



RICKARD RANGE

Variable Air Volume (VAV) Diffusers

RICKARD THERMO-DISC VAV DIFFUSER SERIES



Description

The Rickard range of Thermo-Disc VAV ceiling diffusers help to provide an indoor environment that maintains a consistent and comfortable temperature. Diffusers only allow the required volume of hot or cold air to enter the conditioned space according to the diffuser's set point. It is mechanically controlled and thermally powered which means it is easy to install and requires no external wiring or power supply.

Typical Applications

Can be used for single diffuser, single room applications through to large open areas with multiple diffusers on multi levels. Ideal as a retrofit solution in buildings that experience specific areas that are either too hot or too cold.

Features

- Reduces the energy consumption of a building by lowering the demand on the air handling system.
- Provides the occupant with control over their specific environment. (Temperature set point adjustable from 19 °C to 24 °C).
- Each unit contains its own in-built temperature sensing and volume control mechanism.
- Lightweight, easy to install and ideal as a retrofit solution.
- Available in 495* and 595mm square overall sizes and 150 to 300mm duct neck sizes.
- Square to square and square to round diffuser styles available.
- Flush to the ceiling stylish look.
- Maintains constant air movement from 100% down to 25%.
- Discharge pattern ensures the air within the space is thoroughly mixed.
- Works when system is in cooling or heating mode.

Construction

Diffusers are of sheet steel construction and finished in a chip resistant epoxy powder coating. Matt pen white is the standard colour but others can be ordered to suit the architectural requirements*. All internal components of non-metallic construction are moulded in fire retardant Makrolon glass reinforced plastic.

Mechanism

Air volume control is achieved through the vertical up and down movement of the control disc within the diffuser. This increases or decreases the aperture size which allows either more or less conditioned air to enter the space.

The position of the control disc is varied by means of a wax filled thermal element which responds to changes in sensed room temperature. With a rise or fall in sensed temperature the wax extends or retracts the plunger, causing the mechanism to move the control disc to match the air volume requirements of the space served by the diffuser.

Testing

Methods of testing the performance of air outlets and air inlets. ANSI/ASHRAE Standard 70-2006 (RA 2011).

Suggested Specification

The diffusers shall be of the Rickard Thermo-Disc VAV ceiling diffuser range as supplied by Elta Fans and be of the model number shown on the schedule/drawings.

They shall be manufactured from sheet steel and finished in a chip resistant epoxy powder coating. All internal components of non-metallic construction shall be moulded in fire retardant Makrolon glass reinforced plastic.

Air volume control shall be achieved through the vertical up and down movement of the control disc within the diffuser. The position of the control disc is varied by means of a wax filled thermal element which responds to changes in sensed room temperature. It shall require no external wiring or power supply.

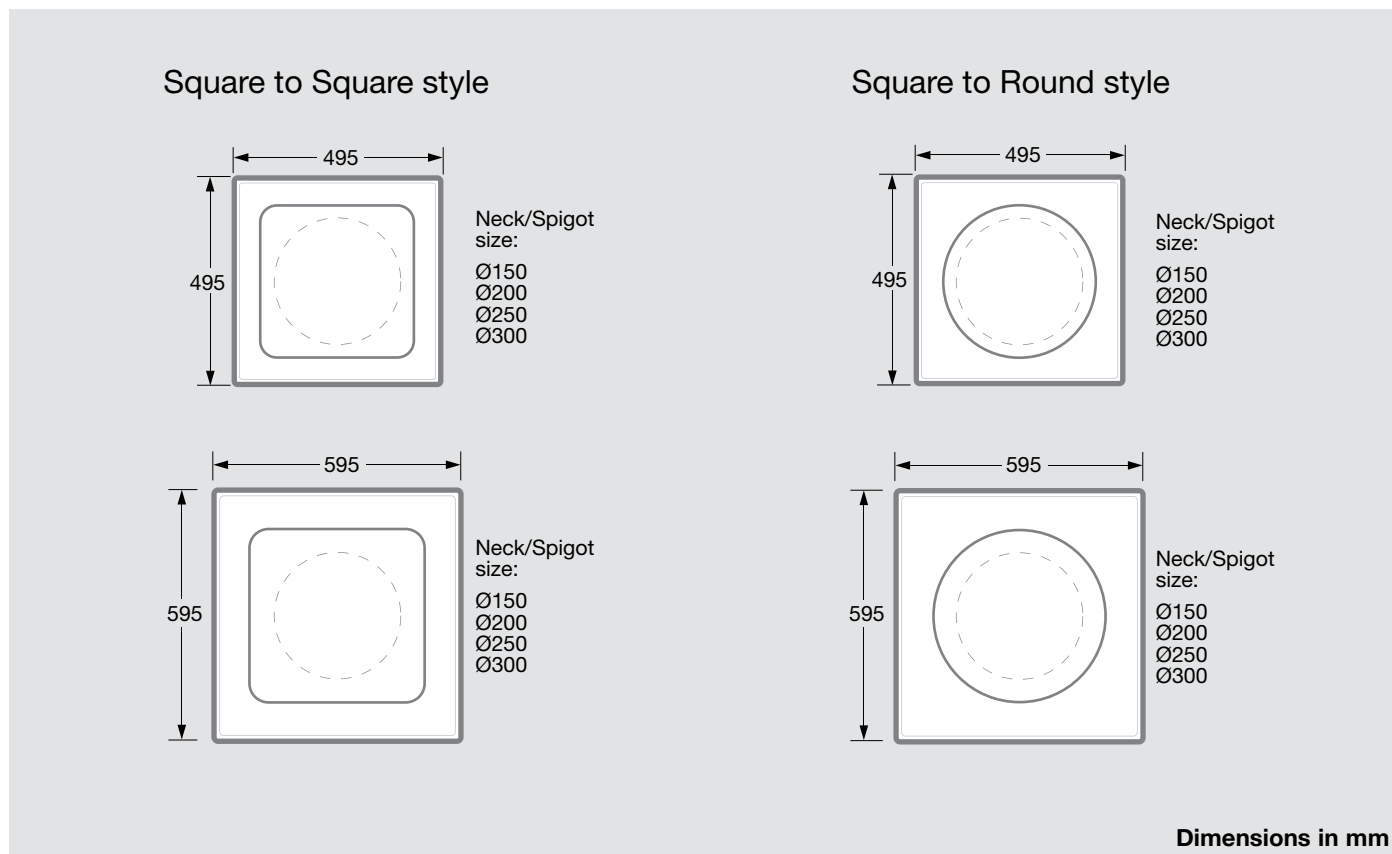
Temperature set point shall be adjustable from 19°C to 24°C via an adjustment ring located on the diffusers thermal mechanism.

All models shall be fully tested to ANSI/ASHRAE Standard 70-2006 (RA 2011)

* Minimum 12 weeks lead time.

RICKARD THERMO-DISC VAV DIFFUSER SERIES

Dimensions



Range

Neck Size (mm)	Style	Model			Neck Total Pressure (Pa)									
		495mm x 495mm	595mm x 595mm		20	30	40	50	60	70	80	90	100	
150	□	VSD1504S495	VSD1504S595	Airflow (L/s)	63	77	88	99	108	117	125	133	140	
				Throw (m)	2.0	2.1	2.7	3.0	3.3	3.5	3.7	4.0	4.2	
	○	VCD1504S495	VCD1504S595	NC Level (NC)	-	-	-	-	26	28	31	33	35	
200	□	VSD2004S495	VSD2004S595	Airflow (L/s)	96	118	137	153	169	184	195	207	218	
				Throw (m)	2.0	2.6	3.0	3.2	3.6	3.9	4.2	4.5	4.7	
	○	VCD2004S495	VCD2004S595	NC Level (NC)	-	27	28	29	30	33	36	38	40	
250	□	VSD2504S495	VSD2504S595	Airflow (L/s)	140	171	198	221	242	261	279	296	313	
				Throw (m)	2.4	2.6	3.2	3.5	3.9	4.2	4.5	4.7	5.1	
	○	VCD2504S495	VCD2504S595	NC Level (NC)	-	27	29	31	33	36	38	40	42	
300	□	VSD3004S495	VSD3004S595	Airflow (L/s)	176	216	250	280	307	332	355	377	398	
				Throw (m)	2.5	2.8	3.3	3.7	4.2	4.6	4.8	5.2	5.4	
	○	VCD3004S495	VCD3004S595	NC Level (NC)	27	28	30	32	35	37	39	41	43	

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the control disc fully open & an air velocity of 0.25m/s.

Noise criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (i.e. the difference between Sound Pressure Level (dB re: 10⁻⁶ Pa) and Sound Pressure Level (dB re: 10⁻¹² Pa) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are factory set for a minimum of 30% of the maximum flow levels reflected above. It should be noted that minimum Airflow settings are approximate & may require to be reset on site to compensate for actual site system pressures.

RICKARD ELECTRONIC VAV DIFFUSER SERIES



Introduction

The Rickard range of VAV Electronic diffusers has been developed as an intelligent modular system. They vary the volume of conditioned air entering a space in accordance with demand, which helps maintain a comfortable and productive indoor temperature. They can potentially also reduce the energy consumption of a building by lowering the demand on the air handling system.

They are very reliable, easy to install and can be individually programmed to provide occupants with total control over their environment. They do not require routine maintenance and will function effectively when the building's air conditioning system is in heating or cooling mode.

Depending on the demands required, Rickard's VAV Electronic diffusers maintain air volumes ranging from 100% to 10% while maintaining constant outlet velocity, which effectively mixes the air and maintains a healthier environment.

Typical Applications

The Rickard Electronic diffuser system can be as simple as one diffuser in a single room or scaled up to work within large open areas with multiple diffusers on multi levels of a building. 60 diffusers can be accommodated on a single Rickard Master Communication Unit (MCU) and multiple MCU's can be connected to a BMS.

Construction

Diffusers are of sheet steel construction and finished in a chip resistant epoxy powder coating. Matt pen white is the standard colour but specific colours can be ordered to suit the architectural requirements*. All internal components of non-metallic construction are moulded in fire retardant Makrolon glass reinforced plastic.

Mechanism

Air volume control is achieved through the opening and closing of the air outlet mechanism within the diffuser. This mechanism is driven by an electric actuator and allows more or less air to enter the occupied space.

Power Supply Unit

Able to power up to 15 Electronic VAV Diffusers
Input 85-265 Vac
Output 36 Vdc regulated @ 1.2 Amps Max
Operating Temperature 0°C to +50°C
Power Consumption 50 Watt Max
Industry standard DIN rail mounting

Testing

Methods of testing the performance of air outlets and air inlets. ANSI/ASHRAE Standard 70-2006 (RA 2011)

System Flexibility

Diffusers can be individually controlled by either a wall thermostat or the on-board master controller that sends its signal back to the BMS. The entire system is then monitored and changes can be made via a computer either on-site or remotely using the Rickard stand-alone software or a BMS.

These intelligent VAV Diffusers operate on a low pressure ductwork design, making them highly energy efficient, but the pressure in the duct work must be controlled for optimal performance. For new installations duct design that achieves static regain is highly recommended. If retrofitting to existing ducting, a relief ring can be fitted to the diffuser to release air pressure when the diffusers close.

Suggested Specification

The diffusers shall be of the Rickard VAV Electronic diffuser range as supplied by Elta Fans and be of the model number shown on the schedule/drawings.

They shall be manufactured from sheet steel and finished in a chip resistant epoxy powder coating. All internal components of non-metallic construction shall be moulded in fire retardant Makrolon glass reinforced plastic.

Air volume control shall be achieved with the opening and closing of the diffusers aperture which varies the volume of conditioned air to enter the occupied space. The aperture shall be driven by a 12V DC electric actuator which receives a signal from a Rickard diffuser's master controller.

The system shall be supplied with Rickard MLM software that is used for commissioning, setting diffuser parameters, monitoring the network, logging diffuser activity and converting slave diffusers to master diffusers, all from below the ceiling via a computer. The system can also be controlled through the building's BMS. All models shall be fully tested to ANSI/ASHRAE Standard 70-2006 (RA 2011).

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Control Options

The Rickard wall thermostat can control a single diffuser, or up to 15 diffusers. The standard thermostat monitors temperature and controls the set point, while the version with occupancy sensing can also detect a vacant zone and automatically switch off that zone. Generally for larger more complex applications, electronic diffusers connect to the most common BMS protocols on the market; LonWorks and BACnet/IP and MS/TP or the Rickard standalone software. Thousands of Diffusers can be connected, controlled, monitored and fine-tuned via the BMS using the Rickard Master Communications Module.

Rickard software is easy to install, commission and re-program

Rickard's easy to use software is perfect for all applications where a BMS system is not being utilised within the building. This standalone software has been developed for commissioning and setting diffuser parameters, monitoring the network, logging diffuser activity and converting a slave diffuser to a master, all from below the ceiling with a computer. Changes to office layouts are easy as each diffuser can be easily re-positioned and re-programmed according to its new environment.

The Rickard software can show you how each diffuser is connected within the zone and which diffusers make up each zone. By selecting the diffuser parameters you wish to log, data can also be viewed in an easy to understand chart and exported for storage and analysis if required. This ensures that any corrections or adjustment to the system can be made accurately and with minimum disturbance to the building occupants.



Occupancy Sensor

Occupancy sensing is a unique option that can lead to the further reduction of a building's energy consumption. It is available within the Square Electronic VAV Ceiling diffuser itself and a specially designed wall thermostat. This technology closes the diffuser if it detects an unoccupied room and opens it again when it detects an occupant present.

If the Electronic diffuser system is connected to the building's BMS, its occupancy sensing capability can also be used to turn the lights on and off depending on the occupancy of the space.

Airflow Sensor

Airflow monitoring enables commissioning of the electronic diffuser system to occur easier and faster. This is because Airflow and total pressure measurements can be viewed and monitored through Rickard's software or the BMS. It can be fitted to each diffuser for accurate Airflow calculations, or to one diffuser per zone for an approximate indication.

Electronic Control Range

Models	Description
RICK-OBCKIT	On-Board Controller
RICK-WSKIT	Thermostat (No occupancy sensor)
RICK-OCWSKIT	Thermostat (With occupancy sensor)
RICK-MLMPS	Power supply unit
RICK-CU-USB	USB connection module



Master Communication Module

Models	Description
RICK-CU-RICK	Base model
RICK-CU-BNIP	BacNet/ IP BMS Interface
RICK-CU-BNTP	BacNet ms/ tp BMS Interface
RICK-CU-LW	LonWorks BMS Interface

Control Cables

Models	Description
RICK-CA-SLA8	8M Slave Cable
RICK-CA-EXT2	2M Extension Cable
RICK-CA-EXT8	8M Extension Cable
RICK-CA-CU20	PSU to MCU Comms Cable 20m Long
RICK-CA-CU40	PSU to MCU Comms Cable 40m Long
RICK-CA-CU80	PSU to MCU Comms Cable 80m Long

Relief Ring

Models	Neck size
RICK-Relief200	200mm
RICK-Relief250	250mm
RICK-Relief300	300mm
RICK-Relief350	350mm

Airflow Sensors

Models	Neck size
RICK-sens-af150	150mm
RICK-sens-af200	200mm
RICK-sens-af250	250mm
RICK-sens-af300	300mm
RICK-sens-af350	350mm

Occupancy Sensor Cap

Model	Details
RICK-CU-OCC	Occupancy Sensor Module - Retrofit

Rickard occupancy sensor cap for retrofitting ceiling diffuser.

RICKARD ELECTRONIC VAV DIFFUSER SERIES

Square Electronic VAV Ceiling Diffusers



Description

The square electronic diffusers feature a modern flush to the ceiling look and are available in 3 distinctive styles: square to square, square to round and square to swirl.

Square to square and square to round diffusers produce low noise levels and are designed for general building zones where a uniform radial air distribution pattern is preferred. The square to swirl diffuser is more efficient at generating good mixing between supply and room air.

Air volume control is achieved through the vertical up and down movement of the central control disc mechanism within the diffuser. This increases or decreases the aperture size which varies the volume of conditioned air to enter the occupied space.

Available in neck sizes from 150 to 350mm diameters and tile sizes of 495 x 495mm* and 595 x 595mm (see range dimension diagrams for more detail)

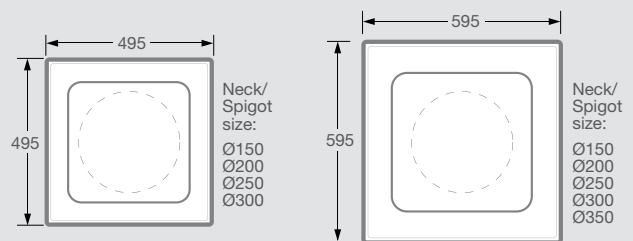
Features

- All models available with in-built occupancy sensor.
- Can be installed in both suspended tiled ceilings with "T" frames and plastered ceilings.

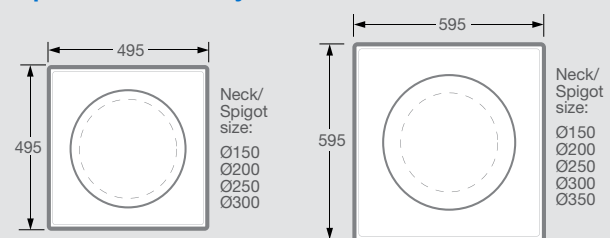
*Minimum 12 weeks lead time.

Dimensions

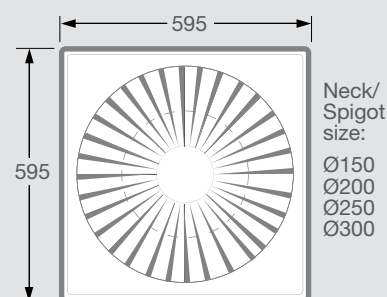
Square to Square Style



Square to Round Style



Square to Swirl Style













Dimensions in mm

RICKARD ELECTRONIC VAV DIFFUSER SERIES

Specifications And Performance

Square to Square and Square to Round

Neck Size (mm)	Style	Part Number			Neck Total Pressure (Pa)								
		495mm x 495mm	595mm x 595mm		20	30	40	50	60	70	80	90	100
150		VSD1501S495	VSD1501S595	Airflow (L/s)	63	77	88	99	108	117	125	133	140
				Throw (m)	2.0	2.1	2.7	3.0	3.3	3.5	3.7	4.0	4.2
		VCD1501S495	VCD1501S595	NC Level (NC)	-	-	-	-	26	28	31	33	35
200		VSD2001S495	VSD2001S595	Airflow (L/s)	96	118	137	153	169	184	195	207	218
				Throw (m)	2.0	2.6	3.0	3.2	3.6	3.9	4.2	4.5	4.7
		VCD2001S495	VCD2001S595	NC Level (NC)	-	27	28	29	30	33	36	38	40
250		VSD2501S495	VSD2501S595	Airflow (L/s)	140	171	198	221	242	261	279	296	313
				Throw (m)	2.4	2.6	3.2	3.5	3.9	4.2	4.5	4.7	5.1
		VCD2501S495	VCD2501S595	NC Level (NC)	-	27	29	31	33	36	38	40	42
300		VSD3001S495	VSD3001S595	Airflow (L/s)	176	216	250	280	307	332	355	377	398
				Throw (m)	2.5	2.8	3.3	3.7	4.2	4.6	4.8	5.2	5.4
		VCD3001S495	VCD3001S595	NC Level (NC)	27	28	30	32	35	37	39	41	43
350		Not available	VSD3501S595	Airflow (L/s)	246	301	349	389	426	461	492	523	551
				Throw (m)	2.7	3.2	3.6	4.1	4.5	5.0	5.5	5.7	5.9
		Not available	VCD3501S595	NC Level (NC)	2.7	28	30	32	35	38	40	43	45

Square to Swirl

Neck Size (mm)	Part Number		Neck Total Pressure (Pa)				
			20	40	50	60	70
150	VSW1501S595	Airflow (L/s)	68	79	88	96	104
		Throw (m)	1.8	2.1	2.3	2.5	2.7
		NC Level (NC)	26	29	31	33	35
200	VSW2001S595	Airflow (L/s)	112	130	145	159	172
		Throw (m)	2.2	2.5	2.8	3.1	3.3
		NC Level (NC)	28	31	33	35	37
250	VSW2501S595	Airflow (L/s)	159	183	205	225	243
		Throw (m)	2.9	3.3	3.7	4.1	4.4
		NC Level (NC)	29	33	35	37	39
300	VSW3001S595	Airflow (L/s)	194	224	250	274	296
		Throw (m)	2.9	3.3	3.7	4.1	4.4
		NC Level (NC)	30	33	36	38	40

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the control disc fully open & an air velocity of 0.25m/s.

Noise criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (ie. the difference between Sound Pressure Level (dB re: 10⁻⁶ Pa) and Sound Pressure Level (dB re: 10⁻¹² Pa) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are factory set for a minimum of 30% of the maximum flow levels reflected above. It should be noted that minimum Airflow settings are approximate & may require to be reset on site to compensate for actual site system pressures.

RICKARD ELECTRONIC VAV DIFFUSER SERIES

Linear Slot Electronic VAV Ceiling Diffusers



Description

Rickard linear slot diffusers provide an effective means of distributing conditioned air into the perimeter zones of a building where the temperature control requirements are the most demanding. The slim, attractive shape of the diffuser ensures that its subtle design works with most architectural styles. At the same time its superior aerodynamic design ensures that the air distribution creates no drafts, is quiet and highly efficient.

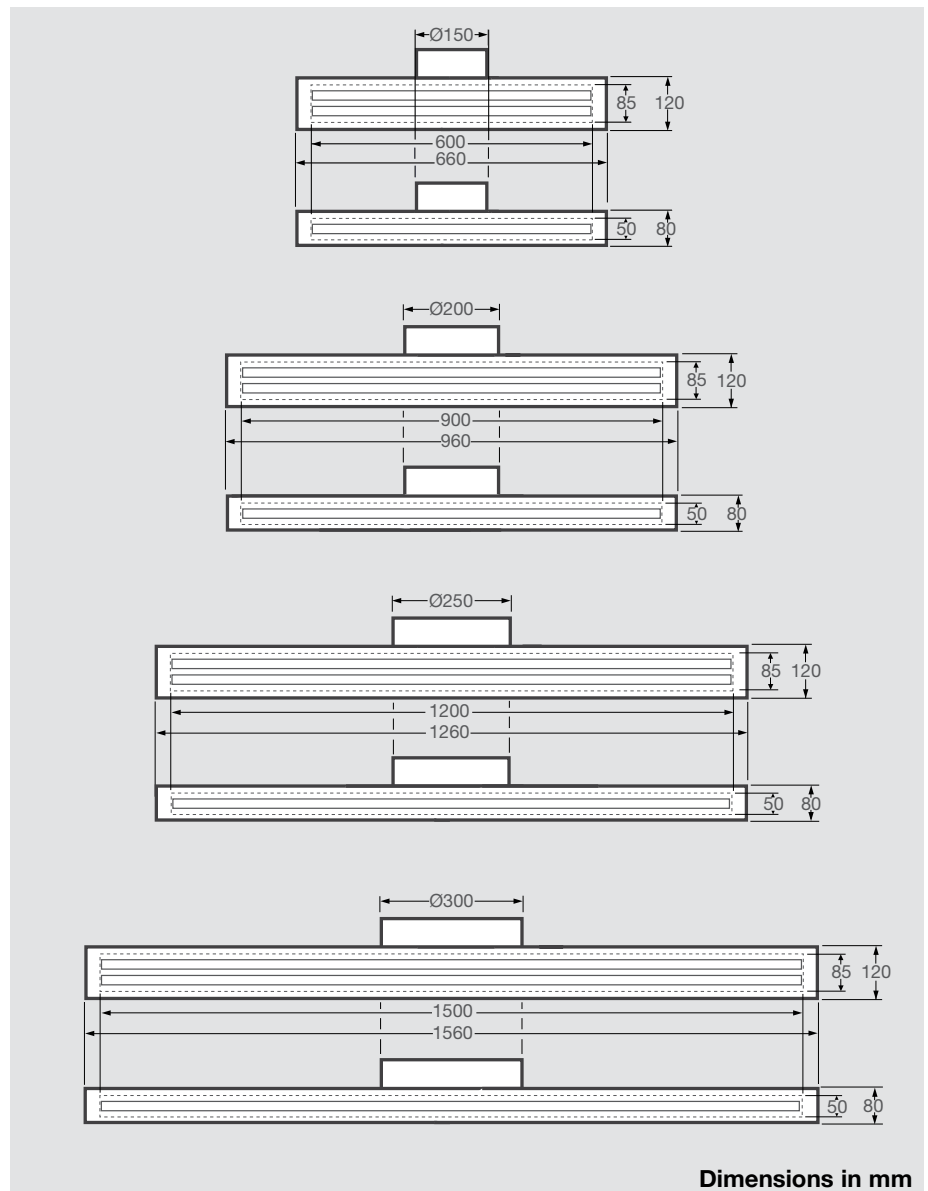
A linear slot diffuser must be connected to a wall thermostat (temperature sensor) for it to perform as a master diffuser. The diffuser can then operate with one or more slave diffusers, or as a standalone system.

Air volume control is achieved with the opening and closing of vanes driven by an electric actuator. This increases or decreases the aperture size which varies the volume of conditioned air to enter the occupied space.

Features

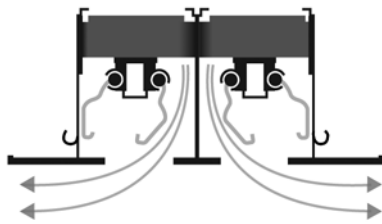
- Airflow direction from diffuser can be easily adjusted by the occupant.
- Available in one or two slots and widths ranging from 660 to 1560mm.
- Air discharge volumes from 10% to 100% can be achieved.

Dimensions

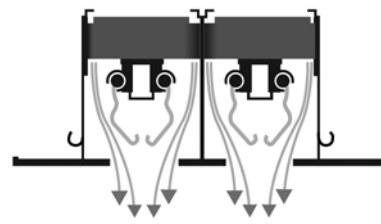


RICKARD ELECTRONIC VAV DIFFUSER SERIES

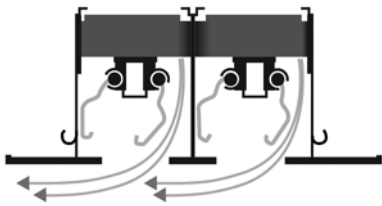
Airflow Direction



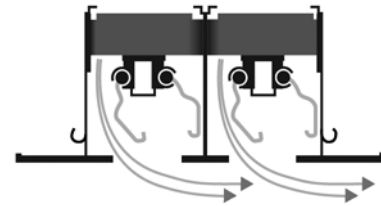
Two way Airflow



One way Airflow - downward



One way Airflow - left



One way Airflow - right

Specifications and Performance

Neck Size (mm)	Width Size (mm)	Product Numbers		Neck Pressure (Pa)					Neck Pressure (Pa)					Neck Pressure (Pa)					
		Single Slot (80mm, high)	Dual Slot (120mm, high)	30	40	50	60	70	30	40	50	60	70	30	40	50	60	70	
150	600	VLN6001/1	VLN6001/2																
				Airflow (L/s)	41	48	53	59	64	54	62	69	76	82	41	48	53	59	64
				Throw (m)	4.5	4.8	5.1	5.4	5.6	3.2	3.4	3.6	3.8	3.9	6.4	6.9	7.3	7.6	7.9
				NC Level (NC)	30	33	35	37	39	30	33	35	37	39	30	33	35	37	39
200	900	VLN9001/1	VLN9001/2																
				Airflow (L/s)	71	82	92	99	108	85	98	109	120	129	71	82	92	99	108
				Throw (m)	5.5	5.9	6.3	6.6	6.8	3.9	4.2	4.4	4.6	4.8	7.8	8.4	8.9	9.3	9.7
				NC Level (NC)	32	35	37	39	41	32	35	37	39	41	32	35	37	39	41
250	1200	VLN12001/1	VLN12001/2																
				Airflow (L/s)	96	111	124	135	146	118	137	153	168	181	96	111	124	135	146
				Throw (m)	6.4	6.9	7.3	7.6	7.9	4.5	4.8	5.1	5.4	5.6	9.0	9.7	10.3	10.7	11.2
				NC Level (NC)	33	36	38	40	42	33	36	38	40	42	33	36	38	40	42
300	1500	VLN15001/1	VLN15001/2																
				Airflow (L/s)	118	136	151	166	179	155	179	199	218	236	118	136	151	166	179
				Throw (m)	7.1	7.7	8.1	8.5	8.8	5.0	5.4	5.7	6.0	5.2	10	10.8	11.5	12.0	12.5
				NC Level (NC)	34	37	39	41	43	34	37	39	41	43	34	37	39	41	43

Performance data applicable for Dual Slot Linear Diffusers only.

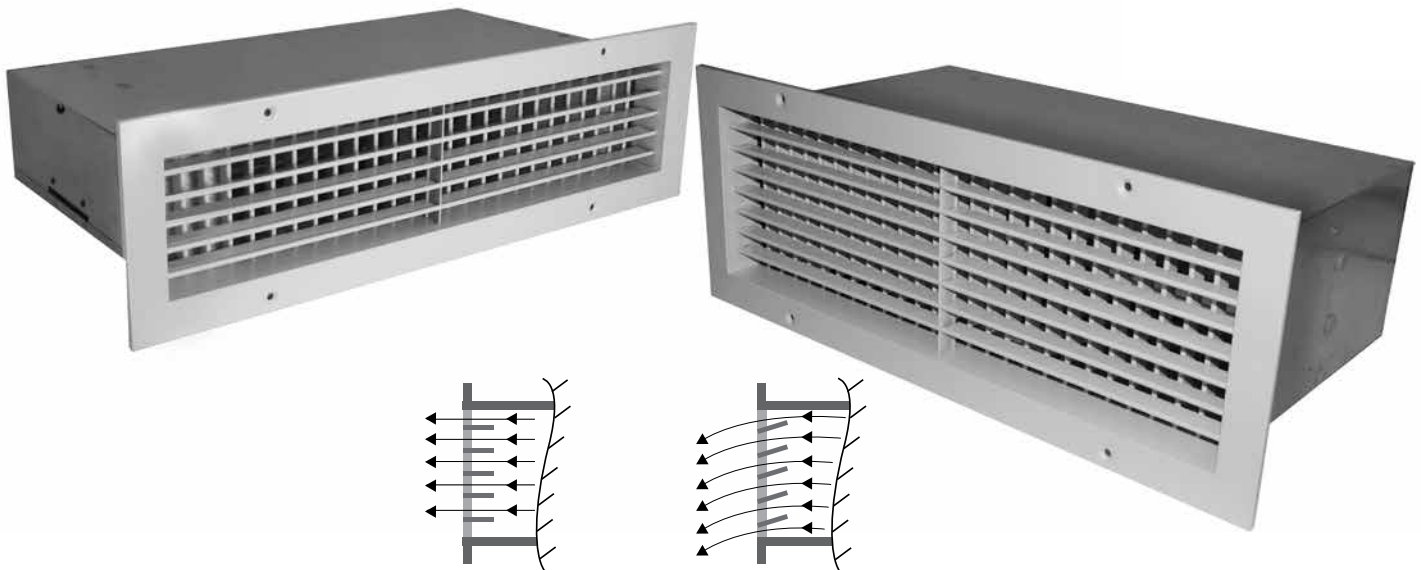
Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the vanes fully open & an air velocity of 0.25m/s.

Noise criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (ie. the difference between Sound Pressure Level (dB re: 10⁻⁶ Pa) and Sound Pressure Level (dB re: 10⁻¹² Pa) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are factory set for a minimum of 30% of the maximum flow levels reflected above. It should be noted that minimum Airflow settings are approximate & may require to be reset on site to compensate for actual site system pressures.

RICKARD ELECTRONIC VAV DIFFUSER SERIES

Wall/Bulkhead Electronic VAV Diffusers



Angle of blades can be changed to reduce the throw.

Description

The Rickard electronic wall/bulkhead VAV diffusers are normally used in sidewalls or bulkheads where restricted ceiling voids exist or covered ceilings are not available. When multiple units are mounted in a row they are very effective at distributing air across long areas.

A comfortable room temperature is maintained by varying the supply air volume in accordance with demand. This is achieved by opening or closing the diffuser's aperture, which is a set of air foil shaped aluminum vanes driven by an electric actuator.

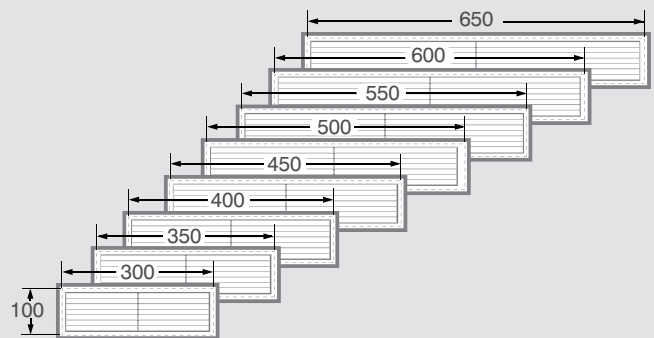
The Electronic Wall/Bulkhead VAV Diffusers are available in 100mm and 150mm heights. The 100mm size is available in lengths from 300 to 650mm and the 150mm size comes in lengths from 500 to 700mm; see range dimension diagrams for more detail. Like the linear slot diffuser, the wall/bulkhead diffuser must be connected to a wall thermostat for it to become a master diffuser.

Features

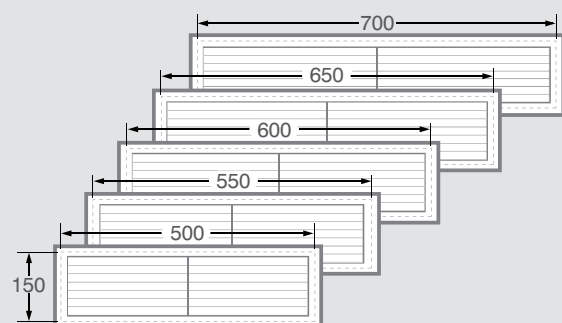
- Air throw can be adjusted by simply changing angle of blades within housing.
- Maintains constant air volumes from 10% to 100%.
- Very effective at distributing air across long areas.

Dimensions

100mm Height



150mm Height



Dimensions in mm

RICKARD ELECTRONIC VAV DIFFUSER SERIES

Specifications and Performance

Width size (mm)	Part Numbers (100mm, high)		Standard Duct Static Pressure (Pa)			
			20	30	40	50
300	WBD3001/100	Airflow (L/s)	58	75	90	95
		Throw (m)	5.2	6.4	7.2	8.3
		NC Level (NC)	28	32	36	38
350	WBD3501/100	Airflow (L/s)	80	102	113	122
		Throw (m)	7.2	8.2	9.5	10.1
		NC Level (NC)	29	33	37	39
400	WBD4001/100	Airflow (L/s)	100	130	149	155
		Throw (m)	7.8	8.6	10.4	10.7
		NC Level (NC)	29	33	36	38
450	WBD4501/100	Airflow (L/s)	105	140	153	160
		Throw (m)	7.0	8.4	9.1	10.7
		NC Level (NC)	29	33	37	39
500	WBD5001/100	Airflow (L/s)	110	144	162	170
		Throw (m)	8.4	9.4	10.0	11.4
		NC Level (NC)	29	34	37	39
550	WBD5501/100	Airflow (L/s)	120	156	185	200
		Throw (m)	8.2	9.5	10.6	11.7
		NC Level (NC)	30	34	38	40
600	WBD6001/100	Airflow (L/s)	135	178	205	216
		Throw (m)	8.6	9.9	11.4	12.6
		NC Level (NC)	30	34	38	40
650	WBD6501/100	Airflow (L/s)	160	215	252	275
		Throw (m)	8.8	10.3	11.7	13.0
		NC Level (NC)	30	33	38	41

Width size (mm)	Part Numbers (150mm, high)		Standard Duct Static Pressure (Pa)			
			20	30	40	50
500	WBD5001/150	Airflow (L/s)	165	219	258	258
		Throw (m)	8.7	10.0	11.4	11.4
		NC Level (NC)	30	35	39	39
550	WBD5501/150	Airflow (L/s)	190	250	288	288
		Throw (m)	8.8	10.5	11.2	11.2
		NC Level (NC)	30	34	38	38
600	WBD6001/150	Airflow (L/s)	215	285	330	330
		Throw (m)	9.2	11.6	13.1	13.1
		NC Level (NC)	31	35	38	38
650	WBD6501/150	Airflow (L/s)	230	300	350	350
		Throw (m)	9.4	10.3	13.0	13.0
		NC Level (NC)	32	35	39	39
700	WBD7001/150	Airflow (L/s)	267	329	378	378
		Throw (m)	9.7	11.0	14.0	14.0
		NC Level (NC)	32	35	39	39

Throw data is taken 25mm below the ceiling on a line through the centre of the diffuser with the vanes fully open & an air velocity of 0.25m/s.

Noise criteria levels apply to a single diffuser mounted in a room having a Sound Absorption of 10dB in octave bands having centre frequencies from 125Hz to 8000Hz (ie. the difference between Sound Pressure Level (dB re: 10⁻⁶ Pa) and Sound Pressure Level (dB re: 10⁻¹² Pa) is equal to 10dB). These levels represent only the noise generated by the diffuser and do not take into account any duct-borne noise.

Diffusers are factory set for a minimum of 30% of the maximum flow levels reflected above. It should be noted that minimum Airflow settings are approximate & may require to be reset on site to compensate for actual site system pressures.

Elta Fans Malaysia Sdn Bhd

Tel **+603 7846 0340**

Fax **+603 7842 1132**

Email **info@eltafans.asia**

No. 147, Jalan TUDM Kampung
Baru Subang, 40150 Shah Alam,
Selangor West Malaysia, Malaysia

eltafans.asia

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