



Delivering with agility for a dynamic industry

Safer, greener, innovative solutions in the fast evolving HVAC industry

Celebrating **20** years



Fire Resisting Ductwork



Life Safety Dampers



Sound Attenuators



Fire-rated Insulation



Smoke Exhaust, Car Park & Tunnel Ventilation Fans



VAV Boxes



Control Dampers



Louvers



UL Listed Air Filters & ESPs



AHU, FAHU, FCU, RTU, ERV & Ecology Units

VAV CATALOGUE

Central Ventilation Systems (CVS) designs, tests, manufactures, and supplies certified air distribution, air control, and passive fire protection solutions, complying with international standards such as UL, AMCA, BS, EN, NFPA, IBC, ASFP, SMACNA, and DW144.

We are a family-owned group, that has been understanding the HVAC industry for 20 years; through the experience of providing certified HVAC solutions to over 1000 projects of varied sizes and complexities, primarily for the commercial, residential, healthcare, educational facilities, data centers and different industrial segments.

The existing range of CVS products includes the BS & EN Certified Fire-Rated Ductwork System, UL Classified Life Safety Dampers, AMCA Certified Louvers, Volume Control Dampers, and Sound Attenuators.

Our Research and Development team continually strives to improve our existing products as well as introduce new products to serve our customers efficiently. Maintaining quality at every stage, we work with a spirit of teamwork in achieving the various performance objectives of the consultants and building contractors. We inspect and certify our projects, and offer the assurance of all requisite approvals to be in place.



Celebrating **20** *years*



Key advantages that
make a real impact

1

Fire-safety products tested, approved and certified by renowned labs and local civil defence authority

2

High quality in-house manufacturing ensuring consistency and timeliness with process automation

3

Saving time and hassle through understanding of region's building standards, local regulations and numerous specifications



High quality delivered with honesty and integrity



Vision

To be recognized as a leading player within the HVAC industry having formidable presence across product categories.



Mission

Striving for superior quality and performance while manufacturing sustainable products. Associate with leading projects that are shaping the infrastructure landscape.



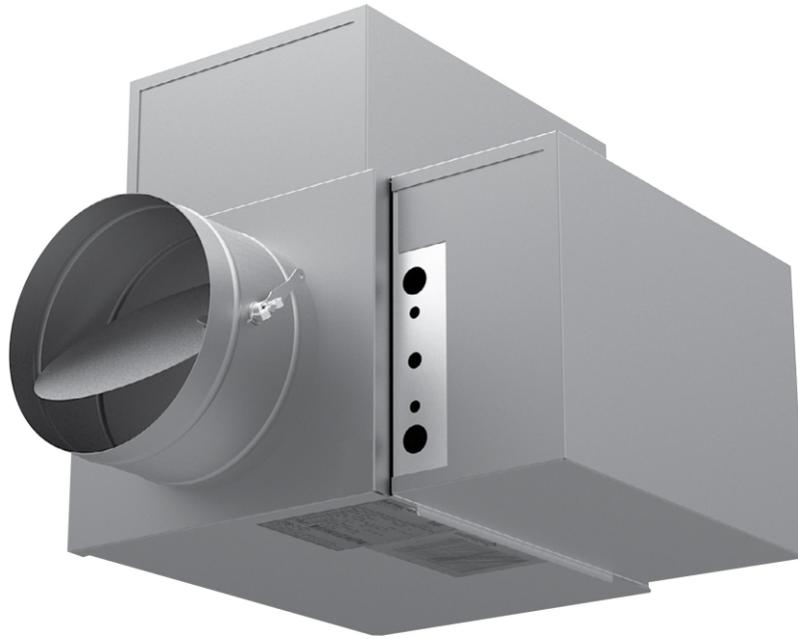
Core Attributes

- Striving for excellence
- Achieving technical superiority
- Commitment to customer satisfaction
- Conscious of environment and costs
- Investing in innovative methodologies

SINGLE DUCT AIR TERMINAL UNITS



ATU-BP VAV
SINGLE DUCT AIR TERMINAL UNITS



ATU-BP-600 BYPASS TERMINAL UNIT

The ATU-BP-600 Bypass Air Terminals are used to achieve variable air volume delivery of conditioned air to a space or zone where constant volume air handlers exist. Variable air volume control is achieved by directing air flow either to the space or to a bypass port in direct response to a signal from the room thermostat. The damper assembly design includes a galvanized single ½”

thick box damper providing superior rigidity and close off for accurate control without the use of cumbersome and high maintenance internal linkage. The damper rotates in a self-lubricating, low friction, long life thermal plastic bearing. A constant volume of air is delivered by the air terminal, but varying amounts are delivered to the space and the bypass plenum. A locking quadrant on the inlet balancing damper determines the total air flow through the air terminal. The primary air valve is enclosed in an insulated sheet metal casing. Control components are shipped piped and wired, and a piping/wiring diagram is affixed to the bottom of the unit for field reference.

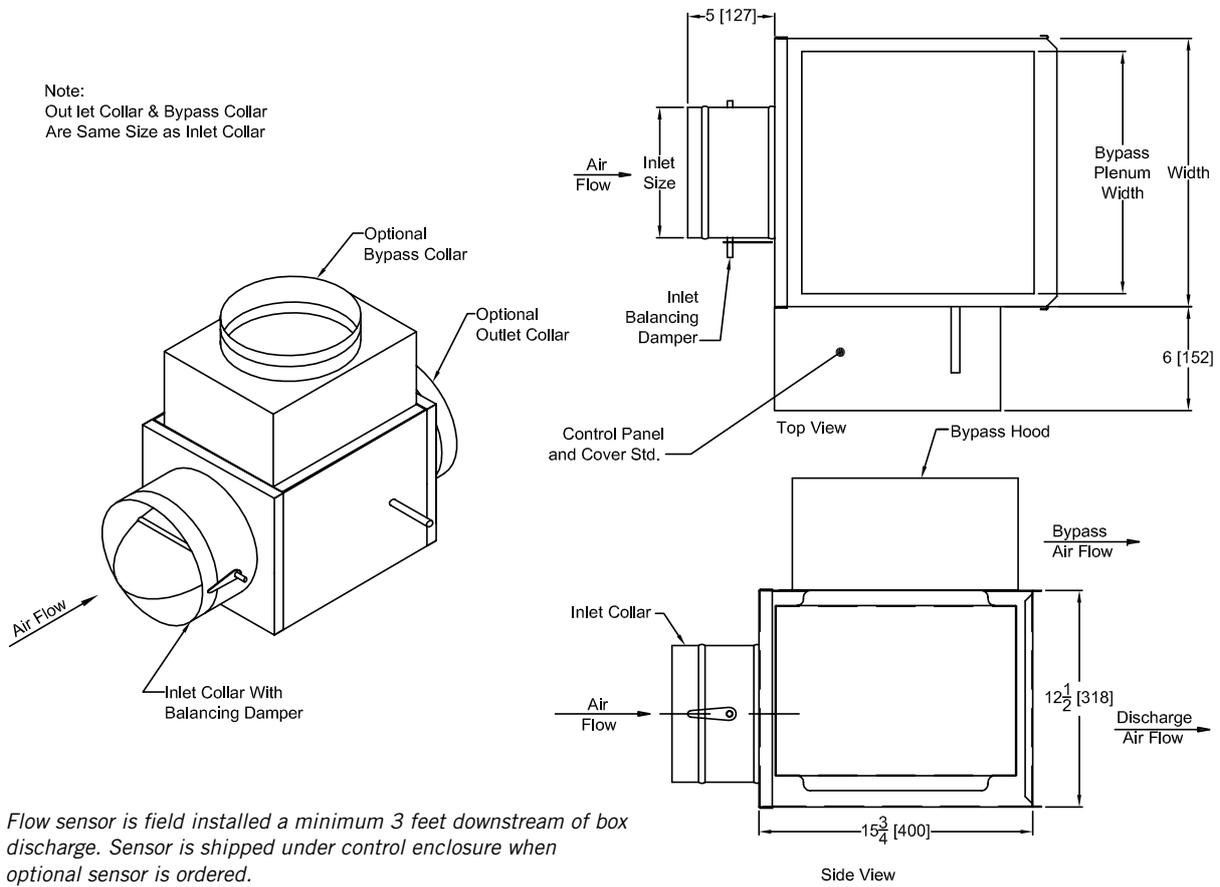
STANDARD FEATURES

- ❑ ATU-BP-600 available in 6 unit sizes to handle 200-4000 CFM
- ❑ Casing constructed of 22 ga. galvanized steel.
- ❑ Damper assembly includes a galvanized single ½” thick box damper providing superior rigidity and close off for accurate control without the use of internal linkage.
- ❑ Insulation is 1/2" thick, 1.5lb / ft³ dual density coated fiberglass that complies with NFPA 90A, ASTM C-665, and UL-181 requirements.
- ❑ 3-beaded inlet connection tube for added rigidity and secure flex duct connections.

Single Duct Air Terminal Units

ATU-BP-600 BYPASS AIR TERMINAL UNIT

Note:
Out let Collar & Bypass Collar
Are Same Size as Inlet Collar



Flow sensor is field installed a minimum 3 feet downstream of box discharge. Sensor is shipped under control enclosure when optional sensor is ordered.

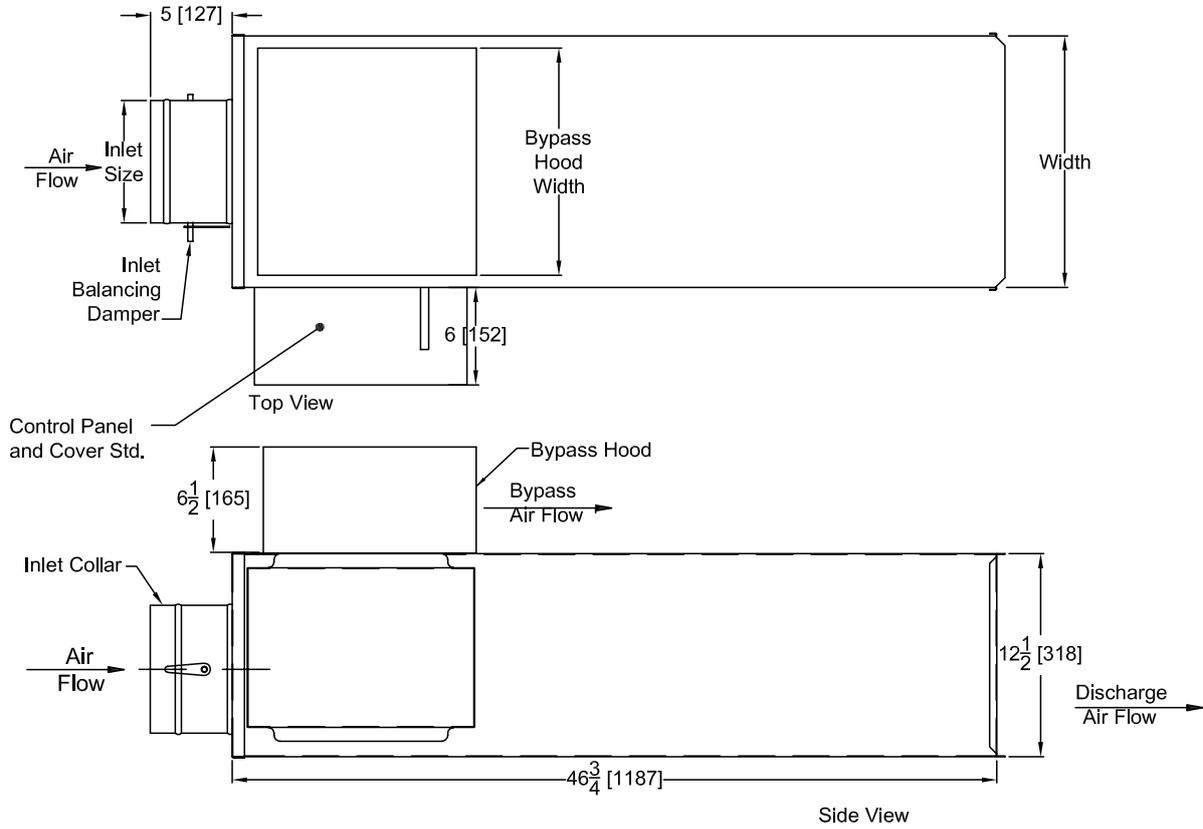
The standard location for control panel is Right Hand on Model ATU-BP. Looking in the direction of airflow, the control panel is on the right.

Model Number	Nominal Size	CFM Range	Width	Shipping Weight (lbs.)
ATU-BP 606	6 (152) Round	0-600	12 (305)	23
ATU-BP 608	8 (203) Round	0-1000	14 (356)	26
ATU-BP 610	10 (254) Round	0-1600	16 (406)	29
ATU-BP 612	12 (305) Oval	0-2200	18 (457)	31
ATU-BP 614	14 (356) Oval	0-3000	24 (610)	34
ATU-BP 616	6 (406) Oval	0-4000	28 (673)	38

Single Duct Air Terminal Units

ATU-BP-600

BYPASS AIR TERMINAL UNIT WITH INTEGRAL SOUND ATTENUATOR



The standard location for control panel is Right Hand on Model BP.
Looking in the direction of airflow, the control panel is on the right.

Model Number	Nominal Size	CFM Range	Width	Shipping Weight (lbs.)
ATU-BP 606	6 (152) Round	0-600	12 (305)	37
ATU-BP 608	8 (203) Round	0-1000	14 (356)	42
ATU-BP 610	10 (254) Round	0-1600	16 (406)	47
ATU-BP 612	12 (305) Oval	0-2200	18 (457)	50
ATU-BP 614	14 (356) Oval	0-3000	24 (610)	55
ATU-BP 616	6 (406) Oval	0-4000	28 (673)	62

ATU-BP-600

Radiated Sound Power, Minimum Ps

Unit Size	Min Ps	CFM	Octave Band					
			2	3	4	5	6	7
4	0.05	200	35	35	29	29	20	20
5	0.05	200	35	35	29	29	20	20
6	0.13	400	50	46	45	43	36	29
8	0.05	700	60	53	45	40	31	27
10	0.05	1100	57	49	45	40	33	28
12	0.10	1600	59	53	47	42	35	29
14	0.10	2100	57	54	53	49	43	41
16	0.12	2800	60	62	61	57	50	43

Discharge Sound Power, Minimum Ps

Unit Size	Min Ps	CFM	Octave Band					
			2	3	4	5	6	7
4	0.05	200	35	35	29	29	20	20
5	0.05	200	35	35	29	29	20	20
6	0.13	400	61	57	52	51	44	39
8	0.05	700	65	59	56	53	45	38
10	0.05	1100	66	62	58	54	46	41
12	0.10	1600	64	60	59	56	49	43
14	0.10	2100	64	65	65	58	53	50
16	0.12	2800	66	63	64	63	56	51

STANDARDS

- Dual-density fiberglass insulation meets UL 181 and NFPA 90A requirements.
- Insulation meets ASHRAE 62.1 requirements for resistance to mold growth and erosion.

Single Duct Air Terminal Units

BP-600

RADIATED SOUND POWER at Minimum Pressures and $\Delta P_s = 1.0$ in. wg

Unit Size	CFM (L/s)		Min Ps in. wg (Pa)		Min Ps							$\Delta P_s = 1.0$ in. wg (250 Pa)								
					Octave Band Sound Power, Lw, dB							NC	Octave Band Sound Power, Lw, dB							NC
					2	3	4	5	6	7	2		3	4	5	6	7			
604 / 605 4 & 5 inch	100	(47)	0.005	(1.2)	35	29	26	22	19	17	<15	35	29	26	22	19	17	<15		
	150	(71)	0.012	(3.0)	35	29	26	22	19	17	<15	44	39	37	31	29	25	<15		
	200	(94)	0.050	(12.4)	35	35	29	29	20	20	<15	53	48	47	40	38	33	21		
	250	(118)	0.055	(13.7)	40	37	36	32	24	20	<15	57	51	48	43	40	36	22		
606 6 inch	200	(94)	0.050	(12.4)	35	35	29	29	20	20	<15	53	48	47	40	38	33	21		
	300	(142)	0.080	(19.9)	45	39	42	35	27	20	15	60	54	48	45	42	38	22		
	400	(189)	0.130	(32.4)	50	46	45	43	36	29	19	60	54	49	46	44	41	23		
	600	(283)	0.300	(74.7)	54	49	46	47	41	39	20	62	56	50	51	46	45	25		
608 8 inch	400	(189)	0.020	(5.0)	45	38	33	26	20	20	<15	61	56	50	46	42	36	25		
	500	(236)	0.030	(7.5)	51	42	37	33	23	20	<15	63	57	53	48	46	38	27		
	700	(330)	0.050	(12.4)	60	53	45	40	31	27	22	66	59	53	50	48	40	30		
	1000	(472)	0.100	(24.9)	66	55	48	46	40	35	30	72	61	53	52	46	42	38		
610 10 inch	600	(283)	0.020	(5.0)	56	35	30	23	20	20	17	65	59	49	43	38	34	29		
	800	(378)	0.030	(7.5)	51	43	38	32	24	20	<15	67	60	55	50	41	37	31		
	1100	(519)	0.050	(12.4)	57	49	45	40	33	28	19	69	63	61	51	44	41	35		
	1600	(755)	0.100	(24.9)	59	51	52	46	40	35	26	72	65	63	54	48	45	38		
612 12 inch	1100	(519)	0.040	(10.0)	50	48	45	37	28	20	19	71	65	56	51	46	42	36		
	1200	(566)	0.050	(12.4)	50	46	46	40	31	23	20	70	67	58	52	48	44	38		
	1500	(708)	0.082	(20.4)	55	51	47	41	33	26	21	72	68	59	54	49	45	40		
	1600	(755)	0.099	(24.5)	59	53	47	42	35	29	21	74	70	60	55	50	46	41		
	2200	(1038)	0.150	(37.3)	63	57	50	45	38	32	26	75	70	63	57	53	49	41		
614 14 inch	1500	(708)	0.050	(12.4)	58	49	47	42	34	25	21	68	67	63	59	55	50	38		
	1800	(850)	0.070	(17.4)	58	50	48	44	37	33	22	69	67	62	60	56	51	38		
	2100	(991)	0.100	(24.9)	57	54	53	49	43	41	27	72	68	64	62	58	52	39		
	2400	(1133)	0.130	(32.4)	56	58	58	53	48	49	33	74	69	65	63	59	53	41		
	3000	(1416)	0.200	(49.8)	71	68	64	57	52	50	39	76	73	68	66	60	55	45		
616 16 inch	2000	(944)	0.060	(14.9)	57	54	53	48	40	21	27	70	70	68	55	51	46	44		
	2800	(1321)	0.120	(29.9)	60	62	61	57	50	43	36	74	73	71	58	52	49	47		
	3200	(1510)	0.160	(39.8)	62	63	62	59	52	40	37	74	74	72	60	54	51	48		
	3600	(1699)	0.210	(52.3)	67	68	67	64	58	53	43	75	75	73	62	57	57	49		
	4000	(1888)	0.250	(62.2)	72	71	67	62	58	55	43	77	77	75	65	60	60	51		

1. Performance data is in accordance with AHRI 880-2011 and ANSI / ASHRAE 130-2008.
2. NC values are calculated using attenuation credits outlined in Appendix E of AHRI 885-2008.
3. Discharge Sound power levels shown with End Reflection Corrections Included in dB (ref: 10^{-12} watts).
4. Minimum Ps is the static pressure drop across the air terminal unit while the inlet damper is in the wide-open position at a given airflow rate.

Single Duct Air Terminal Units

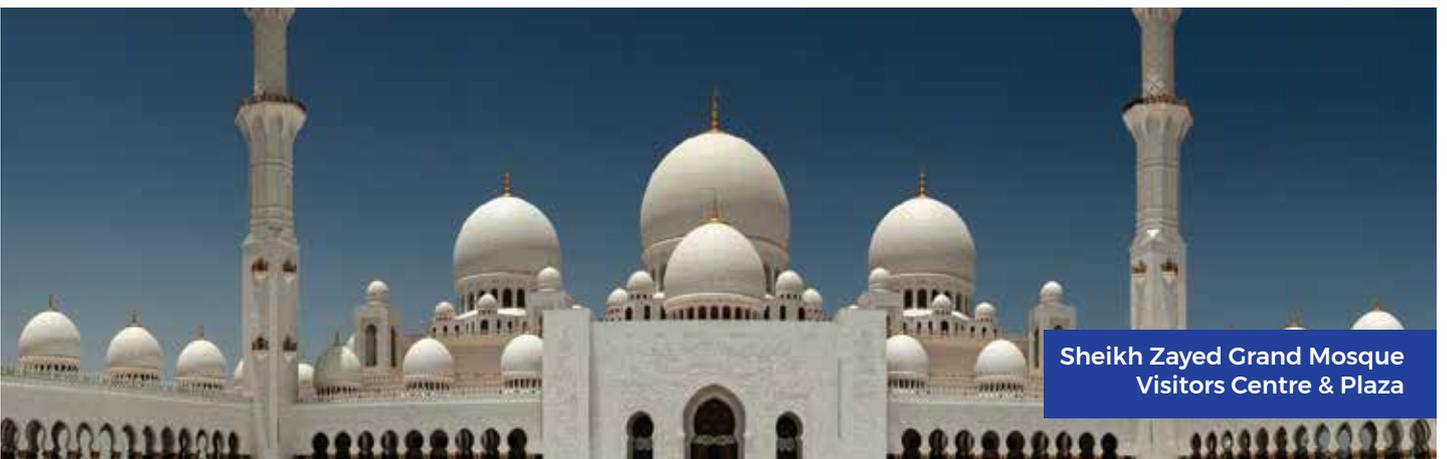
ATU-BP-600

DISCHARGE SOUND POWER at Minimum Pressures and $\Delta P_s = 1.0$ in. wg

Unit Size	CFM (L/s)		Min Ps in. wg (Pa)		Min Ps							$\Delta P_s = 1.0$ in. wg (250 Pa)								
					Octave Band Sound Power, Lw, dB							NC	Octave Band Sound Power, Lw, dB							NC
					2	3	4	5	6	7	2		3	4	5	6	7			
604 / 605 4 & 5 inch	100	(47)	0.005	(1.2)	51	36	30	26	24	16	<15	60	55	51	48	43	41	<15		
	150	(71)	0.012	(3.0)	54	39	33	29	27	19	<15	63	58	54	51	46	44	18		
	200	(94)	0.050	(12.4)	57	42	36	32	30	22	<15	66	61	57	54	49	47	22		
	250	(118)	0.055	(13.7)	57	46	40	38	33	24	<15	67	64	59	58	51	49	24		
606 6 inch	200	(94)	0.050	(12.4)	57	42	36	32	30	22	<15	66	61	57	54	49	47	22		
	300	(142)	0.080	(19.9)	56	50	45	43	35	25	<15	68	66	62	61	53	51	25		
	400	(189)	0.130	(32.4)	61	57	52	51	44	39	<15	71	68	65	65	56	54	27		
	600	(283)	0.300	(74.7)	72	68	64	62	55	52	27	77	76	72	73	63	60	37		
608 8 inch	400	(189)	0.020	(5.0)	63	46	40	36	36	25	<15	68	66	64	64	55	52	25		
	500	(236)	0.030	(7.5)	63	51	46	43	33	23	<15	71	67	65	66	57	53	26		
	700	(330)	0.050	(12.4)	65	59	56	53	45	38	17	75	71	70	70	61	57	31		
	1000	(472)	0.100	(24.9)	72	68	64	63	55	49	26	80	77	76	75	67	62	37		
610 10 inch	600	(283)	0.020	(5.0)	62	48	43	37	28	24	<15	68	65	65	62	55	53	24		
	800	(378)	0.030	(7.5)	63	56	50	46	37	27	<15	73	70	69	65	58	56	28		
	1100	(519)	0.050	(12.4)	66	62	58	54	46	41	19	75	73	72	69	62	59	32		
	1600	(755)	0.100	(24.9)	70	65	66	61	58	54	22	79	76	77	74	66	64	35		
612 12 inch	1100	(519)	0.040	(10.0)	59	51	48	45	37	27	<15	71	69	68	61	66	56	27		
	1200	(566)	0.050	(12.4)	63	53	51	48	40	32	<15	72	70	68	67	61	58	28		
	1500	(708)	0.082	(20.4)	63	60	58	55	48	42	16	74	72	74	72	66	61	31		
	1600	(755)	0.099	(24.5)	64	60	59	56	49	43	16	74	73	74	73	67	62	32		
	2200	(1038)	0.150	(37.3)	67	62	62	61	55	51	19	77	76	77	76	70	65	35		
614 14 inch	1500	(708)	0.050	(12.4)	58	59	54	47	41	36	15	74	73	71	65	61	58	32		
	1800	(850)	0.070	(17.4)	58	62	61	54	49	46	19	75	74	75	67	63	59	33		
	2100	(991)	0.100	(24.9)	64	65	65	58	53	50	22	77	76	77	70	65	61	35		
	2400	(1133)	0.130	(32.4)	69	68	68	62	56	53	26	79	78	79	72	67	63	38		
	3000	(1416)	0.200	(49.8)	77	74	74	68	63	60	33	82	81	84	76	70	67	41		
616 16 inch	2000	(944)	0.060	(14.9)	59	54	55	53	45	38	<15	75	70	69	67	62	58	28		
	2800	(1321)	0.120	(29.9)	66	63	64	63	56	51	20	77	77	76	74	68	64	37		
	3200	(1510)	0.160	(39.8)	70	78	68	67	60	55	38	79	78	78	76	70	66	38		
	3600	(1699)	0.210	(52.3)	73	71	73	72	65	60	29	79	80	81	78	72	66	40		
	4000	(1888)	0.250	(62.2)	76	74	74	72	65	60	33	82	80	82	80	74	69	40		

1. Performance data is in accordance with AHRI 880-2011 and ANSI / ASHRAE 130-2008.
2. NC values are calculated using attenuation credits outlined in Appendix E of AHRI 885-2008.
3. Discharge Sound power levels shown with End Reflection Corrections Included in dB (ref: 10^{-12} watts).
4. Minimum Ps is the static pressure drop across the air terminal unit while the inlet damper is in the wide-open position at a given airflow rate.

Projects References



Projects References



Product Range

- ▶ Fire-Resisting Ductwork (BS & EN)
- ▶ Fire-rated Insulation (ASTM & UL)
- ▶ Sound Attenuators (ASTM & BS)
- ▶ VAV Boxes (AHRI)
- ▶ Life Safety Dampers (UL)
- ▶ Control Dampers (AMCA & BS)
- ▶ Access Doors (BS & EN)
- ▶ Louvers (AMCA)
- ▶ Smoke Exhaust, Building, Car Park & Tunnel Ventilation Fans (AMCA & EN)
- ▶ Domestic and Industrial Ventilation Fans
- ▶ AHU, FAHU, FCU, RTU, ERV & Ecology Units (Eurovent, TUV & AHRI)
- ▶ Electrostatic Precipitators (ESPs) & UL Listed Air Filters (UL)

Our Brands



Control Dampers, Louvers,
Sound Attenuators & VAV Boxes



Non-Coated Fire-Resisting Ductwork
& Life Safety Dampers



Fire-rated Insulation

Building & Industry



Smoke Exhaust, Car Park &
Tunnel Ventilation



General Ventilation



Global Clean Air
Solutions Provider

**Central Ventilation System
Co. L.L.C**

Al Wasit Street,
Industrial Area 2,
Sharjah, U.A.E

CVS Arabia L.L.C

2nd Industrial City,
Dammam 31952,
K.S.A

**Badr and Asfour
Company For Engineering
and Metal Industries**

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