

# XG-RT-500 ROUND RETROFIT AIR TERMINAL UNIT

## SPECIFIABLE FEATURES

- 22 ga. galvanized steel casing, mechanically sealed, low leakage construction.
- Readily installed into existing ductwork with minimal ductwork modifications.
- 3-beaded inlet connection tube for added rigidity and secure flex duct connections.
- Metal inlet flow sensor with extra balancing taps.
- Available with optional factory provided pneumatic, electric, DDC, or electronic controls.
- Externally accessible balancing taps.
- 20 ga. control mounting plate and enclosure are standard.

## INDEX OF SECTIONS

	PAGE
Dimensional Data	3
Sound Performance	4
Control Sequence Offerings	6

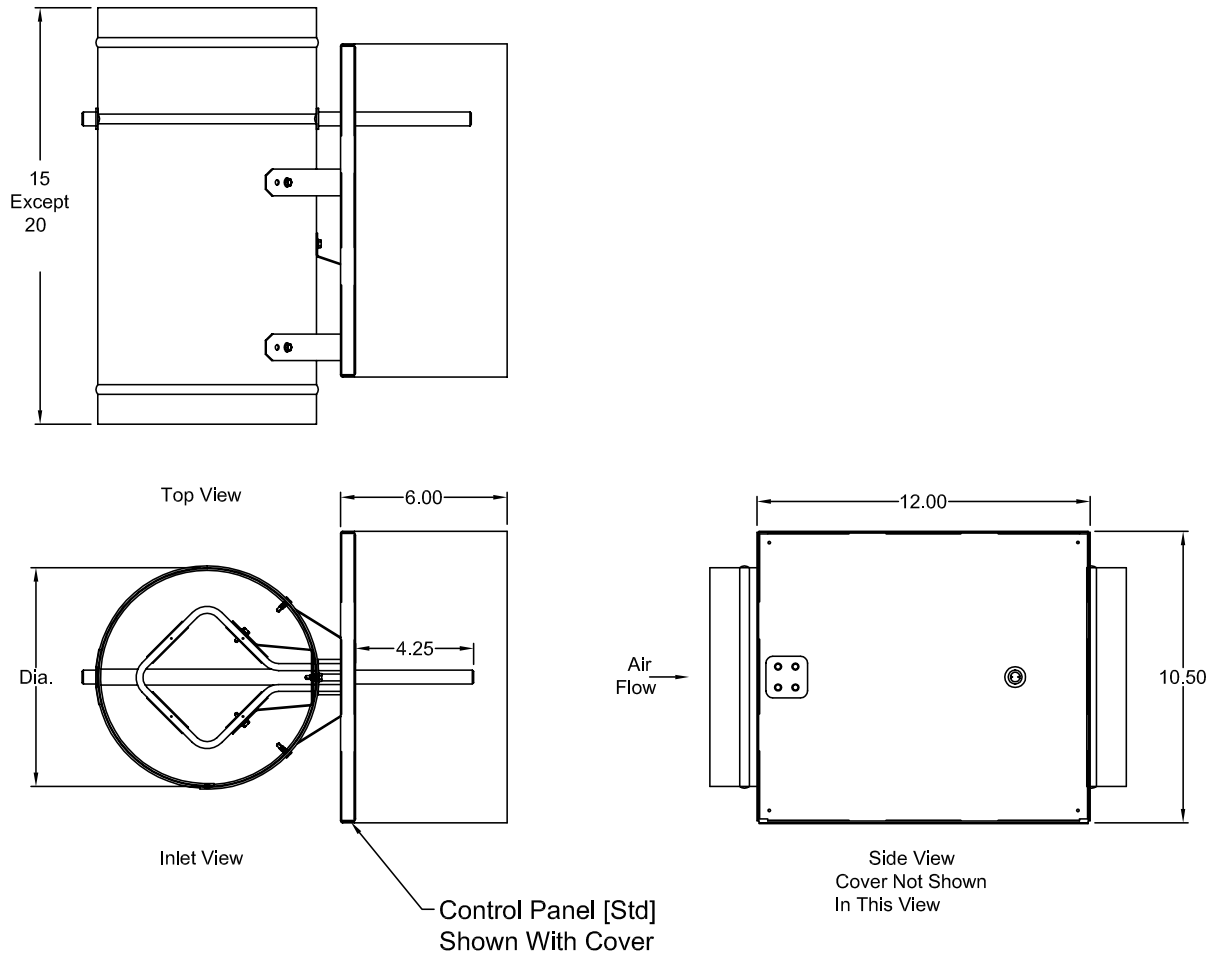


# XG-RT-500 ROUND RETROFIT AIR TERMINAL UNIT

## STANDARD FEATURES

- XG-RT-500 is available in ten sizes from 6" to 16" to handle 30 CFM – 5,020 CFM.
- 22 ga. galvanized steel casing, mechanically sealed, low leakage construction.
- Mechanically fastened damper assembly is double layer, 18 gauge equivalent, galvanized steel with integral blade seal. (<1% at 3" static pressure).
- Optional factory calibrated job-specific controls.
- Multi-quadrant, averaging flow sensor for highly accurate (+/-5%) flow readings with varying inlet duct configurations after certified balancer has balanced terminal.
- Easily accessible, steel balancing taps.
- External control cabinet with offset mounting plate as standard.
- XG-RT-500 has beaded inlet and discharge for added rigidity and aids in secure flex duct connections.

## XG-RT-500 ROUND RETROFIT



*XG-RT504 has a round 6" to 4" transition on the inlet.  
An optional transition is available for the discharge end.*

### RADIATED SOUND MODEL RT

		OCTAVE BAND SOUND POWER, Lw, dB																												
Unit Size	CFM	Min ΔPs	ΔPs = 0.50 in. wg.							ΔPs = 1.0 in. wg.							ΔPs = 1.5 in. wg.							ΔPs = 3.0 in. wg.						
			2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
4	50	0.01	41	32	19	19	15	7	<15	43	34	21	21	17	9	<15	44	35	22	22	18	11	<15	45	38	25	24	23	18	<15
	100	0.01	43	34	23	22	19	13	<15	45	36	25	24	21	15	<15	46	37	26	25	22	17	<15	47	40	29	27	27	24	<15
	150	0.03	46	38	29	26	21	16	<15	48	40	31	28	23	18	<15	49	41	32	29	24	20	<15	50	44	35	31	29	27	<15
	200	0.04	49	41	35	29	23	18	<15	51	43	37	31	25	20	<15	52	44	38	32	26	22	<15	53	47	41	34	31	29	<15
	250	0.06	51	43	39	32	28	26	<15	53	45	41	34	30	28	<15	54	46	42	35	31	30	15	55	49	45	37	36	37	19
5	150	0.03	46	38	29	26	21	16	<15	48	40	31	28	23	18	<15	49	41	32	29	24	20	<15	50	44	35	31	29	27	<15
	200	0.04	49	41	35	29	23	18	<15	51	43	37	31	25	20	<15	52	44	38	32	26	22	<15	53	47	41	34	31	29	<15
	250	0.06	51	43	39	32	28	26	<15	53	45	41	34	30	28	<15	54	46	42	35	31	30	15	55	49	45	37	36	37	19
	300	0.07	53	46	43	35	32	30	17	55	48	45	37	34	32	19	56	49	46	38	35	34	20	57	52	49	40	40	41	23
	350	0.08	54	48	45	38	35	31	19	56	50	47	40	37	33	20	57	51	47	41	38	35	22	58	54	50	43	43	42	25
6	200	0.04	49	41	35	29	23	18	<15	51	43	37	31	25	20	<15	52	44	38	32	26	22	<15	53	47	41	34	31	29	<15
	300	0.07	53	46	43	35	32	30	17	55	48	45	37	34	32	19	56	49	46	38	35	34	20	57	52	49	40	40	41	23
	400	0.08	55	50	46	41	38	32	20	57	52	48	43	40	34	22	58	53	49	44	41	36	23	59	56	52	46	46	43	26
	500	0.10	57	53	48	44	40	34	22	59	55	50	46	42	36	24	60	56	51	47	43	38	25	61	59	54	49	48	45	29
	600	0.18	58	55	50	46	42	36	24	60	57	52	48	44	38	26	61	58	53	49	45	40	27	62	61	56	51	50	47	31
7	350	0.01	51	40	33	25	20	19	<15	55	46	42	36	28	24	16	55	46	43	38	32	29	17	56	47	45	42	40	38	19
	450	0.01	52	41	34	27	22	19	<15	57	48	42	37	29	25	18	58	50	45	40	33	30	20	59	53	49	45	42	39	24
	550	0.01	53	42	35	29	24	20	<15	58	50	43	37	29	26	19	60	55	47	42	35	32	24	61	59	54	49	43	41	29
	650	0.01	55	45	38	34	26	20	<15	60	53	44	39	32	29	22	61	56	48	43	36	33	25	63	60	55	50	44	41	30
	750	0.01	57	47	41	36	28	21	17	62	54	46	41	34	29	24	63	58	50	45	38	34	27	65	62	57	52	45	42	32
8	400	0.01	52	41	34	26	21	19	<15	56	47	42	37	29	25	17	57	49	44	39	32	29	19	58	52	48	44	41	38	23
	550	0.01	53	42	35	29	24	20	<15	58	50	43	37	29	26	19	60	55	47	42	35	32	24	61	59	54	49	43	41	29
	700	0.01	56	46	40	35	27	21	17	61	53	45	40	33	28	23	62	57	49	44	37	33	26	64	61	56	51	44	41	31
	850	0.01	58	49	43	38	31	24	20	63	55	47	43	36	31	26	65	59	51	46	39	34	28	67	63	58	53	45	42	34
	1000	0.01	60	52	46	42	34	27	22	65	57	50	45	39	33	29	67	60	53	48	42	36	31	70	66	60	54	47	42	37
9	500	0.01	45	42	33	25	22	20	<15	50	47	41	31	26	23	16	54	54	49	39	34	28	23	59	55	49	44	41	39	24
	700	0.01	48	47	39	32	27	22	<15	53	52	47	37	32	26	21	56	56	51	42	36	30	26	62	59	58	47	43	41	28
	900	0.01	49	49	41	35	29	23	16	54	54	48	40	34	28	22	57	57	52	44	38	31	27	64	64	58	51	46	43	37
	1100	0.02	51	50	44	38	30	24	18	55	55	49	41	35	29	24	58	58	52	44	38	32	27	65	68	61	53	48	47	39
	1300	0.03	54	53	46	40	32	26	23	58	57	50	42	36	30	26	62	61	53	46	40	34	31	70	69	62	55	49	48	40
10	700	0.01	48	47	39	32	27	22	15	53	52	47	38	32	26	21	56	56	51	42	36	30	26	62	59	58	47	43	41	28
	900	0.01	49	49	41	35	29	23	16	54	54	48	40	34	28	22	57	57	52	44	38	31	27	64	64	58	51	46	43	37
	1100	0.02	51	50	44	38	30	24	18	55	55	49	41	35	29	24	58	58	52	44	38	32	27	65	68	61	53	48	47	39
	1300	0.03	54	53	46	40	32	26	23	58	57	50	42	36	30	26	62	61	53	46	40	34	31	70	69	62	55	49	48	40
	1500	0.03	56	56	49	43	35	29	25	61	59	51	44	38	32	32	64	63	55	48	42	36	33	72	71	64	57	51	50	42
12	800	0.01	50	42	35	28	26	29	<15	54	48	45	36	32	32	19	57	51	49	40	35	35	23	58	56	56	50	46	47	31
	1200	0.01	51	45	39	32	29	30	16	56	50	48	39	35	34	23	59	54	51	43	38	37	26	61	61	60	53	47	48	35
	1600	0.01	54	48	46	39	33	32	20	58	53	51	42	38	37	25	61	56	54	45	41	40	29	65	65	63	55	49	48	38
	2000	0.02	56	52	51	43	39	37	25	61	55	53	45	42	40	27	62	58	56	47	44	42	31	66	67	64	56	50	49	39
	2400	0.03	57	52	44	36	38	38	20	62	58	56	48	45	43	31	65	61	59	51	48	46	34	69	68	67	60	54	51	43
14	1000	0.01	53	41	39	31	27	22	<15	55	43	41	33	29	24	16	56	43	41	33	30	24	17	57	45	43	35	31	26	18
	1600	0.01	56	46	44	35	31	26	18	58	48	46	37	33	28	20	58	49	46	38	33	28	20	60	50	48	39	35	30	22
	2100	0.02	59	54	51	42	36	31	25	61	56	53	44	38	33	27	62	57	54	45	39	34	29	63	58	55	46	40	35	30
	2600	0.03	62	56	54	43	40	36	29	64	58	56	45	42	38	31	65	59	57	46	43	39	32	66	60	58	47	44	40	33
	3100	0.04	64	60	57	46	44	40	32	66	62	59	48	46	42	34	67	63	60	49	47	43	35	68	64	61	50	48	44	36
16	1400	0.01	58	51	41	35	31	26	20	59	55	46	40	36	30	24	60	57	51	45	41	36	26	63	61	57	53	49	47	32
	2100	0.02	60	53	44	40	37	33	22	60	57	49	43	40	35	26	62	60	54	48	44	40	28	66	65	61	58	55	53	36
	2800	0.03	61	54	47	42	39	35	23	62	58	51	45	42	37	27	64	62	56	50	47	44	32	69	69	65	62	61	59	41
	3500	0.04	62	57	52	46	42	39	26	64	60	55	49	44	41	30	67	64	59	54	50	47	34	71	70	67	64	63	62	43
	4200	0.05	65	61	57	50	46	43	32	67	63	58	52	48	45	33	69	66	62	56	54	51	37	73	72	69	66	65	64	45

1) Radiated sound is the noise transmitted through the unit casing  
 2) Sound power levels expressed in decibels, (dB) re 10<sup>-12</sup> Watts  
 3) Min ΔPs is the minimum operating pressure requirement of the unit with the damper full open and is the static pressure drop from the unit inlet to the unit discharge  
 4) Performance data based on laboratory tests conducted in accordance with ASHRAE 130-2016 and AHRI 880-2017  
 5) NC values are calculated using attenuation credits outlined in AHRI 885-2008 Appendix E  
 6) Blank spaces indicate Minimum Ps if

### DISCHARGE SOUND MODEL RT

OCTAVE BAND SOUND POWER, Lw, dB																														
Unit Size	CFM	Min ΔPs	ΔPs = 0.50 in. wg.							ΔPs = 1.0 in. wg.							ΔPs = 1.5 in. wg.							ΔPs = 3.0 in. wg.						
			2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
4	50	0.01	67	57	40	37	33	26	23	70	63	57	51	41	33	27	71	64	56	51	42	33	29	73	66	55	53	44	35	31
	100	0.02	69	58	42	39	34	28	26	71	64	58	51	42	36	29	72	65	58	51	43	36	30	74	67	58	53	45	38	32
	150	0.03	71	59	44	41	35	30	29	72	65	59	52	44	38	30	73	66	59	52	45	38	31	75	68	59	54	47	40	34
	200	0.04	72	60	45	43	36	31	30	73	66	59	53	46	39	31	74	67	59	53	47	39	32	76	69	59	55	49	41	35
	250	0.06	74	61	48	44	38	33	32	74	67	60	53	47	42	32	75	68	61	53	48	42	34	77	70	63	55	50	44	36
5	150	0.03	71	59	44	41	35	30	29	72	65	59	52	44	38	30	73	66	59	52	45	38	31	75	68	59	54	47	40	34
	200	0.04	72	60	45	43	36	31	30	73	66	59	53	46	39	31	74	67	59	53	47	39	32	76	69	59	55	49	41	35
	250	0.06	74	61	48	44	38	33	32	74	67	60	53	47	42	32	75	68	61	53	48	42	34	77	70	63	55	50	44	36
	300	0.07	76	63	50	47	39	35	31	74	69	62	54	48	45	32	75	70	63	54	49	45	30	77	72	65	56	51	47	32
	350	0.09	77	64	51	48	40	36	32	75	70	63	55	49	46	33	76	71	64	55	50	46	31	78	73	66	57	52	48	33
6	200	0.02	68	57	43	42	35	31	25	69	63	57	52	45	39	26	70	64	57	52	46	39	27	72	66	57	54	48	41	30
	300	0.04	72	60	48	46	38	35	26	70	66	60	53	47	45	25	71	67	61	53	48	45	26	73	69	63	55	50	47	28
	400	0.08	73	65	53	51	42	40	27	71	67	61	54	48	49	26	72	68	62	54	49	49	27	74	70	64	56	51	51	29
	500	0.12	74	68	58	55	47	44	29	74	71	65	59	53	52	31	75	72	66	59	54	52	32	77	74	68	61	56	54	34
	600	0.15	76	72	62	59	51	48	32	75	73	67	63	56	53	33	76	74	68	63	57	53	34	78	76	70	65	59	55	37
7	350	0.04	68	60	50	45	39	34	21	72	67	60	55	50	46	26	71	66	61	56	53	48	25	73	67	62	57	57	52	27
	450	0.06	70	62	52	48	40	36	23	74	69	60	57	41	47	28	74	69	63	59	55	50	28	76	70	65	60	58	53	31
	550	0.08	72	65	55	52	43	39	26	76	71	62	59	53	48	31	76	71	65	61	56	51	31	78	72	67	62	59	54	34
	650	0.10	73	66	56	53	44	40	27	77	72	63	60	56	52	32	78	72	66	62	57	52	33	80	74	68	64	60	55	36
	750	0.12	75	68	58	56	46	41	28	78	73	65	62	60	57	33	79	74	67	63	60	57	35	81	76	69	65	62	58	37
8	400	0.05	69	61	51	47	39	35	22	73	68	59	56	40	46	27	73	68	62	58	54	49	27	75	69	64	59	57	52	30
	550	0.08	72	65	55	52	43	39	26	76	71	62	59	53	48	31	76	71	65	61	56	51	31	78	72	67	62	59	54	34
	700	0.10	74	67	57	55	45	40	29	77	72	64	61	59	56	32	78	73	66	62	59	56	34	80	75	68	64	61	57	36
	850	0.12	76	70	60	58	49	44	30	80	74	66	64	59	56	34	81	75	68	65	60	55	36	83	77	70	66	62	57	38
	1000	0.14	78	72	63	61	52	47	31	82	76	68	66	58	53	36	83	77	70	67	60	54	38	85	78	72	68	63	57	40
9	500	0.01	64	60	49	45	37	35	18	69	66	57	53	48	45	25	70	67	60	56	51	48	26	72	69	62	58	54	52	28
	700	0.01	67	63	52	48	40	38	20	71	69	59	55	50	47	27	72	69	62	58	53	50	28	74	71	64	60	56	54	31
	900	0.02	70	65	54	51	41	39	21	73	70	61	57	53	50	28	74	71	64	59	55	52	29	76	73	66	61	57	54	32
	1100	0.02	71	66	57	53	45	43	24	75	71	63	58	53	51	29	76	72	65	60	56	53	31	77	74	68	62	59	55	33
	1300	0.03	74	71	61	58	51	49	30	78	75	66	63	57	55	35	79	76	68	64	59	56	40	81	77	70	65	62	59	43
10	700	0.01	67	63	52	48	40	38	20	71	69	59	55	50	47	27	72	69	62	58	53	50	28	74	71	64	60	56	54	31
	900	0.02	70	65	54	51	41	39	21	73	70	61	57	53	50	28	74	71	64	59	55	52	29	76	73	66	61	57	54	32
	1100	0.02	71	66	57	53	45	43	24	75	71	63	58	53	51	29	76	72	65	60	56	53	31	77	74	68	62	59	55	33
	1300	0.03	74	71	61	58	51	49	30	78	75	66	63	57	55	35	79	76	68	64	59	56	40	81	77	70	65	62	59	43
	1500	0.03	76	73	63	60	53	51	32	80	77	68	65	59	57	36	81	78	70	66	61	58	38	83	79	72	67	64	61	39
12	800	0.01	61	54	46	43	39	33	<15	67	64	57	55	52	49	21	69	66	60	59	58	55	24	70	67	61	62	63	60	25
	1200	0.01	64	58	50	47	43	39	17	69	66	60	58	56	53	24	72	69	64	62	61	58	27	73	70	66	66	65	63	29
	1600	0.01	66	62	53	50	47	45	19	71	68	63	60	59	57	26	74	71	67	64	63	61	29	75	73	70	69	67	65	32
	2000	0.02	69	63	58	55	52	51	22	74	70	65	63	62	60	28	77	73	69	66	65	64	31	78	75	71	71	69	67	33
	2400	0.02	72	65	63	59	58	57	25	76	71	67	65	65	63	30	79	74	70	67	67	66	33	80	76	72	73	70	68	35
14	1000	0.50	68	57	52	46	40	39	18	63	60	55	51	48	45	16	63	60	56	52	49	46	16	64	62	59	58	50	49	19
	1600	0.01	75	70	65	61	57	50	28	67	65	66	59	55	49	22	67	65	67	60	56	50	22	68	67	70	66	57	53	25
	2100	0.01	76	71	68	63	60	54	29	70	69	73	63	58	53	27	70	69	74	64	59	54	27	71	71	77	70	60	57	31
	2600	0.01	77	75	69	65	61	57	34	76	75	76	67	63	57	34	76	75	77	68	64	58	34	77	77	80	74	65	61	37
	3100	0.04	81	76	73	69	63	61	36	83	78	78	72	67	61	38	84	79	80	74	69	63	39	85	81	83	80	70	66	41
16	1400	0.01	70	67	61	54	48	43	26	73	73	69	65	58	53	32	75	76	71	70	64	58	35	75	77	74	72	69	63	37
	2100	0.02	74	71	65	58	53	48	29	77	76	71	67	61	56	35	78	78	73	71	65	60	37	79	79	76	74	70	64	39
	2800	0.03	78	74	68	62	57	53	33	80	78	73	68	63	58	38	81	79	75	71	66	61	39	83	81	77	76	71	65	41
	3500	0.04	78	75	71	64	59	56	34	81	78	74	69	64	60	38	82	80	76	72	67	63	40	84	82	79	76	72	66	42
	4200	0.06	81	77	75	68	62	59	37	84	80	77	73	68	64	40	84	80	77	75	69	65	40	85	83	80	77	73	68	44

1) Discharge sound is noise emitted from unit discharge into downstream ductwork  
 2) Sound power levels expressed in decibels, (dB) re 10<sup>-12</sup> Watts  
 3) Min ΔPs is the min. operating pressure requirement of the unit with the damper full open and is the static pressure drop from the unit inlet to the unit discharge  
 4) Performance data based on laboratory tests conducted in accordance with ASHRAE 130-2016 and AHRI 880-2017

5) NC values are calculated using attenuation credits outlined in AHRI 885-2008 Appendix E  
 6) Blank spaces indicate Minimum Ps if unit exceeds the ΔPs across the unit  
 7) Discharge sound power levels include duct end reflection corrections per AHRI Standard 880-2017

## XG-RT-500 CONTROL SEQUENCE OFFERINGS



### PPD-PNEUMATIC PRESSURE DEPENDENT

- Direct Acting / Normally Closed (DA / NC)
- Reverse Acting / Normally Open (RA / NO)



### PPI-PNEUMATIC PRESSURE INDEPENDENT

- Direct Acting / Normally Closed (DA / NC)
- Direct Acting / Normally Open (DA / NO)
- Reverse Acting / Normally Closed (RA / NC)
- Reverse Acting / Normally Open (RA / NO)
- Static Pressure Control



### EPD-ELECTRIC PRESSURE DEPENDENT

- Cooling Only
- Cooling with Reheat
- Static Control
- Actuator Only



### API-ANALOG PRESSURE INDEPENDENT

- Cooling Only
- Cooling with Heat
- Night Setback / Morning Warm-up
- Heating / Cooling Changeover
- Static Pressure Control



### DDC-DIRECT DIGITAL CONTROL

BACnet

- Cooling Only
- Cooling or Heating
- Hot Water Reheat
- Electric Reheat