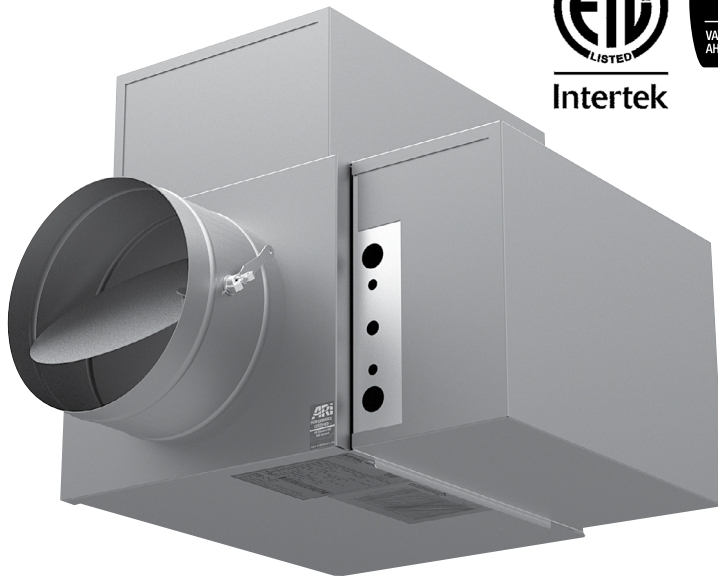


ATU PRODUCT CATALOG



AIR TERMINAL UNITS

BP-600
BYPASS
AIR TERMINAL UNIT

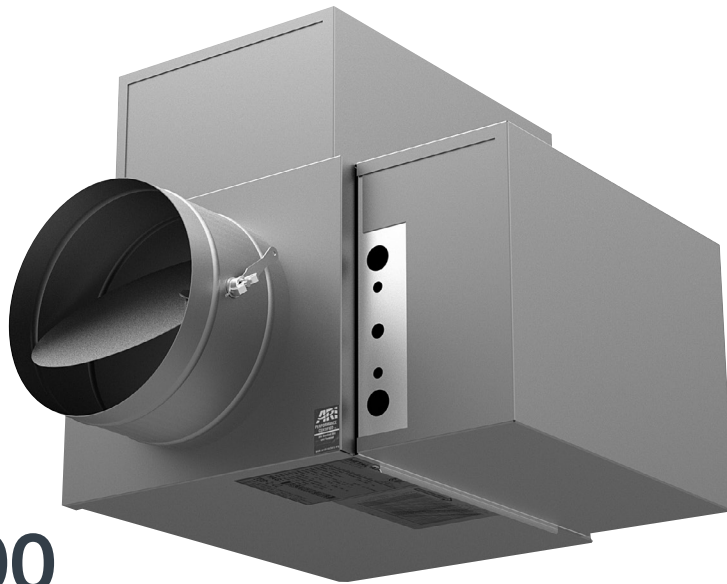


Intertek



BP-600 BYPASS AIR TERMINAL UNIT

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BP-600 BYPASS TERMINAL UNIT

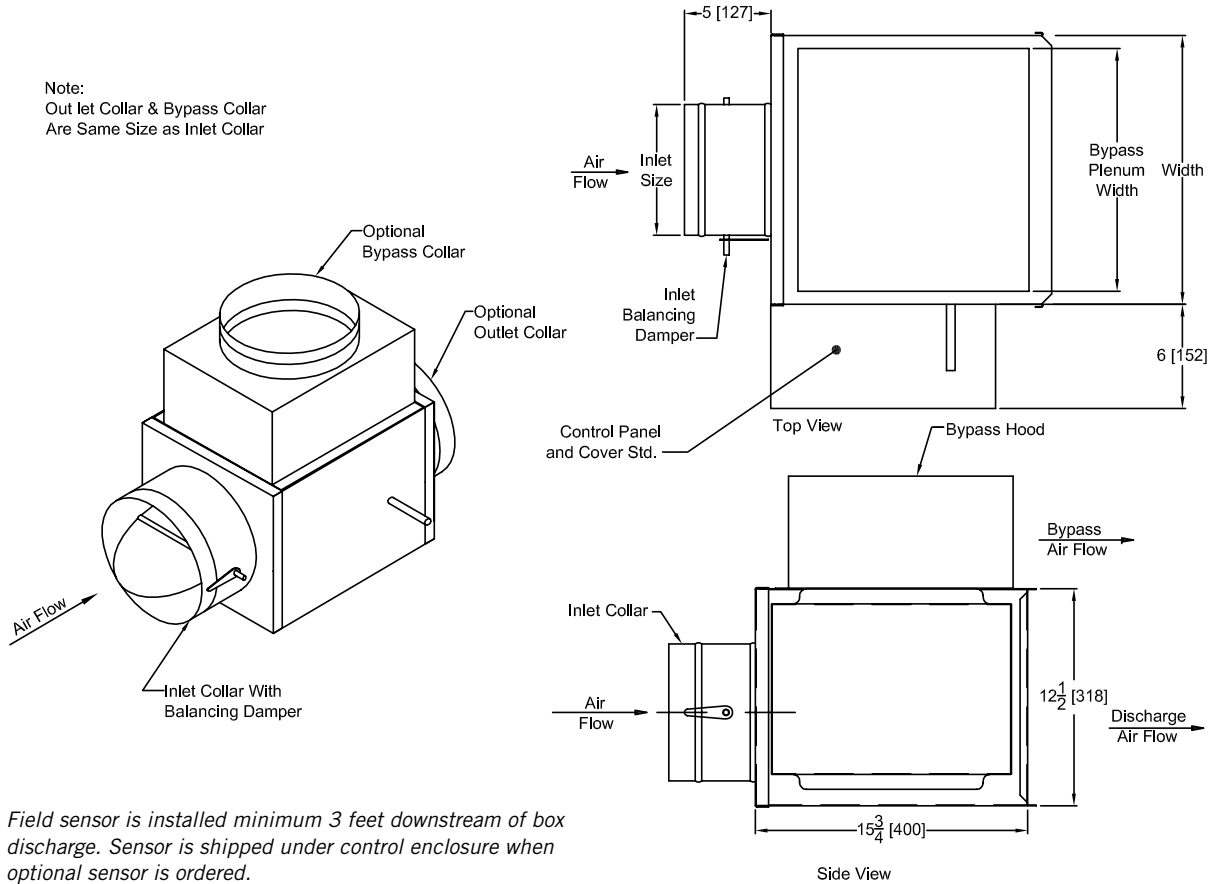
The BP-600 Bypass Air Terminals are used to achieve variable air volume delivery of conditioned air to a space or zone where constant volume air handlers exist. Variable air volume control is achieved by directing air flow either to the space or to a bypass port in direct response to a signal from the 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

- 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.
- All BP-600 terminal units are AHRI certified and shipped with the AHRI seal.

BP-600 BYPASS AIR TERMINAL UNIT

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

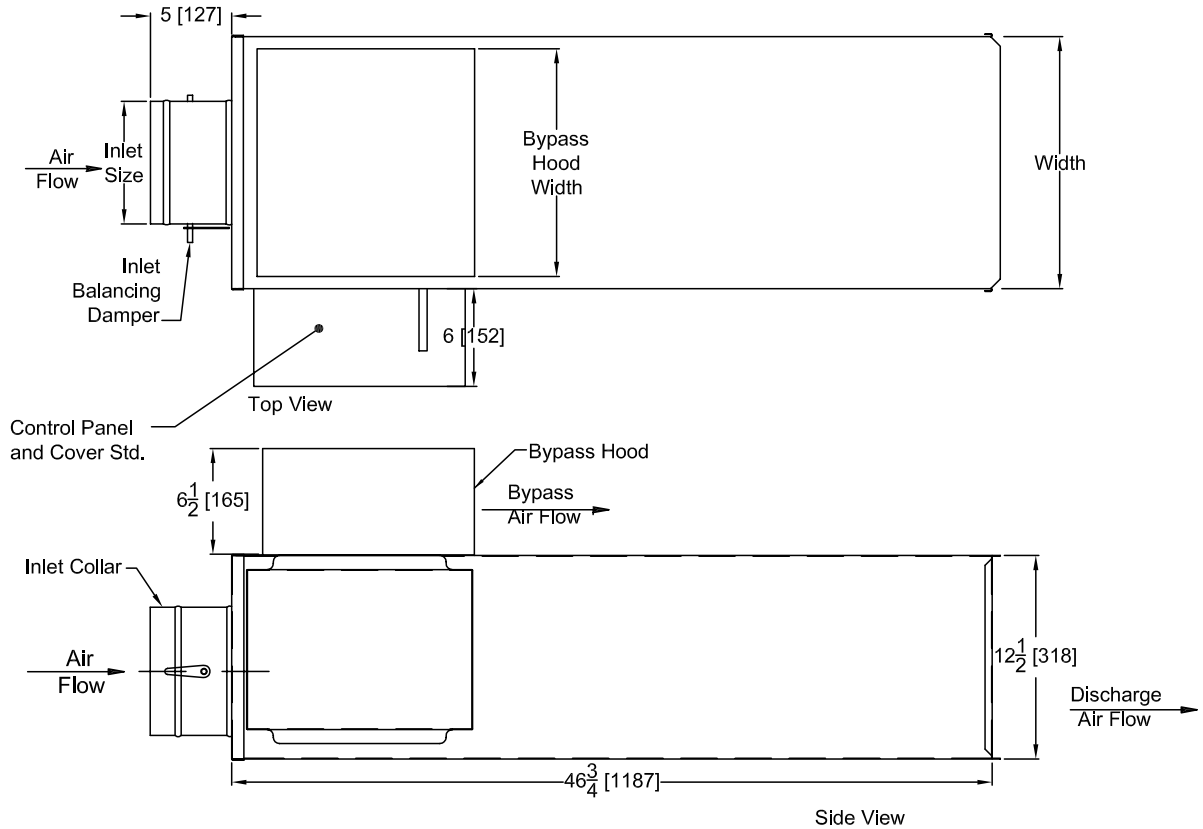


Field sensor is installed minimum 3 feet downstream of box discharge. Sensor is shipped under control enclosure when optional sensor is ordered.

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

Model Number	Nominal Size	CFM Range	Width	Shipping Weight (lbs.)
BP606	6 (152) Round	0-600	12 (305)	23
BP608	8 (203) Round	0-1000	14 (356)	26
BP610	10 (254) Round	0-1600	16 (406)	29
BP612	12 (305) Oval	0-2200	18 (457)	31
BP614	14 (356) Oval	0-3000	24 (610)	34
BP616	6 (406) Oval	0-4000	28 (673)	38

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.)
BP606	6 (152) Round	0-600	12 (305)	37
BP608	8 (203) Round	0-1000	14 (356)	42
BP610	10 (254) Round	0-1600	16 (406)	47
BP612	12 (305) Oval	0-2200	18 (457)	50
BP614	14 (356) Oval	0-3000	24 (610)	55
BP616	6 (406) Oval	0-4000	28 (673)	62

BP-600 AHRI CERTIFIED RATING POINTS

AHRI Certified 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

AHRI Certified 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

CERTIFICATIONS AND STANDARDS

- Units tested per ANSI / ASHRAE Standard 130.
- All model sizes certified in accordance with AHRI 880 certification program.
- ETL listed to meet requirements of UL 1995 and CSA 236.
- Dual-density fiberglass insulation meets UL 181 and NFPA 90A requirements.
- Insulation meets ASHRAE 62.1 requirements for resistance to mold growth and erosion.



BP-600

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

Unit Size	CFM (L/s)	Min Ps in. wg (Pa)		Min Ps								$\Delta Ps = 1.0$ in. wg (250 Pa)							
				Octave Band Sound Power, Lw, dB								Octave Band Sound Power, Lw, dB							
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC		
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 contained within a bold border outline are AHRI certified data.
2. Performance data not contained within a bold border outline are application ratings. Application ratings are outside the scope of the Certification Program.
3. Performance data is obtained from laboratory testing in accordance with AHRI 880-2011 and ANSI / ASHRAE 130-2008.
4. NC values are calculated using attenuation credits outlined in Appendix E of AHRI 885-2008.
5. Discharge Sound power levels shown with End Reflection Corrections Included in dB (ref: 10^{-12} watts).
6. 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.

BP-600 DISCHARGE SOUND POWER at Minimum Pressures and ΔPS = 1.0 in. wg

Unit Size	CFM (L/s)	Min Ps in. wg (Pa)		Min Ps								ΔPs = 1.0 in. wg (250 Pa)							
				Octave Band Sound Power, Lw, dB								Octave Band Sound Power, Lw, dB							
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC		
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			

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6. 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.

METALAIRE™

BP-600 CONTROL SEQUENCE OFFERINGS



PPD-PNEUMATIC PRESSURE DEPENDENT

- 310 DA / NC
- 312 RA / NO



PPI-PNEUMATIC PRESSURE INDEPENDENT

- 314 DA / NC
- 315 DA / NO
- 316 RA / NC
- 317 RA / NO
- 340 Static Pressure Control



EPD-ELECTRIC PRESSURE DEPENDENT

- 352 Cooling Only
- 356 Static Control
- 357 Actuator Only



API-ANALOG PRESSURE INDEPENDENT

- 360 Cooling Only
- 365 Heating / Cooling Changeover
- 373 Static Pressure Control



DDC-DIRECT DIGITAL CONTROL

BACnet

- Consult Factory for Direct Digital Controls (DDC)

Refer to ACC 24 for complete description.

