 (+28)	43	49	55	32	36	41	33	37	43	
6	2,196	14	43	49	55	X	X	X	37	41	47	
8	2,928	25	44	50	55	X	X	X	43	46	52	

900 x 610	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,098	2 (+6)	44	50	57	26	31	36	27	32	39
4	2,196	6 (+23)	44	50	56	33	36	42	35	39	45	
6	3,294	13	45	51	58	X	X	X	39	43	49	
8	4,392	23	46	52	58	X	X	X	45	48	54	

1200 x 610	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,464	2 (+7)	42	48	55	27	31	37	28	34	40
4	2,928	6 (+28)	43	49	55	34	38	43	36	41	46	
6	4,392	12	44	50	56	X	X	X	40	45	50	
8	5,856	22	45	51	56	X	X	X	46	50	55	

600 x 710	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	852	3 (+7)	42	48	55	26	31	36	26	31	37
4	1,704	7 (+28)	43	49	54	32	36	41	34	38	44	
6	2,556	14	44	50	56	X	X	X	38	42	48	
8	3,408	25	45	51	56	X	X	X	43	47	53	

900 x 710	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,278	2 (+6)	43	49	56	26	31	36	28	33	39
4	2,556	6 (+23)	43	49	55	33	37	43	35	40	46	
6	3,834	13	45	50	57	X	X	X	40	44	50	
8	5,112	23	46	51	57	X	X	X	46	49	56	

1200 x 710	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,704	2 (+7)	42	48	54	26	31	37	29	35	40
4	3,408	6 (+28)	43	49	55	34	38	43	36	42	47	
6	5,112	12	44	50	56	X	X	X	40	46	51	
8	6,816	22	45	51	57	X	X	X	46	51	57	

900 x 810	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,458	2 (+6)	42	48	55	27	32	38	29	34	40
4	2,916	6 (+23)	43	49	56	33	37	43	36	41	48	
6	4,374	13	44	50	57	X	X	X	40	45	52	
8	5,832	23	45	51	58	X	X	X	46	51	57	

1200 x 810	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,944	2 (+7)	42	48	55	27	32	38	30	35	41
4	3,888	6 (+28)	43	49	56	34	38	44	37	42	49	
6	5,832	12	43	49	56	X	X	X	41	46	53	
8	7,776	22	44	50	56	X	X	X	47	52	58	

KEY INFORMATION

100 Pa 200 Pa 400 Pa System Static Pressure.
Discharge and Radiated Sound (LpA)

VEL = Velocity in (m/s)

VOL = Volume in (l/s)

KD100 – SELECTION DATA

SUPPLY SELECTION DATA												
900 x 910	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,638	2 (+6)	42	49	56	26	32	38	29	35	41
4	3,276	6 (+23)	42	49	56	33	38	44	36	42	49	
6	4,914	13	43	50	57	X	X	X	40	46	53	
8	6,552	23	44	51	57	X	X	X	46	52	58	

SUPPLY SELECTION DATA												
1200 x 910	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	2,184	2 (+7)	42	49	55	27	33	39	30	36	42
4	4,368	6 (28)	43	50	57	35	40	45	37	44	50	
6	6,552	12	43	50	57	X	X	X	41	48	54	
8	8,736	22	43	50	57	X	X	X	47	54	60	

900 x 1010	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	1,818	2 (+6)	42	48	55	27	32	38	30	36	42
4	3,636	6 (+23)	43	49	56	34	38	45	37	42	49	
6	5,454	13	43	49	56	X	X	X	41	46	53	
8	7,272	23	44	50	56	X	X	X	47	52	59	

1200 x 1010	Size			Discharge Sound			Attenuated Sound			Radiated Double Wall		
	VEL m/s	VOL l/s	Min Δ Ps Pa (+ASK)	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa	100 Pa	200 Pa	400 Pa
	2	2,424	2 (+7)	42	48	55	27	33	38	31	37	43
4	4,848	6 (+28)	43	49	56	35	39	45	38	44	50	
6	7,272	12	43	49	56	X	X	X	42	48	54	
8	9,696	22	44	50	56	X	X	X	48	54	60	

KEY INFORMATION

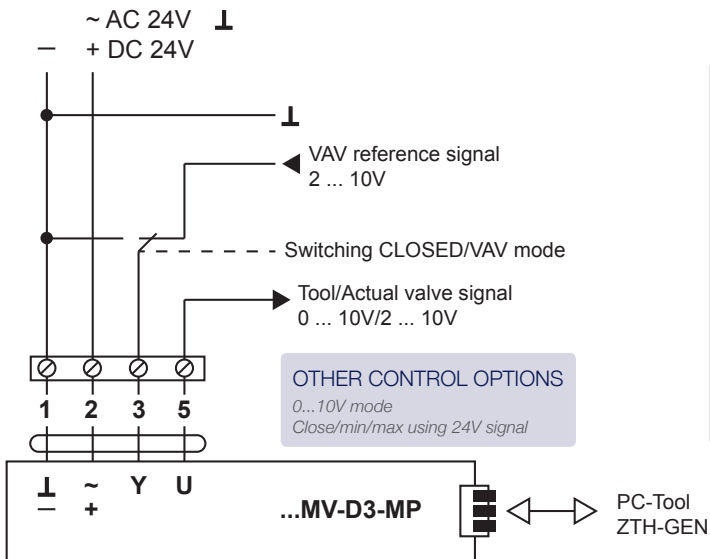
100 Pa 200 Pa 400 Pa System Static Pressure.
Discharge and Radiated Sound (LpA)

VEL = Velocity in (m/s)

VOL = Volume in (l/s)

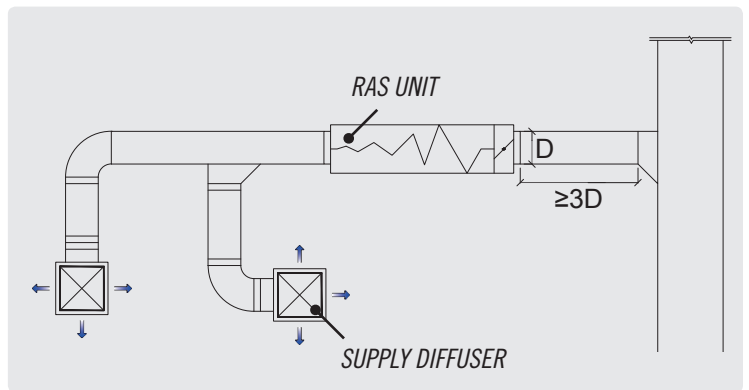
CONTROL MODES

VAV with shut-off (CLOSE, 2 ... 10V mode)



DUCT STRAIGHT APPROACH

3x Diameter (or equivalent diameter) approach required for effective operation. Due to the unique design VSV/VDV units do not require any straight approach.



*D Y U g Y V e b H U W i U D f M Y 9 b [] b Y Y f Y X G c i h j c b g
Y b [] b Y Y f Z f Z f A Y f [] b Z f a U h j c b "*