

[illegible]

Laboratory Room Exhaust Air Terminal



Figure 1. Laboratory Room Exhaust Air Terminal.

The Laboratory Room Exhaust Air Terminal is an industrial grade, easy-to-install, pre-packaged airflow measurement and control terminal unit. When used with the Laboratory Room Controller, it provides fast-acting, stable and precise laboratory general exhaust airflow control over the entire range of room airflow requirements.

Measurement of airflow is accomplished by unique orifice plate or four quadrant sensing technology that minimizes pressure loss and duct obstruction, while maintaining measurement accuracy at 2% of actual flow (sensor only). Airflow control uses a round single blade damper. The terminal is comprised of 22 gauge-galvanized steel including the damper and orifice plate components. For corrosive environments, 316L stainless steel or Teflon® is available as an option. Slip or flange end fitting connections may be selected to match the ductwork construction. Flanges comply with the SMACNA Round Industrial Duct Construction Standard (RIDCS).

Features

- Orifice plate airflow measurement or four quadrant airflow sensors with multipoint, center averaging and signal amplification.
- Solid stainless steel damper shaft on Teflon bushings for fast acting control and maintenance free operation.
- Option of three different materials for construction,
 - Galvanized steel for non-corrosive, general applications.
 - 316L stainless steel for potentially corrosive applications.
 - Teflon for highly corrosive applications.
- Low non-recoverable static pressure loss.
- Eleven standard sizes with airflow capacities from 36 to 5591 cfm – additional sizes are available.
- Only two pivoting mechanical points, the damper shaft ends in Teflon bushings are exposed to the airstreams.
- Field commissionable and adjustable—not dependent upon factory calibration.
- *(Optional)* Factory-mounted measurement and control devices to simplify installation.
- Electronic or pneumatic damper control.
- Meets equipment requirements of ASHRAE 62.1 Sec. 5.
- LGE can be mounted in any orientation.
- Blade seals included as standard.
- Clean, sealed shipping bags available for LEED IEQ projects.
- Lab DXR (IP) control packages available

Description

The Lab Room Exhaust Air Terminal consists of the following components:

- Round duct casing, damper blade, and airflow sensor in sizes from 4 inches to 18 inches diameter.
- Material offerings: Galvanized steel, 316L stainless steel, Teflon-coated cold-rolled steel.
- *(Optional)* Galvanized steel equipment enclosure with exterior supply connection.
- *(Optional)* Factory-mounted controls.

Specifications

Materials (within air stream) – Standard	
Construction A	22-gauge Galvanized steel casing, orifice & blade. Shaft is zinc-plated steel. Volara Type A polyurethane blade seal – meets ASHRAE 130. Type A or B sensors available.
Construction B	casing, orifice & blade. Shaft is solid stainless steel. Volara Type A polyurethane blade seal – meets ASHRAE 130. Type A sensors only.
Construction C	Teflon-coated 18 ga. Cold-rolled Carbon Steel casing, orifice, blade, shaft, nuts, bolts. Teflon blade seal – meets ASHRAE 130. Type A sensors only.
Damper Shaft	Teflon shaft bushings. 1/2-inch (1.27 cm) diameter. End marked with blade position.
Flanges	Comply with SMACNA RIDCS. Seam welded BEFORE coating for A or C code.
Materials (outside air stream) – Standard	
Control Enclosure	18 gauge galvanized steel.
Pneumatic Tubing	UL rated 94 V-2 fire retardant.
Pneumatic Fittings with enclosure only	Brass, dual barbed.

Airflow Measurement

Sensor Type A	Square edge orifice plate. Two sets of averaging pressure taps. Same material as duct casing.
Sensor Type B	Four quadrants, with 12 sensing points, center averaging and signal amplification.

Accuracy

Flow Measurement	±3% of actual flow @ listed ranges (<i>Sensor only, per AMCA 610.</i>)
Installation Requirements	Rigid duct of the same diameter 1 x duct diameters upstream from the sensor, or taper angle less than 30 degrees.

Airflow Control

Damper Blade	Round single blade with 90 degree control.
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Environmental

Operating Temperature/% RH	40 to 120°F (4 to 50°C) 0 to 95% non-condensing
Storage Temperature/% RH	-10 to 150°F (-23 to 65°C) 0 to 95% non-condensing

Dimensions

Sizes	See Figure 2 and Figure 3
Weight	20 to 32 lbs. (9.1 to 14.5 kg)

Ordering Information

Part numbers are created based on the selections you choose. There are no spaces or dashes in the SAP part number.

NOTE: Not all combinations or configurations will yield a valid part number in SAP.

Sample Part Number: LGEG904R14BAS

Model Number	Control Package Number	Mounting Side	Inlet (Duct) Size	Casing Material and Sensor Type	End Fitting	Custom Options
LGE	G815	R	14	BA	S	S or T
Laboratory Exhaust Air Terminal	Enclosure with a GDE131.1P actuator.	Available in R only.	The inlet (or duct) size is 14 inches.	Stainless steel casing and orifice sensor.	Slip fitting	Including this letter at the end of your part number creates a number that is non-orderable in SAP. Please contact your Siemens Representative for this Custom solution.

To create an orderable part number that can be entered in SAP, complete the following steps:

1. Begin with the Model Number, **LGE**.
2. Select a Control Package number from the following tables, and append it to the Model Number. Once you have completed this step, proceed to Step 3.

Legacy

Control Package	Includes the following Control Components:			
	Actuator Part Number	Transducer Part Number	Flow Transmitter Part Number	Controller Part Number
E000*	—	—	—	—
G000	—	—	—	—
G862	GNP191.1P	—	590-780	—
G865	GNP191.1P	—	—	—
G904	GDE131.1P	—	—	—
G905	GDE161.1P	—	590-780	—
G906	GMA131.1P	—	—	—
G907	GMA161.1P	—	590-780	—
R904	GDE131.1P	—	—	540-104N
R906	GMA131.1P	—	—	540-104N
V862	GNP191.1P	590-380	590-780	546-00705

BACnet

Control Package	Includes the following Control Components:			
	Actuator Part Number	Transducer Part Number	Flow Transmitter Part Number	Controller Part Number
EOBO	GNP191.1P	—	550-819B	—
GOBO	GMA 131.1P	—	550-819B	—
GXBO	GDE 131.1P	—	550-819B	—
EOBF	GNP191.1P	—	550-819B	570-00701PA

Lab DXR BACnet IP

Control Package	Includes the following Control Components:			
	Actuator Part Number	Transducer Part Number	Flow Transmitter Part Number	Controller Part Number
EO10	GNP191.1P	—	DXA.S04P1	—
GO10	GMA 131.1P	—	DXA.S04P1	—
GX10	GDE 131.1P	—	DXA.S04P1	—
EO11	GNP191.1P	—	DXA.S04P1	DXR2.E17C-103B

Control Components

Part Number	Description	Part Number	Description
540-380	Auto-Zero Module	546-00705	Variable Volume Fume Hood Controller, Application 941 and 942
540-104	Constant Volume TEC with Auto-Zero Module	570-00701	BACnet Fume Hood Controller, Applications 6740, 6741 and 6742
		DXR2.E17C-103B	Lab DXR BACnet IP Controller, 30 dp
		550-819B	BACnet OAM - Off-board Air Module
		DXA.S04P1	Lab DXR Airflow Pressure Sensor 0-1"
		590-780	Differential Pressure Transmitter, 1" WC, 4-20 mA, 0.4% accuracy
		GDE161.1P	Fail-in-Last Position, Modulation, 44 in-lb electric actuator
GDE131.1P	Fail-in-Last Position, Floating, 44 in-lb electric actuator	GDE161.1P	Fail-safe Spring Return Modulating 62 in-lb electric actuator
GMA131.1P	Fail-safe Spring Return Floating, 62 in-lb electric actuator	GNP191.1P	GNP Fast Acting Lab Electronic Actuator

- Choose **R** for the Mounting Side, and append the letter to the part number. (The **R** is required.)
- Choose the Inlet size (the size of the duct), and append the 2-digit number to the part number.

Inlet Size (in inches)	2-digit Number	Inlet Size (in inches)	2-digit number
4	04	11	11 (12" casing with special orifice)
6	06	12	12
7	07	14	14
8	08	16	16
9	09	18	18
10	10	—	—

- Choose the Casing Material and the Sensor, and append the letters to the part number:

Casing Material and Sensor Type	
AA	Galvanized steel casing with orifice sensor.
AB	Galvanized steel casing with multi-point sensor. (Does not apply to inlet sizes 4, 11, or 18.)
BA	Stainless steel casing with orifice sensor.
CA	Teflon®-coated steel casing with orifice sensor.

- Select the End fitting, and append that letter to the part number:

S = Slip

F = Flange

- (Custom Options) This selection is for **custom orders** only, and will not be accepted in SAP. Please see your Siemens representative if you want to choose one or both of these options:

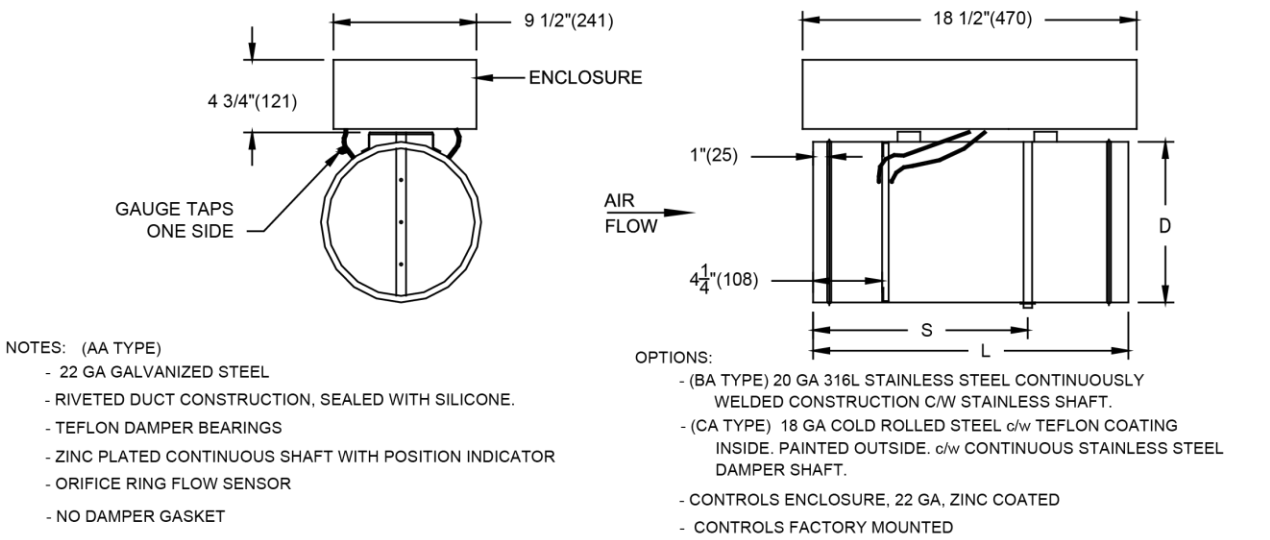
T = Transformer (120/24 CL.2) and Disconnect Switch

S = No Blade Seals

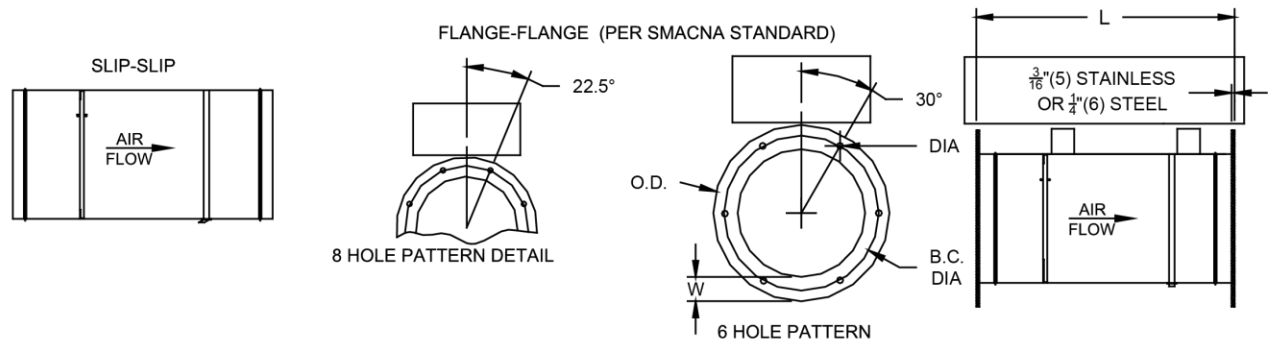
After completing your selections, you should have an SAP orderable part number that looks similar to the following example:

SAMPLE Part Number: LGEG904R14BAS

Dimensions



OPTIONAL END CONFIGURATIONS

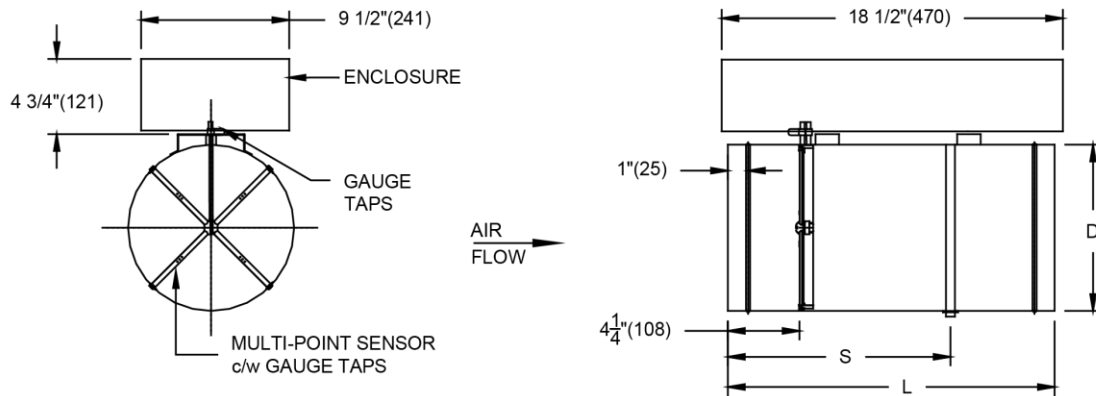


IMPERIAL/(METRIC)

NOM SIZE	D (mm)	L (mm)	S (mm)	# OF HOLES	FLANGE W (mm)		HOLE DIA (mm)		B.C. DIA (mm)	O.D. (mm)	
					BA	CA, AA	BA	CA, AA		BA	CA, AA
4	3 7/8 (99)	16 (406)	12 (305)	6	1 (25)	1 (25)	7/16 (11)	7/16 (11)	5 1/4 (133)	6 (152)	6 (152)
6	5 7/8 (149)	16 (406)	12 (305)	6	1 (25)	1 (25)	7/16 (11)	7/16 (11)	7 1/4 (184)	8 (203)	8 (203)
7	6 7/8 (175)	16 (406)	12 (305)	6	1 (25)	1 (25)	7/16 (11)	7/16 (11)	8 1/4 (210)	9 (229)	9 (229)
8	7 7/8 (200)	16 (406)	12 (305)	6	1 (25)	1 (25)	7/16 (11)	7/16 (11)	9 1/4 (239)	10 (254)	10 (254)
9	8 7/8 (311)	19 1/2 (495)	13 1/4 (337)	6	1 (25)	1 (25)	7/16 (11)	7/16 (11)	10 1/4 (260)	11 (279)	11 (279)
10	9 7/8 (251)	19 1/2 (495)	13 1/4 (337)	6	1 (25)	1 (25)	7/16 (11)	7/16 (11)	11 1/4 (286)	12 (305)	12 (305)
11*	11 7/8 (302)	20 1/2 (521)	13 1/4 (337)	6	1 (25)	1 1/2 (38)	7/16 (11)	7/16 (11)	13 1/4 (337)	14 (356)	15 (381)
12	11 7/8 (302)	20 1/2 (521)	13 1/4 (337)	6	1 (25)	1 1/2 (38)	7/16 (11)	7/16 (11)	13 1/4 (337)	14 (356)	15 (381)
14	13 7/8 (353)	23 (584)	14 1/2 (368)	8	1 1/2 (38)	1 1/2 (38)	7/16 (11)	7/16 (11)	15 3/4 (400)	17 (432)	17 (432)
16	15 7/8 (403)	25 (635)	15 1/2 (394)	8	1 1/2 (38)	1 1/2 (38)	7/16 (11)	1/2 (13)	17 3/4 (451)	19 (483)	19 (483)
18	17 7/8 (454)	25 (635)	15 1/2 (394)	8	1 1/2 (38)	1 1/2 (38)	7/16 (11)	1/2 (13)	19 3/4 (502)	21 (533)	21 (533)

NOTES: * SIZE 11" IS 12" CASING WITH SMALLER ORIFICE.

Figure 2. Laboratory Room Exhaust Air Terminal with Orifice Flow Sensor.



NOTES: (AA TYPE)

- 22 GA GALVANIZED STEEL
- RIVETED DUCT CONSTRUCTION, SEALED WITH SILICONE.
- TEFLON DAMPER BEARINGS
- ZINC PLATED CONTINUOUS SHAFT WITH POSITION INDICATOR
- MULTI-POINT AIR FLOW SENSOR

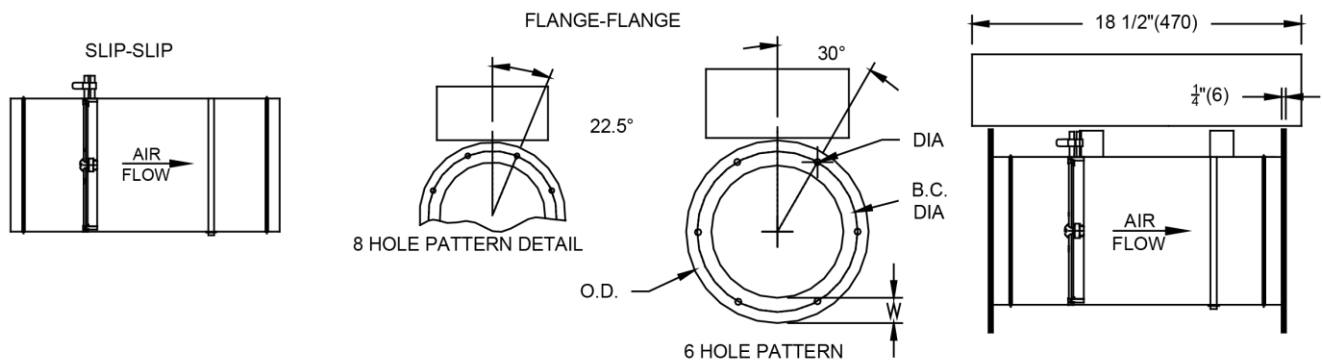
OPTIONS:

- CONTROLS ENCLOSURE, 22 GA, ZINC COATED
- CONTROLS FACTORY MOUNTED

END CONFIGURATIONS AS SHOWN BELOW:

- SLIP - SLIP
- FLANGE - FLANGE

OPTIONAL END CONFIGURATIONS



IMPERIAL/(METRIC)

NOM SIZE	D (mm)	L (mm)	S (mm)	# OF HOLES	FLANGE W (mm)	HOLE DIA (mm)	B.C. DIA (mm)	O.D. (mm)
6	5 7/8 (149)	16 (406)	12 (305)	6	1" (25)	7/16" (11)	7 1/4" (184)	8" (203)
7	6 7/8 (175)	16 (406)	12 (305)	6	1" (25)	7/16" (11)	8 1/4" (210)	9" (229)
8	7 7/8 (200)	16 (406)	12 (305)	6	1" (25)	7/16" (11)	9 1/4" (239)	10" (254)
9	8 7/8 (311)	19 1/2 (495)	13 1/4 (337)	6	1" (25)	7/16" (11)	10 1/4" (260)	11" (279)
10	9 7/8 (251)	19 1/2 (495)	13 1/4 (337)	6	1" (25)	7/16" (11)	11 1/4" (286)	12" (305)
12	11 7/8 (302)	20 1/2 (521)	13 1/4 (337)	6	1 1/2" (38)	7/16" (11)	13 1/4" (337)	15" (381)
14	13 7/8 (353)	23 (584)	14 1/2 (368)	8	1 1/2" (38)	7/16" (11)	15 3/4" (400)	17" (432)
16	15 7/8 (403)	25 (635)	15 1/2 (394)	8	1 1/2" (38)	1/2" (13)	17 3/4" (451)	19" (483)

Figure 3. Laboratory Exhaust Air Terminal with Multi-Point Flow Sensor.

Table 1. Minimum Pressure Drop at Listed Airflow.

Unit Size	Flow		Minimum Operating Pressure Drop		Unit Size	Flow		Minimum Operating Pressure Drop	
	CFM	Lps	IN WG	Pa		CFM	Lps	IN WG	Pa
4	36	17	0.01	2.5	10	238	112	0.01	2.5
	44	21	0.02	5.0		273	129	0.01	2.5
	87	41	0.06	15		545	257	0.05	7.5
	175	83	0.25	63		1091	515	0.12	35.0
	252	119	0.53	133		1686	796	0.26	92.5
6	89	42	0.01	2.5	12	339	160	0.00	0.0
	98	46	0.02	5		393	185	0.00	0.0
	196	92	0.04	10		785	370	0.02	5.0
	393	185	0.17	43		1571	741	0.06	15.0
	627	296	0.45	113		2394	1130	0.12	30.0
7	121	57	0.01	2.5	14	460	217	0.00	0.0
	134	63	0.01	3		535	252	0.00	0.0
	267	126	0.03	8		1069	504	0.01	2.5
	535	252	0.16	40		2138	1009	0.07	17.5
	855	403	0.35	88		3254	1536	0.19	47.5
8	148	70	0.01	2.5	16	626	295	0.00	0.0
	175	83	0.01	3		698	329	0.00	0.0
	349	165	0.04	10		1396	659	0.01	2.5
	698	329	0.15	38		2793	1318	0.04	10.0
	1049	495	0.33	83		4429	2090	0.12	30.00
9	196	92	0.01	2.5	18	791	373	0.00	0.0
	221	104	0.01	3		884	417	0.00	0.0
	442	209	0.04	10		1767	834	0.01	2.5
	884	417	0.14	35		3534	1668	0.04	10.0
	1389	655	0.32	80		5591	2638	0.11	27.5

Table 2. Exhaust Terminal Casing Leakage in CFM.

LGE Casing Leakage (Per ASHRAE 130-1996)							
Imperial Units (CFM, Inches Water)							
Unit Size	1" WC	3.0"WC	6.0"WC	Unit Size	1.0" WC	3.0" WC	6.0"WC
4	0	1	3	10	1	3	4
6	0	1	3	11 / 12	1	2	3
7	1	2	4	14	1	3	5
8	1	2	4	16	1	3	5
9	1	2	4	18	1	3	5
Metric Units (Lps, Pascals)							
Unit Size	250 Pa	750 Pa	1500 Pa	Unit Size	250 Pa	750 Pa	1500 Pa
4	0.0	0.5	1.4	10	0.5	1.4	1.9
6	0.0	0.5	1.4	11 / 12	0.5	0.9	1.4
7	0.5	0.9	1.9	14	0.5	1.4	2.4
8	0.5	0.9	1.9	16	0.5	1.4	2.4
9	0.5	0.9	1.9	18	0.5	1.4	2.4

Table 3. Exhaust Terminal Damper Leakage in CFM.

LGE Closed Blade Leakage, No Seals (Per ASHRAE 130-1996)							
Imperial Units (CFM, Inches Water)							
Unit Size	1.0" WC	3.0"WC	6.0"WC	Unit Size	1.0" WC	3.0" WC	6.0"WC
4	13	20	25	10	67	110	135
6	31	50	63	11/12	72	144	168
7	39	58	77	14	98	195	228
8	42	73	94	16	133	266	310
9	56	94	111	18	112	280	335
Metric Units (Lps, Pascals)							
Unit Size	250 Pa	750 Pa	1500 Pa	Unit Size	250 Pa	750 Pa	1500 Pa
4	6	9	12	10	32	52	64
6	15	24	30	11 / 12	34	68	79
7	18	27	36	14	46	92	108
8	20	34	44	16	63	126	146
9	26	44	52	18	53	132	158
LGE Blade Seal Leakage (VOLARA; Per ASHRAE 130-1996)							
Imperial Units (CFM, Inches Water)							
Unit Size	1" WC	3.0"WC	6.0"WC	Unit Size	1.0" WC	3.0" WC	6.0"WC
4	0	1	3	10	1	3	4
6	0	1	3	11/12	1	2	4
7	1	2	3	14	1	3	5
8	1	2	3	16	1	3	5
9	1	2	4	18	1	3	5
Metric Units (Lps, Pascals)							
Unit Size	250 Pa	750 Pa	1500 Pa	Unit Size	250 Pa	750 Pa	1500 Pa
4	0.0	0.5	1.4	10	0.5	1.4	1.9
6	0.0	0.5	1.4	11 / 12	0.5	0.9	1.9
7	0.5	0.9	1.9	14	0.5	1.4	2.4
8	0.5	0.9	1.9	16	0.5	1.4	2.4
9	0.5	0.9	1.9	18	0.5	1.4	2.4

Table 4. Flow Range for Orifice Air Flow Sensor.

Flow Range for Sensor "A"							
Inlet Size	Maximum Flow @ 1.0" dp		Minimum Flow @ 0.02" dp		Flow Sensor Inlet Area		Flow Coefficient
	CFM.	Lps	CFM	Lps	SQ.FT	M ²	
4	252	119	36	17	0.087	0.008	0.721
6	627	296	89	42	0.196	0.018	0.797
7	857	404	121	57	0.267	0.025	0.801
8	1049	495	148	70	0.349	0.032	0.750
9	1389	656	196	93	0.442	0.041	0.785
10	1686	796	238	112	0.545	0.051	0.772
11	2054	969	290	137	0.785	0.073	0.653
12	2394	1130	339	160	0.785	0.073	0.761
14	3254	1536	460	217	1.069	0.099	0.760
16	4429	2090	626	295	1.396	0.130	0.792
18	5591	2639	791	373	1.767	0.164	0.790

Table 5. Flow Range for Sensor – Center-Averaging Multi-Port.

Note: The multi-point flow sensor option is not available for unit sizes 4, 11, and 18.

Flow Range for Sensor "B"							
Inlet Size	Maximum Flow @ 1.0" dp		Minimum Flow @ 0.02" dp		Flow Sensor Inlet Area		Flow Coefficient
	CFM.	Lps	CFM	Lps	SQ.FT	M ²	
6	468	221	66	31	0.196	0.018	0.596
7	673	318	95	45	0.267	0.025	0.629
8	923	436	126	59	0.349	0.032	0.660
9	1155	545	163	77	0.442	0.041	0.652
10	1487	702	210	99	0.545	0.051	0.681
12	2141	1010	303	143	0.785	0.073	0.681
14	3045	1437	431	203	1.069	0.099	0.711
16	4074	1923	576	272	1.396	0.130	0.729

Table 6. Radiated Sound Data for Exhaust Terminal. Sound Power Levels, Lw dB, re 10⁻¹² Watts.

Unit Size	Pressure Drop		125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
	Airflow		Octave Band							Octave Band							Octave Band							Octave Band						
	Lps	cfm	2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7	
4	35	75	51	29	27	22	19	17		51	32	30	27	24	24		52	36	33	31	29	31		52	38	35	34	32	35	
	71	150	52	34	36	31	27	23		52	38	40	35	32	30		53	41	43	40	37	36		53	43	45	42	40	41	
	106	225	52	38	42	36	31	26		53	41	45	41	36	33		53	45	49	45	41	40		53	47	51	48	44	44	
	132	279	53	39	45	39	33	28		53	43	48	43	39	35		53	46	52	48	44	42		54	48	54	50	47	46	
6	59	125	41	27	23	21	20	20		44	31	27	26	26	26		46	35	32	31	32	33		48	38	34	34	35	37	
	118	250	44	33	30	29	26	25		46	37	35	34	31	31		49	41	39	39	37	38		50	43	42	41	40	42	
	177	375	45	36	35	33	29	28		48	40	39	38	35	34		50	44	44	43	40	41		52	46	46	46	44	44	
	236	500	46	38	38	36	31	30		49	42	42	41	37	36		51	46	47	46	43	43		53	49	50	49	46	47	
	296	628	47	40	40	39	33	32		50	44	45	44	39	38		52	48	49	49	44	44		54	50	52	51	48	48	
7	71	150	43	28	22	21	22	19		45	31	26	25	26	24		46	34	30	29	31	29		47	36	33	31	34	33	
	142	300	46	33	29	29	27	24		47	36	33	33	32	29		49	39	37	36	37	35		50	41	40	39	40	38	
	212	450	47	36	33	33	30	27		49	39	37	37	35	32		50	42	42	41	40	38		51	43	44	43	43	41	
	284	601	48	38	36	37	33	29		50	41	40	40	37	34		51	44	45	44	42	40		52	46	47	46	45	43	

Unit Size	Pressure Drop		125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
	Airflow		Octave Band							Octave Band							Octave Band							Octave Band						
	Lps	cfm	2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7	
8	83	175	42	30	25	22	23	23		44	33	29	26	28	28		47	37	33	30	32	34		48	38	35	32	35	37	
	177	375	45	34	32	30	29	28		47	37	36	34	34	33		50	41	40	38	38	39		51	42	42	40	41	42	
	271	575	47	36	36	35	33	31		49	40	40	38	37	36		52	43	44	42	42	42		53	45	46	44	45	45	
	366	775	48	38	39	38	35	33		50	41	43	42	40	38		53	44	47	45	44	44		54	46	49	47	47	47	
	527	1117	49	40	42	42	38	35		52	43	46	45	43	41		54	46	50	49	47	46		56	48	53	51	50	49	
9	118	250	38	30	27	25	25	24		41	34	31	29	31	30		45	39	35	33	36	36		47	42	38	36	39	40	
	236	500	42	34	33	32	29	27		46	38	38	36	35	34		49	43	42	40	40	40		51	46	45	42	43	44	
	354	750	45	36	37	35	32	29		48	41	42	39	37	36		52	45	46	43	43	42		54	48	48	46	46	46	
	469	994	47	37	40	38	34	31		50	42	44	42	39	37		53	47	49	46	44	43		55	50	51	48	48	47	
10	118	250	43	28	23	24	25	24		46	32	28	29	30	30		49	36	32	34	34	35		51	39	34	36	37	39	
	260	550	45	33	32	30	30	29		48	37	37	35	35	34		51	41	41	40	40	40		53	44	43	43	43	43	
	401	850	46	36	37	34	33	31		49	40	41	39	38	37		52	44	46	44	43	42		54	47	48	47	46	45	
	543	1150	47	38	41	37	35	33		50	42	45	41	40	38		53	46	49	46	45	44		55	49	52	49	48	47	
	684	1450	47	40	43	39	37	34		50	44	48	43	42	40		53	48	52	48	46	45		55	50	54	51	49	48	
	824	1745	48	41	45	40	38	35		51	45	50	45	43	41		54	49	54	50	48	46		56	52	56	53	50	49	
11	165	350	38	28	26	23	24	24		42	31	29	27	29	30		45	35	33	30	33	37		47	37	35	32	36	41	
	307	650	43	34	33	30	30	28		46	37	36	34	35	35		49	41	40	37	40	41		51	43	42	40	42	45	
	448	950	46	37	37	34	33	31		49	41	41	38	38	37		52	45	44	42	43	44		54	47	46	44	46	48	
	590	1250	48	40	41	38	36	33		51	43	44	41	41	39		54	47	48	45	46	46		56	49	50	47	49	50	
	701	1485	49	41	43	40	38	34		52	45	46	43	43	40		55	49	50	47	48	47		57	51	52	49	51	51	
12	165	350	37	29	27	25	27	26		40	33	32	29	33	33		43	38	36	34	38	40		45	40	38	36	41	44	
	401	850	44	36	36	33	33	31		47	40	40	37	38	38		50	44	44	42	44	44		52	47	47	44	47	48	
	637	1350	47	39	40	37	36	33		50	44	44	41	41	40		53	48	49	46	47	47		55	50	51	48	50	50	
	873	1850	49	42	43	40	38	35		53	46	47	44	43	41		56	50	52	49	48	48		57	53	54	51	52	52	
	1109	2350	51	43	45	42	39	36		54	48	50	47	45	43		57	52	54	51	50	49		59	55	56	53	53	53	
	1186	2513	52	44	46	43	40	36		55	48	50	47	45	43		58	53	54	51	50	50		60	55	57	54	54	54	
14	236	500	42	29	30	27	28	26		45	35	35	32	34	33		48	40	40	38	40	39		50	43	44	41	43	43	
	590	1250	47	38	39	36	35	32		50	43	44	41	41	39		53	48	50	47	46	45		55	51	53	50	50	49	
	944	2000	50	42	44	41	38	36		53	47	49	46	44	42		56	52	54	51	50	48		58	55	58	54	53	52	
	1298	2750	52	44	47	44	41	38		55	50	52	49	47	44		58	55	58	54	52	50		60	58	61	57	56	54	
	1615	3421	54	46	49	46	42	39		57	51	54	51	48	45		60	57	60	56	54	52		61	59	63	60	57	55	
16	283	600	45	34	35	33	35	28		47	37	39	38	40	34		49	41	42	42	45	40		50	44	44	45	48	44	
	661	1400	50	40	42	39	39	34		52	44	46	44	45	40		54	48	49	48	50	46		55	51	51	51	53	49	
	1038	2200	53	44	46	42	42	36		55	48	49	47	47	43		57	52	53	51	52	49		58	54	55	54	55	52	
	1416	3000	55	47	49	44	44	39		57	51	52	49	49	45		59	55	55	54	54	51		60	57	57	56	57	54	
	1793	3800	56	49	51	46	45	40		58	53	54	51	50	46		60	56	57	55	55	52		61	59	59	58	58	56	
	2110	4470	57	50	52	47	46	41		59	54	55	52	51	47		61	58	59	56	56	53		62	60	60	59	59	57	
18	358	760	45	34	35	33	35	28		47	37	39	38	40	34		49	41	42	42	45	40		50	44	44	45	48	44	
	835	1770	50	40	42	39	39	34		52	44	46	44	45	40		54	48	49	48	50	46		55	51	51	51	53	49	
	1311	2780	53	44	46	42	42	36		55	48	49	47	47	43		57	52	53	51	52	49		58	54	55	54	55	52	
	1792	3800	55	47	49	44	44	39		57	51	52	49	49	45		59	55	55	54	54	51		60	57	57	56	57	54	
	2264	4800	56	49	51	46	45	40		58	53	54	51	50	46		60	56	57	55	55	52		61	59	59	58	58	56	
	2665	5650	57	50	52	47	46	41		59	54	55	52	51	47		61	58	59	56	56	53		62	60	60	59	59	57	

Performance Notes:

1. Tested in accordance with ASHRAE Standard 130-1996: "Methods of Testing for Rating Ducted Air Terminal Units."
2. Airflow given in liters/seconds (L/s); and in cubic feet per minute (cfm).
3. Pressure given in Pascals (Pa) and inches of water gauge (in W.G.).

Table 7. Discharge Sound Data for Exhaust Terminal. Sound Power Levels, Lw dB, re 10⁻¹² Watts.

Unit	Airflow		125 Pa (0.5" W.G.)						250 Pa (1.0" W.G.)						500 Pa (2.0" W.G.)						750 Pa (3.0" W.G.)					
			Octave Band						Octave Band						Octave Band						Octave Band					
Size	Lps	cfm	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7
4	35	75	46	43	45	43	43	38	51	49	50	49	49	45	56	54	55	54	55	53	58	58	58	58	58	57
	71	150	52	50	52	50	49	43	56	56	57	56	55	50	61	61	62	61	61	58	64	65	65	64	65	62
	106	225	55	54	56	54	53	46	60	60	61	60	59	54	65	65	67	65	65	61	67	69	70	68	68	65
	132	279	57	56	59	56	54	48	62	62	64	62	60	55	66	67	69	67	66	63	69	71	72	71	70	67
6	59	125	47	40	43	45	43	39	51	45	48	50	49	45	56	50	52	54	55	52	59	53	55	57	59	56
	118	250	54	48	50	51	48	44	58	53	55	55	54	50	63	58	60	60	60	57	66	61	62	63	63	61
	177	375	58	53	54	54	50	47	62	58	59	59	56	53	67	63	64	64	63	60	70	66	67	67	66	64
	236	500	61	56	57	56	52	49	65	61	62	61	58	55	70	66	67	66	64	62	73	69	70	69	68	66
	296	628	63	58	59	58	54	50	68	64	64	63	60	57	72	69	69	68	66	64	75	72	72	71	70	68
7	71	150	43	38	41	40	39	36	48	42	45	45	45	43	53	47	50	50	51	50	55	50	53	52	54	54
	142	300	51	46	48	48	45	42	56	51	53	52	51	49	61	56	58	57	57	55	64	58	60	60	60	59
	212	450	55	51	53	52	49	45	60	56	57	57	55	52	65	61	62	61	61	59	68	63	65	64	64	63
	284	601	59	55	56	55	52	48	64	59	61	60	58	54	69	64	65	64	63	61	72	67	68	67	67	65
8	83	175	43	38	40	43	45	38	48	43	45	47	51	45	53	48	50	52	57	53	56	50	53	55	60	58
	177	375	52	47	49	50	50	44	57	52	53	54	56	52	62	57	58	59	62	59	64	59	61	62	65	64
	271	575	57	53	53	54	53	47	61	57	58	58	59	55	66	62	63	63	64	63	69	64	66	66	68	67
	366	775	60	56	57	57	55	49	65	61	61	61	61	57	70	65	66	66	66	65	73	68	69	69	70	70
	527	1117	64	61	61	60	57	52	69	65	66	65	63	60	74	70	70	69	69	68	77	72	73	72	72	73
9	118	250	46	41	42	43	42	34	51	46	47	48	48	41	56	51	51	53	54	48	59	54	54	56	57	52
	236	500	53	48	50	50	48	41	58	53	55	55	53	48	63	58	59	59	59	55	66	61	62	62	63	59
	354	750	58	53	55	54	51	45	63	58	59	58	57	52	68	63	64	63	62	59	71	66	66	66	66	63
	469	994	60	56	58	56	53	47	66	61	62	61	59	54	71	66	67	66	65	61	74	69	69	69	68	66
10	118	250	45	41	42	41	41	40	50	46	47	47	47	47	54	51	51	52	52	54	57	54	54	55	56	58
	260	550	54	50	51	48	47	45	59	55	55	53	53	52	63	59	60	59	59	59	66	62	62	62	63	63
	401	850	59	54	55	52	51	48	64	59	60	57	57	55	68	64	65	62	63	62	71	67	67	66	66	65
	543	1150	63	58	59	54	54	50	67	62	63	60	60	57	71	67	68	65	66	64	74	70	71	68	69	67
	684	1450	65	60	61	56	56	52	70	65	66	62	62	58	74	70	70	67	68	65	77	72	73	70	71	69
	824	1745	67	62	63	58	57	53	72	67	68	63	63	60	76	72	73	69	69	66	79	74	75	72	73	70
11	165	350	49	42	42	42	42	37	53	47	47	47	48	44	57	53	51	52	54	51	60	56	54	55	57	55
	307	650	55	48	48	47	47	41	59	54	53	52	53	48	64	59	58	57	59	55	66	62	61	60	62	60
	448	950	59	52	52	51	50	44	63	57	57	56	55	51	67	63	62	60	61	58	70	66	65	63	65	62
	590	1250	62	55	55	53	52	46	66	60	60	58	57	53	70	66	65	63	63	60	73	69	68	66	67	64
	701	1485	64	57	57	54	53	47	68	62	62	59	59	54	72	67	67	64	65	62	75	70	70	67	68	66
12	165	350	46	41	41	41	42	36	50	46	46	46	48	43	55	51	50	51	54	50	57	54	53	54	57	54
	401	850	56	51	51	49	48	43	60	56	56	54	54	50	64	61	60	59	60	57	67	63	63	62	64	61
	637	1350	61	55	56	53	52	46	65	60	61	58	58	53	70	65	65	63	64	61	72	68	68	66	67	65
	873	1850	65	59	59	56	54	49	69	64	64	61	60	56	73	69	69	66	66	63	76	72	71	69	70	67
	1109	2350	67	61	62	58	56	51	72	66	67	63	62	58	76	71	71	68	68	65	78	74	74	71	71	69
	1186	2513	68	62	63	59	57	51	72	67	67	64	62	58	77	72	72	69	68	66	79	75	75	72	72	70
14	236	500	47	41	42	43	45	40	51	47	47	47	50	46	55	52	51	52	56	53	58	55	53	54	59	56
	590	1250	57	51	53	52	51	47	62	57	57	56	57	53	66	62	61	60	62	59	68	65	64	63	65	63
	944	2000	63	56	58	56	55	50	67	62	62	61	60	56	71	67	67	65	65	62	74	70	69	67	68	66
	1298	2750	66	60	62	59	57	52	71	65	66	64	62	58	75	70	70	68	68	65	78	74	73	71	71	68
	1615	3421	69	62	64	61	59	54	73	67	68	66	64	60	77	73	73	70	69	66	80	76	75	73	72	70
16	283	600	47	42	43	44	46	39	51	47	47	49	52	46	56	52	51	54	58	53	58	55	54	57	61	57
	661	1400	56	51	52	51	51	44	60	56	56	56	56	51	65	61	60	61	62	58	67	64	63	63	66	62
	1038	2200	61	56	57	55	53	47	65	61	61	60	59	54	69	66	65	64	65	61	72	69	68	67	68	65
	1416	3000	64	59	60	57	55	49	68	64	64	62	61	56	73	69	68	67	66	63	75	72	71	69	70	67
	1793	3800	67	61	62	59	56	50	71	66	67	64	62	57	75	71	71	69	68	64	78	74	73	71	71	68
	2110	4470	68	63	64	60	57	51	73	68	68	65	63	58	77	73	72	70	68	65	79	76	75	73	72	69

Unit Size Airflow Lps cfm			125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
			Octave Band							Octave Band							Octave Band							Octave Band						
			2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7				
18	358	760	47	42	43	44	46	39	51	47	47	49	52	46	56	52	51	54	58	53	58	55	54	57	61	57				
	835	1770	56	51	52	51	51	44	60	56	56	56	56	51	65	61	60	61	62	58	67	64	63	63	66	62				
	1311	2780	61	56	57	55	53	47	65	61	61	60	59	54	69	66	65	64	65	61	72	69	68	67	68	65				
	1792	3800	64	59	60	57	55	49	68	64	64	62	61	56	73	69	68	67	66	63	75	72	71	69	70	67				
	2264	4800	67	61	62	59	56	50	71	66	67	64	62	57	75	71	71	69	68	64	78	74	73	71	71	68				
	2665	5650	68	63	64	60	57	51	73	68	68	65	63	58	77	73	72	70	68	65	79	76	75	73	72	69				

Performance Notes:

1. Tested in accordance with ASHRAE Standard 130-1996: "Methods of Testing for Rating Ducted Air Terminal Units."
2. Airflow given in liters/seconds (Lps); and in cubic feet per minute (cfm).
3. Pressure given in Pascals (Pa) and inches of water gauge (in W.G.).

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Siemens Industry, Inc.
Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, IL 60089-4513
U.S.A

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Laboratory Room Single Duct Supply Air Terminal



Figure 1. Laboratory Room Single Duct Supply Air Terminal.

The Laboratory Room Single Duct Supply Air Terminal is an industrial-grade, easy-to-install pre-packaged airflow measurement and control terminal unit. The Laboratory Room Single Duct Supply Air Terminal is a round inlet, rectangular outlet, one piece insulated and lined terminal that provides cooling only or cooling with hot water reheat. When used with the Laboratory Room Controller, it provides fast acting, stable and precise laboratory supply airflow control over the entire range of room airflow requirements.

Measurement of airflow is accomplished by four quadrant sensing technology to achieve measurement accuracy of 3% of actual flow (sensor only) when tested in accordance with AMCA 610. Airflow control is achieved utilizing a round single blade damper mounted on a zinc plated steel shaft with polyethylene bushings and mechanical stops. Construction is 22 gauge-galvanized steel, including the casing and damper.

Features

- Eight standard sizes with airflow capacities from 35 to 8530 cfm; others are also available.
- Four quadrant airflow sensors with multi-point, center averaging and signal amplification.
- Low radiated and discharge sound levels.
- 22 gauge casing with slip and drive discharge connection.
- Solid zinc plated steel damper shaft on self lubricating polyethylene bushings for fast acting control and maintenance free operation.
- Low non-recoverable static pressure loss.
- Round, beaded inlet collar accepts nominal flexible or rigid duct (size 18 has rectangular inlet).
- Internal insulation 3/4-inch fiber-free foam which meets requirements of NFPA 90A and UL181. Closed cell structure foam allows for disinfecting and hand washing with detergents and water.
- Meets mechanical standards UL 181, NFPA 90A, ASTM E84, UL 723 and bacteria standard ASTM C665.
- Ultra-low leakage, damper and casing.
- Up to four rows of hot water reheat coils.
- Meets equipment requirements of ASHRAE 62.1 Sec. 5.
- Clean, sealed shipping bags available for LEED IEQ projects.
- Lab DXR (IP) control packages available

Description

The Single Duct Supply Terminal consists of the following components (see Figures 2 through 6).

- Galvanized steel round inlet duct, damper blade in sizes from 4" (10.2 cm) to 16" (40.6 cm) diameter; size 18 unit has a rectangular 16 x 24 inlet and two 16" (40.6 cm) diameter dampers.
- Four quadrant airflow measurement sensor.
- Rectangular, lined and insulated casing with slip and drive outlet connections.
- Factory-mounted controls options.
- Electronic damper control – high speed or standard speed

Specifications

Materials (within air stream) – Standard

Duct Casing	22 gauge galvanized steel with mechanically locked and sealed seam
Airflow Sensor	PVC sensing arms and center manifold with galvanized steel frame
Damper Blade	22 gauge, galvanized steel single damper with Volara foam gasket
Damper Shaft	1/2-inch (1.27 cm) diameter, zinc-plated steel. Shaft end marked with the damper blade position
Damper Bushing	Self lubricating polyethylene
Case Insulation	3/4-fiber free foam. Density 1.5 lb/ft ³ Meets NFPA 90A UL181 Flame Spread rating <25 Smoke Developed rating < 50 Meets ASTM E84 UL 723, bacteria stand. ASTM C665

Hot water reheat coils (optional)	22 gauge, galvanized casing, Aluminum sine wave fins (thickness 0.0045") Copper tubes, 0.016" wall Meets ARI 410
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Dimensions	
Sizes	See Figures 4, 5, 6 and 7
Weight	19 to 63 lbs. (8.6 to 28.6 kg)

Materials (outside air stream) - Standard	
Control Enclosure	18 gauge two piece galvanized steel
Pneumatic Tubing	UL rated 94 V-2 fire retardant polyethylene
Pneumatic Fittings	Brass, dual barbed

Airflow Measurement	
Sensor Type	Four quadrant, with 12 sensing points, center averaging, and signal amplification

Accuracy	
Flow Measurement	±3% of actual flow @ listed ranges (Sensor only, per AMCA 610)
Installation Requirements	Rigid duct of the same diameter 1 x duct diameters upstream from the sensor, or taper angle less than 30 degrees

Airflow Control	
Damper Blade	Round, sealing single blade with 90 degree control with two mechanical stops

Non-Recoverable Terminal	
Pressure Loss	See Table 2

Environmental	
Operating Temperature/% rh	40 to 120°F (4 to 50°C) 0 to 95% non-condensing
Storage Temperature/% rh	-10 to 150°F (-23 to 65°C) 0 to 95% non-condensing

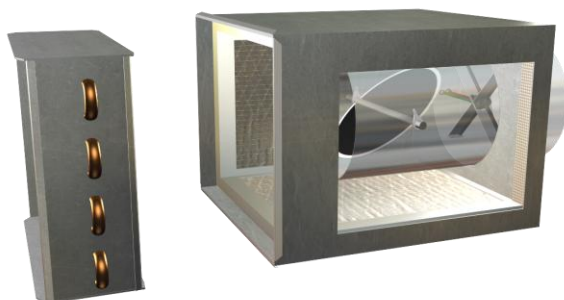


Figure 2. Single Duct Supply Air Terminal Components with Reheat (cut view).

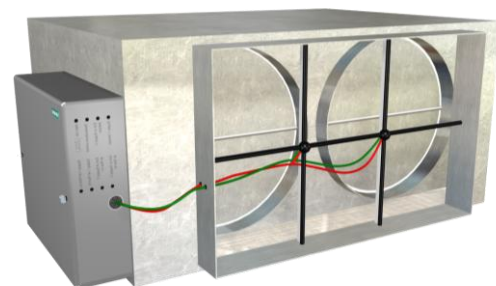


Figure 3. High Capacity Single Duct Supply Air Terminal Components.

Single Duct Supply Air Terminal Components (inlet view).

Ordering Information

Part numbers are created based on the selections you choose. There are no spaces or dashes in the SAP part number.

NOTE: Not all combinations or configurations will yield a valid part number in SAP.

Sample Part Number: LGS0575R14DBBO

Model Number	Control Package Number	Shaft/Coil Orientation	Inlet (Duct) Size	Reheat Coil Configuration	Lining	Construction	(Custom) Integral Attenuator
LGS	O575	R	14	DB	B	O	—
Laboratory Room Single Duct Supply Air Terminal	This package provides an actuator, a transducer, a flow transmitter, and a controller.	Shaft and coil are on opposite sides.	The inlet (or duct) size is 14 inches.	4 row, left	Fiber-free foam	Low leakage	Not included in this sample part number.

To create an orderable part number that can be entered in SAP, complete the following steps:

1. Begin with the Model Number, **LGS**.
2. Select a Control Package number from the following table and append it to the Model Number. Once you have completed this step, proceed to Step 3.

Standard

Control Package	Includes the following Control Components:			
	Actuator Part Number	Transducer Part Number	Flow Transmitter Part Number	Controller Part Number
E000*	—	—	—	—
G000	—	—	—	—
G514	GDE131.1P	—	550-819B	—
G516	GMA131.1P	—	550-819B	—
G575	GNP191.1P	—	550-819B	—
G872	GNP191.1P	—	590-780	—
G875	GNP191.1P	—	—	—
G914	GDE131.1P	—	—	—
G915	GDE161.1P	—	590-780	—
G916	GMA131.1P	—	—	—
G917	GMA161.1P	—	590-780	—
O514	GDE131.1P	—	550-819B	550-767FN
O516	GMA131.1P	—	550-819B	550-767FN
O575	GNP191.1P	—	550-819B	550-767EN
R914	GDE131.1P	—	—	540-104N
R916	GMA131.1P	—	—	540-104N
W914	GDE131.1P	—	—	540-200N
W916	GMA131.1P	—	—	540-200N

*No enclosure included.

BACnet

Control Package	Includes the following Control Components:			
	Actuator Part Number	Transducer Part Number	Flow Transmitter Part Number	Controller Part Number
ECBE	GNP191.1P	—	550-819B	570-803PA
ECBO	GNP191.1P	—	550-819B	—
GCBF	GMA131.1P	—	550-819B	570-801PA
GCBG	GMA131.1P	—	550-819B	570-805PA
GCBH	GMA131.1P	—	550-819B	570-811PA
GCBN	GMA131.1P	—	550-819B	570-810PA
GCBO	GMA131.1P	—	550-819B	—
GXBF	GDE131.1P	—	550-819B	570-801PA
GXBG	GDE131.1P	—	550-819B	570-805PA
GXBH	GDE131.1P	—	550-819B	570-811PA
GXBN	GDE131.1P	—	550-819B	570-810PA
GXBO	GDE131.1P	—	550-819B	—

Lab DXR BACnet IP

Control Package	Includes the following Control Components:			
	Actuator Part Number	Transducer Part Number	Flow Transmitter Part Number	Controller Part Number
EC11	GNP191.1P	—	DXA.S04P1	DXR2.E17C-103B
EC12	GNP191.1P	—	DXA.S04P1	DXR2.E17CX-103B
EC10	GMA131.1P	—	DXA.S04P1	—
GC11	GMA131.1P	—	DXA.S04P1	DXR2.E17C-103B
GC12	GMA131.1P	—	DXA.S04P1	DXR2.E17CX-103B
GC10	GMA131.1P	—	DXA.S04P1	—
GX11	GDE131.1P	—	DXA.S04P1	DXR2.E17C-103B
GX12	GDE131.1P	—	DXA.S04P1	DXR2.E17CX-103B
GX10	GDE131.1P	—	DXA.S04P1	—

Control Components

Part Number	Description	Part Number	Description
540-200N	Variable Volume TEC with Auto-Zero Module	550-819B DXR2.E17C-103B DXR2.E17CX-103B DXA.S04P1 540-104N	BACnet OAM - Off-board Air Module Lab DXR BACnet IP Controller, 30 dp Lab DXR BACnet IP Controller, 60 dp Lab DXR Airflow Pressure Sensor 0-1" Constant Volume TEC with Auto-Zero Module
550-767GN	Lab Controller Module, Applications 2924/2930, Terminals with Low-Speed Actuator Supply and Venturi Exhaust		
550-767EN	Lab Controller Module, Applications 2921/2927, Terminals with High-Speed Actuator	590-780	Differential Pressure Transmitter, 1" WC, 4-20 mA, 0.4% accuracy
550-767FN	Lab Controller Module, Applications 2923/2929, Terminals with Low-Speed Actuator		
550-767HN	Pressurized Room Controller, Application 2931, Terminals with Low-Speed Actuator	GDE131.1P	Fail-in-Last Position, Floating, 44 in-lb electric actuator

Part Number	Description	Part Number	Description
550-767NN	Pressurized Room Controller, Application 2963, Terminals with Low-Speed Actuator	GMA131.1P	Fail-safe Spring Return Floating, 62 in-lb electric actuator
570-801PA	BACnet Lab Controller Module, Applications 6753/6759, Terminals with Low-Speed Actuator	GDE161.1P	Fail-in-Last Position, Modulation, 44 in-lb electric actuator
570-803PA	BACnet Lab Controller Module, Applications 6751/6757, Terminals with High-Speed Actuator	GMA161.1P	Fail-safe Spring Return Modulating 62 in-lb electric actuator
570-805PA	BACnet Lab Controller Module, Applications 6754/6750, Terminals with Low-Speed Actuator Supply and Venturi Exhaust	GNP191.1P	GNP Fast Acting Lab Electronic Actuator
570-811PA	BACnet Pressurized Room Controller, Application 6761, Terminals with Low-Speed Actuator		
570-810PA	Pressurized Room Controller, Application 6773, Terminals with Low-Speed Actuator		

3. Choose a Shaft and Coil orientation, and append the letter to the part number:

R = Shaft/Coil Opposite Side

S = Shaft/Coil Same Side

4. Choose the Inlet size (the size of the duct) and append the 2-digit number to the part number.

Inlet Size (in inches)	2-digit number	Inlet Size (in inches)	2-digit number
4	04	12	12
6	06	14	14
8	08	16	16
10	10	16" x 24"	18

5. Choose the Reheat Coil orientation, and append the letters to the part number:

Reheat Coil orientation	
(All coils come with access doors)	
OO	No coil.
AB	1 row, Left
AH	1 row, Left HIGH CAPACITY
BB	2 rows, Left.
BH	2 rows, Left HIGH CAPACITY
CB	3 rows, Left.
DB	4 rows, Left
EB	1 row, Right
EH	1 row, Right HIGH CAPACITY
FB	2 rows, Right
FH	2 rows, Right HIGH CAPACITY
GB	3 rows, Right
HB	4 rows, Right

6. Select the Lining, and append that letter to the part number:

Standard Lining Options	
B	Fiber-free foam

Custom options

NOTE: Custom options require a longer lead time. Please contact your Siemens representative if you want to choose a Custom option.

Custom Lining Options	
F	Foil-faced fiberglass
M	Solid Metal Liner with sound absorbing material between inner and outer layer
A	Solid metal liner (M) with Agion Anit-Microbial coating
X	No liner in discharge casing

7. Choose the Construction type:

O = Low Leakage

T = Low leakage (**O**) plus a transformer (120/24 CL.2) and a Disconnect Switch

8. (Custom Option – requires a longer lead time) This selection is for **custom orders** only, and will not be accepted in SAP. Please see your Siemens representative if you want to choose an Integral Attenuator:

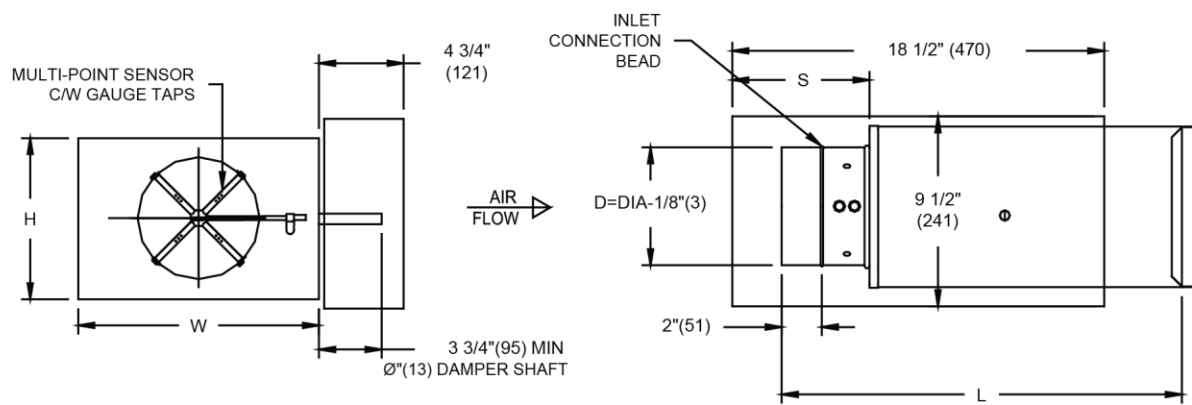
3 = 36"

5 = 60"

After completing your selections, you should have an SAP orderable part number that looks similar to the following example:

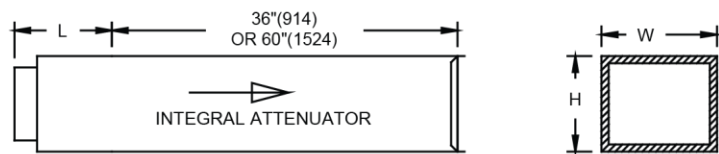
SAMPLE Part Number: LGSO575R14DBBO

Dimensions



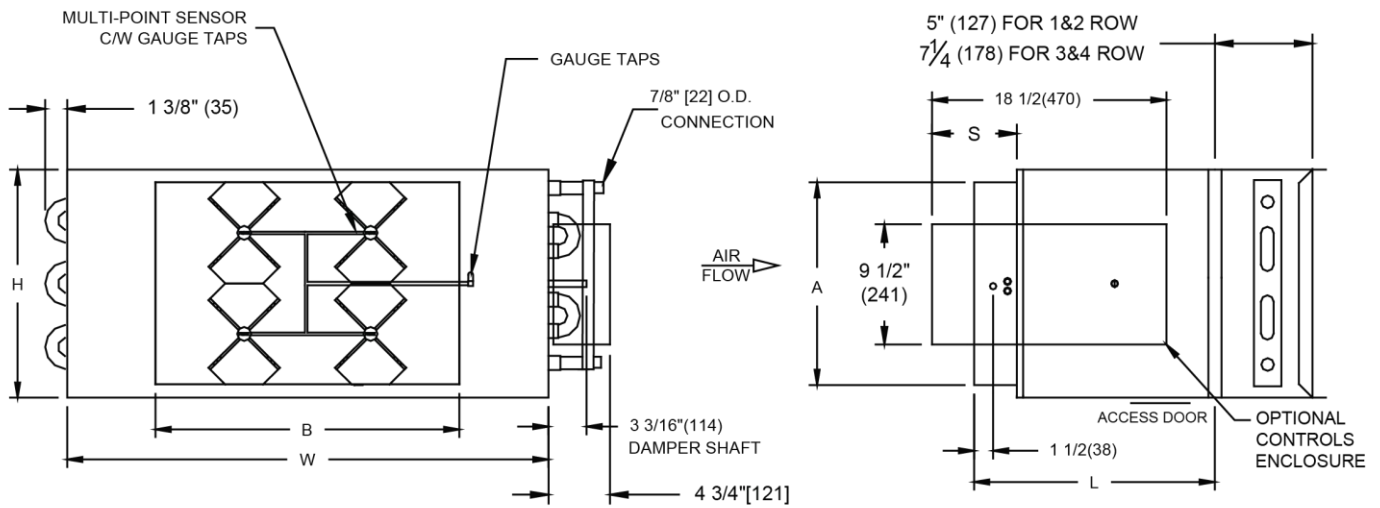
S.I. UNITS mm					IMPERIAL UNITS inches				
OUTLET		INLET	LENGTH		OUTLET		INLET	LENGTH	
W	H	D	L	S	W	H	D	L	S
305	203	102	562	168	12	8	4	22 ⅞	6 ⅝
		152	6				20 ⅞		
305	254	203	12		10	8			
356	318	254	14		12 ½	10			
406	381	305	16		15	12			
508	445	356	600	117	20	17 ½	14	23 ⅞	4 ⅞
610	457	406			24	18	16		

- NOTES:**
- 22GA ZINC COATED STEEL CONSTRUCTION. MECHANICALLY SEALED AND GASKETED.
 - INSULATION 3/4"(19) FIBER FREE FOAM WHICH MEETS REQUIREMENTS OF NFPA 90A & UL-181.
 - ULTRA LOW LEAKAGE CONSTRUCTION - ALL CASING SEAMS COVERED WITH DUCT SEALER.
 - ZINC PLATED STEEL DAMPER SHAFT WITH VISIBLE POSITION INDICATOR
 - POLYETHYLENE DAMPER BEARINGS
 - VOLARA DAMPER SEALS
- OPTIONS:**
- CONTROLS FACTORY MOUNTED.
 - 22GA ZINC COATED STEEL CONTROLS ENCLOSURE.
 - 3 FT DISCHARGE ATTENUATOR (INTEGRAL TO LGS CASING)
 - 5 FT DISCHARGE ATTENUATOR (INTEGRAL TO LGS CASING)



ALL METRIC DIMENSIONS () ARE SOFT CONVERTED.
IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED OT THE NEAREST MILLIMETER

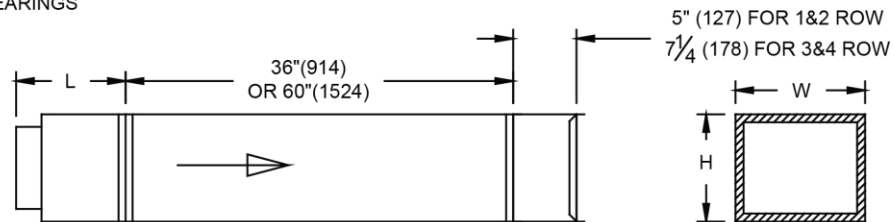
Figure 4. Laboratory Room Single Duct Supply Air Terminal without Reheat



S.I. UNITS mm						IMPERIAL UNITS inches					
OUTLET		INLET		LENGTH		OUTLET		INLET		LENGTH	
W	H	B	A	L	S	W	H	B	A	L	S
965	457	603	403	483	178	38	18	23 7/8	15 7/8	19	7

NOTES:

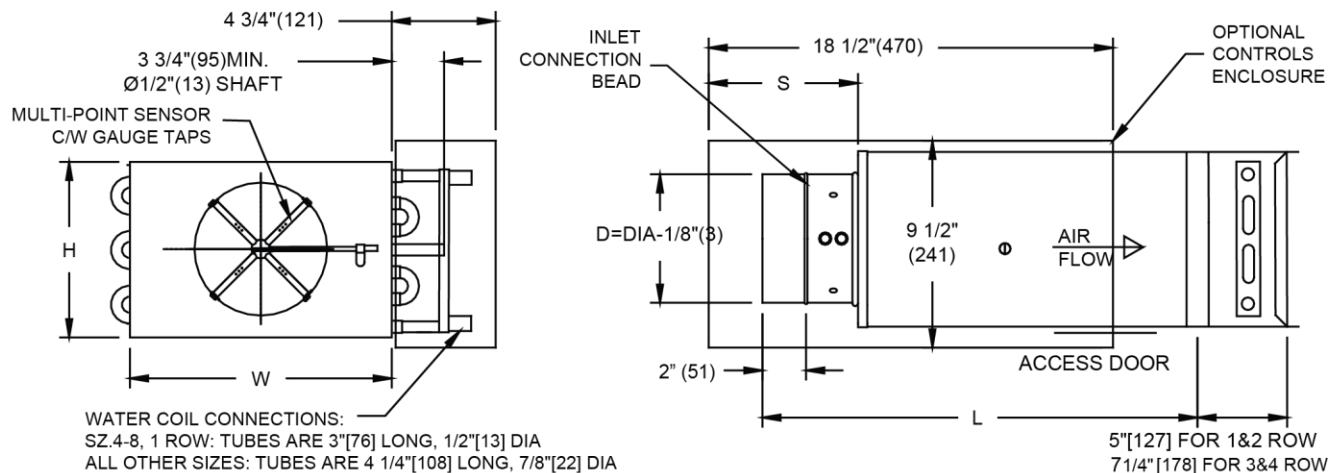
- LARGER ENCLOSURE REQUIRED FOR Q575 CONTROL PACKAGE.
- INTERNAL INSULATION 3/4" (119mm) FIBER FREE FOAM WHICH MEETS REQUIREMENTS OF NFPA 90A AND UL181.
- 22GA ZINC COATED STEEL HOUSING. MECHANICALLY SEALED AND GASKETED.
- HAND OF HOT WATER COIL CONNECTIONS IS DETERMINED VIEWED FROM AIR INLET SIDE. RIGHT HAND AS SHOWN. LEFT HAND IS ALSO AVAILABLE.
- HOT WATER COILS HAVE COPPER TUBES AND ALUMINUM FINS WITH O.D. SWEAT CONNECTIONS.
- METHOD OF VENTING HOT WATER COIL IS TO BE PROVIDED BY INSTALLING CONTRACTOR.
- COIL PERFORMANCE IS RATED AND CERTIFIED IN ACCORDANCE WITH THE CURRENT EDITION OF ARI STANDARD 410.
- ULTRA LOW LEAKAGE CONSTRUCTION - ALL CASING SEAMS COVERED WITH DUCT SEALER.
- ZINC PLATED STEEL DAMPER SHAFT WITH VISIBLE POSITION INDICATOR
- POLYETHYLENE DAMPER BEARINGS
- VOLARA DAMPER SEALS



OPTIONS:

- 1 ROW WATER COIL
- 2 ROW WATER COIL
- 3 ROW WATER COIL
- 4 ROW WATER COIL
- CONTROLS FACTORY MOUNTED.
- 22GA ZINC COATED STEEL CONTROLS ENCLOSURE.
- 3 FT DISCHARGE ATTENUATOR
- 5 FT DISCHARGE ATTENUATOR

Figure 5. Laboratory Room Single Duct Supply Air Terminal Size 18 without Reheat

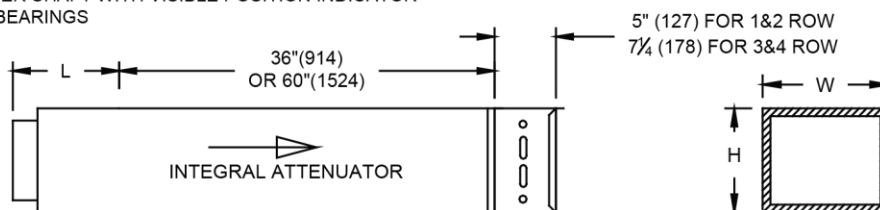


S.I. UNITS mm					IMPERIAL UNITS inches				
OUTLET		INLET	LENGTH		OUTLET		INLET	LENGTH	
W	H	D	L	S	W	H	D	L	S
305	203	102	562	168	12	8	4	22 ⅞	6 ⅝
		152	511				6	20 ⅞	
305	254	203			12	10	8		
356	318	254			14	12 ½	10		
406	381	305			16	15	12		
508	445	356	600	117	20	17 ½	14	23 ⅞	4 ⅞
610	457	406			24	18	16		

UNIT SIZE	S, IN(mm)
4-12	6 5/8 (168)
14,16	4 5/8 (117)

NOTES:

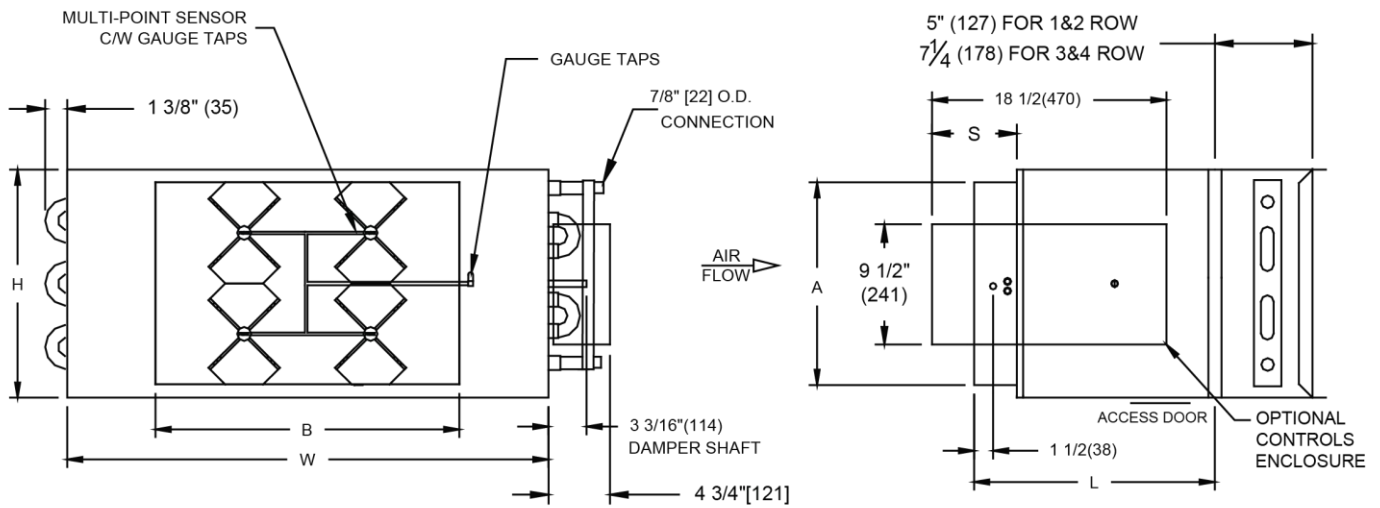
- INTERNAL INSULATION 3/4" (119mm) FIBER FREE FOAM WHICH MEETS REQUIREMENTS OF NFPA 90A AND UL181.-
- 22GA ZINC COATED STEEL HOUSING. MECHANICALLY SEALED AND GASKETED.
- HAND OF HOT WATER COIL CONNECTIONS IS DETERMINED VIEWED FROM AIR INLET SIDE. RIGHT HAND IS SHOWN. LEFT HAND IS ALSO AVAILABLE.
- HOT WATER COILS HAVE COPPER TUBES AND ALUMINUM FINS WITH O.D. SWEAT CONNECTIONS.
- METHOD OF VENTING HOT WATER COIL IS TO BE PROVIDED BY INSTALLING CONTRACTOR.
- COIL PERFORMANCE IS RATED AND CERTIFIED IN ACCORDANCE WITH THE CURRENT EDITION OF ARI STANDARD 410.
- ULTRA LOW LEAKAGE CONSTRUCTION - ALL CASING SEAMS COVERED WITH DUCT SEALER.
- ZINC PLATED STEEL DAMPER SHAFT WITH VISIBLE POSITION INDICATOR
- POLYETHYLENE DAMPER BEARINGS
- VOLARA DAMPER SEALS



OPTIONS:

- 1 ROW WATER COIL
- 2 ROW WATER COIL
- 3 ROW WATER COIL
- 4 ROW WATER COIL
- CONTROLS FACTORY MOUNTED.
- 22GA ZINC COATED STEEL CONTROLS ENCLOSURE.
- 3 FT DISCHARGE ATTENUATOR (INTEGRAL TO LGS CASING)
- 5 FT DISCHARGE ATTENUATOR (INTEGRAL TO LGS CASING)

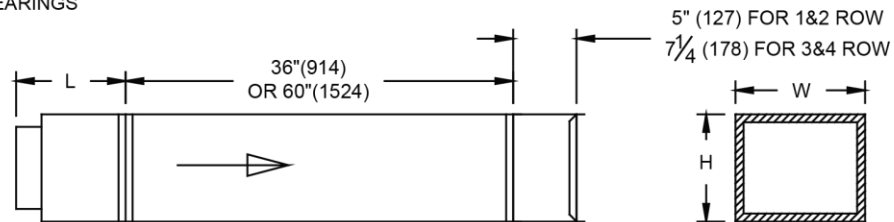
Figure 6. Laboratory Room Single Duct Supply Air Terminal with Reheat



S.I. UNITS mm						IMPERIAL UNITS inches					
OUTLET		INLET		LENGTH		OUTLET		INLET		LENGTH	
W	H	B	A	L	S	W	H	B	A	L	S
965	457	603	403	483	178	38	18	23 7/8	15 7/8	19	7

NOTES:

- LARGER ENCLOSURE REQUIRED FOR Q575 CONTROL PACKAGE.
- INTERNAL INSULATION 3/4" (119mm) FIBER FREE FOAM WHICH MEETS REQUIREMENTS OF NFPA 90A AND UL181.
- 22GA ZINC COATED STEEL HOUSING. MECHANICALLY SEALED AND GASKETED.
- HAND OF HOT WATER COIL CONNECTIONS IS DETERMINED VIEWED FROM AIR INLET SIDE. RIGHT HAND AS SHOWN. LEFT HAND IS ALSO AVAILABLE.
- HOT WATER COILS HAVE COPPER TUBES AND ALUMINUM FINS WITH O.D. SWEAT CONNECTIONS.
- METHOD OF VENTING HOT WATER COIL IS TO BE PROVIDED BY INSTALLING CONTRACTOR.
- COIL PERFORMANCE IS RATED AND CERTIFIED IN ACCORDANCE WITH THE CURRENT EDITION OF ARI STANDARD 410.
- ULTRA LOW LEAKAGE CONSTRUCTION - ALL CASING SEAMS COVERED WITH DUCT SEALER.
- ZINC PLATED STEEL DAMPER SHAFT WITH VISIBLE POSITION INDICATOR
- POLYETHYLENE DAMPER BEARINGS
- VOLARA DAMPER SEALS



OPTIONS:

- 1 ROW WATER COIL
- 2 ROW WATER COIL
- 3 ROW WATER COIL
- 4 ROW WATER COIL
- CONTROLS FACTORY MOUNTED.
- 22GA ZINC COATED STEEL CONTROLS ENCLOSURE.
- 3 FT DISCHARGE ATTENUATOR
- 5 FT DISCHARGE ATTENUATOR

Figure 7. Laboratory Room Single Duct Supply Air Terminal Size 18 with Reheat

Table 1. Airflow Ranges.

INLET SIZE	MAXIMUM FLOW @ 1.0"dp		MINIMUM FLOW @ 0.02"dp		FLOW SENSOR INLET AREA		Flow Coefficient
	CFM	L/S	CFM	L/S	SQ. FT	M2	
4	340	160	48	23	0.087	0.008	0.976
6	468	221	66	31	0.196	0.018	0.596
8	923	436	126	59	0.349	0.032	0.660
10	1487	702	210	99	0.545	0.051	0.681
12	2141	1010	303	143	0.785	0.073	0.681
14	3045	1437	431	203	1.069	0.099	0.711
16	4074	1923	576	272	1.396	0.130	0.729
18(16x24)	7785	3674	1101	520	2.667	0.248	0.729

Table 2. Minimum Non-Recoverable Terminal Pressure Drop Across Assembly.

Terminal Size	Airflow		Without Reheat (inch W.C)	With Hot Water Coils (in. W.C.)			
	CFM	L/s		1 Row	2 Row	3 Row	4 Row
04	75	35	0.01	0.02	0.03	0.03	0.04
	125	59	0.01	0.03	0.05	0.07	0.08
	225	106	0.01	0.05	0.11	0.16	0.21
	280	132	0.01	0.08	0.15	0.22	0.30
06	125	59	0.01	0.03	0.05	0.07	0.08
	250	118	0.01	0.11	0.18	0.24	0.30
	375	177	0.01	0.24	0.36	0.48	0.59
	500	236	0.01	0.40	0.60	0.78	0.97
08	175	83	0.01	0.03	0.05	0.07	0.09
	375	177	0.01	0.08	0.15	0.23	0.30
	775	366	0.01	0.24	0.49	0.74	0.98
	975	460	0.01	0.35	0.72	1.08	1.43
10	250	118	0.01	0.03	0.05	0.07	0.09
	550	260	0.01	0.08	0.16	0.23	0.30
	1150	543	0.01	0.25	0.51	0.76	1.01
	1450	684	0.01	0.36	0.75	1.11	1.48
12	350	165	0.01	0.03	0.05	0.06	0.09
	380	401	0.01	0.09	0.19	0.27	0.36
	1850	873	0.01	0.32	0.66	0.99	1.31
	2350	1109	0.01	0.48	0.98	1.47	1.96
14	500	236	0.01	0.03	0.05	0.07	0.09
	1250	590	0.01	0.09	0.19	0.28	0.36
	2000	944	0.01	0.20	0.40	0.60	0.80
	2750	1298	0.01	0.33	0.68	1.02	1.36
16	600	283	0.01	0.03	0.05	0.07	0.09
	1400	661	0.01	0.08	0.17	0.25	0.33
	3000	1416	0.01	0.28	0.58	0.87	1.16
	3800	1793	0.01	0.42	0.86	1.29	1.72
18	1500	708	0.01	0.05	0.09	0.14	0.18
	3500	1652	0.01	0.17	0.35	0.53	0.70
	5500	2596	0.01	0.36	0.74	1.11	1.48
	7500	3540	0.01	0.61	1.25	1.86	2.48

Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 04, 06

1-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	75	100	200	300	400	500	600	
	Heating Capacity (MBH)							
0.50	4.4	5.0	6.8	7.9	8.6	9.2	9.6	0.13
0.75	4.6	5.4	7.4	8.8	9.7	10.5	11.0	0.28
1.00	4.7	5.6	7.8	9.3	10.4	11.2	11.9	0.49
1.50	4.9	5.8	8.3	9.9	11.2	12.2	13.0	1.06
2.00	5.0	5.9	8.5	10.3	11.6	12.7	13.6	1.86
2.50	5.0	6.0	8.7	10.5	11.9	13.1	14.0	2.87
3.00	5.0	6.0	8.8	10.7	12.1	13.3	14.3	4.08
4.00	5.1	6.1	8.9	10.9	12.4	13.7	14.7	7.13

UNIT SIZE 04, 06

2-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	75	100	200	300	400	500	600	
	Heating Capacity (MBH)							
0.60	6.3	7.4	10.5	12.3	13.5	14.4	15.1	0.05
0.75	6.5	7.8	11.2	13.3	14.8	15.9	16.8	0.07
1.00	6.7	8.1	12.0	14.5	16.3	17.7	18.8	0.12
1.50	7.0	8.5	13.0	16.0	18.2	20.0	21.4	0.27
2.00	7.2	8.8	13.6	16.9	19.4	21.4	23.0	0.47
2.50	7.3	8.9	13.9	17.5	20.2	22.4	24.2	0.72
3.00	7.3	9.0	14.2	17.9	20.7	23.1	25.0	1.02
4.00	7.4	9.1	14.5	18.4	21.5	24.0	26.1	1.79

Air Side Pressure Drop (Inches WC)

0.01	0.01	0.04	0.07	0.12	0.18	0.24
------	------	------	------	------	------	------

Air Side Pressure Drop (Inches WC)

0.02	0.03	0.08	0.16	0.26	0.38	0.51
------	------	------	------	------	------	------

UNIT SIZE 04, 06

3- Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	75	100	200	300	400	500	600	
	Heating Capacity (MBH)							
1.00	8.2	10.2	15.7	19.2	21.7	23.6	25.0	0.19
1.50	8.5	10.5	16.8	21.1	24.3	26.8	28.8	0.42
2.00	8.6	10.7	17.5	22.3	25.9	28.8	31.1	0.72
2.50	8.6	10.9	17.9	23.0	26.9	30.1	32.7	1.11
3.00	8.7	11.0	18.2	23.5	27.6	31.0	33.9	1.58
4.00	8.7	11.1	18.5	24.1	28.6	32.3	35.4	2.74
5.00	8.8	11.1	18.8	24.6	29.2	33.1	36.4	4.23
6.00	8.8	11.2	18.9	24.9	29.7	33.7	37.1	6.01

UNIT SIZE 04, 06

4- Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	75	100	200	300	400	500	600	
	Heating Capacity (MBH)							
1.5	9.1	11.5	18.9	23.9	27.5	30.3	32.6	0.23
3	9.3	11.9	20.5	26.8	31.8	35.9	39.3	0.88
4	9.4	12.1	20.9	27.7	33.1	37.6	41.4	1.55
5	9.4	12.1	21.2	28.2	34.0	38.7	42.8	2.39
6	9.4	12.2	21.4	28.6	34.5	39.5	43.8	3.41
7	9.5	12.2	21.5	28.9	34.9	40.1	44.5	4.61
8	9.5	12.2	21.6	29.1	35.3	40.5	45.1	5.98
9	9.5	12.2	21.7	29.2	35.5	40.9	45.6	7.53

Air Side Pressure Drop (Inches WC)

0.02	0.04	0.12	0.24	0.39	0.56	0.77
------	------	------	------	------	------	------

Air Side Pressure Drop (Inches WC)

0.03	0.05	0.16	0.32	0.52	0.75	1.02
------	------	------	------	------	------	------

UNIT SIZE 08

1-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	150	350	500	650	800	950	1100	
	Heating Capacity (MBH)							
0.5	6.9	9.6	10.7	11.5	12.1	12.6	13.0	0.17
1.0	7.8	11.4	13.1	14.4	15.3	16.1	16.8	0.66
1.5	8.1	12.3	14.2	15.7	16.9	17.9	18.7	1.44
2.0	8.3	12.7	14.8	16.5	17.8	18.9	19.8	2.50
2.5	8.4	13.0	15.2	17.0	18.4	19.6	20.6	3.85
3.0	8.5	13.2	15.5	17.3	18.8	20.1	21.2	5.48
4.0	8.6	13.5	15.9	17.8	19.4	20.7	21.9	9.56
4.5	8.7	13.6	16.1	18.0	19.6	21.0	22.2	12.01

UNIT SIZE 08

2-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	150	350	500	650	800	950	1100	
	Heating Capacity (MBH)							
0.6	10.2	14.7	16.4	17.7	18.5	19.2	19.8	0.06
1.0	11.4	17.5	20.2	22.1	23.6	24.7	25.7	0.17
2.0	12.5	20.5	24.4	27.3	29.7	31.6	33.2	0.64
3.0	12.9	21.8	26.2	29.7	32.5	34.9	36.9	1.39
4.0	13.2	22.5	27.3	31.1	34.2	36.8	39.1	2.43
5.0	13.3	23.0	28.0	32.0	35.3	38.1	40.5	3.72
6.0	13.4	23.3	28.5	32.6	36.1	39.0	41.6	5.32
7.0	13.5	23.5	28.8	33.1	36.7	39.7	42.4	7.14

Air Side Pressure Drop (Inches WC)

0.01	0.06	0.11	0.17	0.24	0.33	0.42
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Air Side Pressure Drop (Inches WC)

0.03	0.13	0.23	0.36	0.51	0.68	0.87
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*** Notes:**

All capacities are based on 180°F entering water temperature and 55°F entering air temperature. For other air and water inlet temperature conditions, use the correction factors shown in Table 4 to multiply the given heating capacity for each size.
 1 MBH = 1000 BTU/Hr. MBH Required = 0.00108 × CFM × Temp. Rise

Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 08								
3-Row Coil								Waterside Head Loss (ft.wg.)
GPM	Airflow, CFM							
	150	350	500	650	800	950	1100	
	Heating Capacity (MBH)							
1.0	14.4	23.0	26.6	29.1	30.9	32.4	33.5	0.26
1.5	15.1	25.5	30.2	33.7	36.4	38.5	40.3	0.57
2.0	15.5	26.9	32.4	36.5	39.8	42.5	44.7	0.98
2.5	15.8	27.8	33.8	38.5	42.2	45.2	47.8	1.51
3.0	15.9	28.4	34.8	39.8	43.9	47.2	50.1	2.14
4.0	16.1	29.3	36.2	41.7	46.2	50.0	53.3	3.71
5.0	16.2	29.8	37.1	42.9	47.7	51.8	54.4	5.71
6.0	16.3	30.2	37.7	43.7	48.8	53.1	56.9	8.11

Air Side Pressure Drop (Inches WC)							
0.05	0.19	0.35	0.54	0.77	1.02	1.31	

UNIT SIZE 08								
4-Row Coil								Waterside Head Loss (ft.wg.)
GPM	Airflow, CFM							
	150	350	500	650	800	950	1100	
	Heating Capacity (MBH)							
2.0	16.8	29.6	35.6	40.0	43.4	46.1	48.3	0.27
2.5	17.1	30.8	37.6	42.6	46.6	49.9	52.5	0.42
3.0	17.3	31.7	39.0	44.6	49.0	52.7	55.7	0.59
4.0	17.6	32.9	40.9	47.3	52.4	56.7	60.3	1.04
6.0	17.8	34.1	43.0	50.3	56.3	61.4	65.8	2.30
8.0	17.9	34.7	44.2	51.9	58.4	64.0	68.9	4.04
10.0	18.0	35.2	44.9	53.0	59.8	65.7	70.9	6.26
12.0	18.1	35.4	45.4	53.7	60.8	66.9	72.3	8.95

Air Side Pressure Drop (Inches WC)							
0.06	0.26	0.46	0.72	1.02	1.36	1.74	

UNIT SIZE 10								
1-Row Coil								Waterside Head Loss (ft.wg.)
GPM	Airflow, CFM							
	200	400	600	800	1000	1400	1600	
	Heating Capacity (MBH)							
1.0	9.9	13.4	15.5	17.0	18.1	19.7	20.3	0.11
2.0	11.0	15.4	18.3	20.5	22.1	24.6	25.6	0.42
3.0	11.4	16.3	19.6	22.0	23.9	26.9	28.1	0.92
4.0	11.6	16.8	20.3	22.9	25.0	28.3	29.6	1.60
5.0	11.8	17.1	20.7	23.5	25.7	29.2	30.6	2.47
6.0	11.9	17.3	21.0	23.9	26.2	29.9	31.3	3.52
7.0	11.9	17.5	21.3	24.2	26.6	30.4	31.9	4.74
8.0	12.0	17.6	21.4	24.4	26.9	30.7	32.3	6.13

Air Side Pressure Drop (Inches WC)							
0.01	0.04	0.08	0.13	0.19	0.33	0.42	

UNIT SIZE 10								
2-Row Coil								Waterside Head Loss (ft.wg.)
GPM	Airflow, CFM							
	200	400	600	800	1000	1400	1600	
	Heating Capacity (MBH)							
1.0	14.5	20.4	23.8	26.1	27.7	30.0	30.9	0.23
2.0	16.4	24.5	29.8	33.6	36.5	40.8	42.5	0.88
3.0	17.2	26.3	32.5	37.2	40.9	46.4	48.6	1.93
4.0	17.6	27.3	34.2	39.4	43.5	49.9	52.5	3.35
5.0	17.9	28.0	35.2	40.8	45.3	52.3	55.1	5.14
6.0	18.0	28.5	36.0	41.8	46.6	54.0	57.1	7.31
7.0	18.2	28.8	36.5	42.6	47.6	55.4	58.6	9.84
8.0	18.3	29.1	37.0	43.2	48.3	56.4	59.7	12.73

Air Side Pressure Drop (Inches WC)							
0.03	0.09	0.17	0.27	0.39	0.69	0.87	

UNIT SIZE 10								
3-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	200	400	600	800	1000	1400	1600	
	Heating Capacity (MBH)							
1.5	19.8	29.9	36.1	40.3	43.4	47.8	49.3	0.29
3.0	21.2	34.0	42.9	49.5	54.7	62.5	65.5	1.12
4.0	21.6	35.2	45.0	52.5	58.4	67.6	71.2	1.97
5.0	21.8	35.9	46.3	54.3	60.9	71.0	75.0	3.03
6.0	21.9	36.5	47.2	55.7	62.6	73.5	77.9	4.32
7.0	22.0	36.8	47.9	56.7	63.9	75.4	80.0	5.84
8.0	22.1	37.1	48.4	57.5	64.9	76.8	81.7	7.57
9.0	22.2	37.3	48.8	58.1	65.8	78.0	83.1	9.51

Air Side Pressure Drop (Inches WC)							
0.04	0.13	0.25	0.41	0.59	1.04	1.30	

UNIT SIZE 10								
4-Row Coil								Waterside Head Loss (ft.wg.)
GPM	Airflow, CFM							
	200	400	600	800	1000	1400	1600	
	Heating Capacity (MBH)							
2.0	22.5	36.0	44.7	50.7	55.2	61.5	63.8	0.33
2.5	23.0	37.5	47.3	54.4	59.8	67.5	70.4	0.51
3.0	23.3	38.6	49.2	57.1	63.2	72.2	75.6	0.73
4.0	23.6	39.9	51.8	60.8	68.0	78.9	83.2	1.28
6.0	24.0	41.3	54.5	65.0	73.5	86.9	92.2	2.82
8.0	24.2	42.1	56.0	67.2	76.6	91.4	97.5	4.94
10.0	24.3	42.5	56.9	68.6	78.5	94.4	100.9	7.65
12.0	24.3	42.8	57.5	69.6	79.9	96.4	103.3	10.92

Air Side Pressure Drop (Inches WC)							
0.06	0.17	0.34	0.54	0.79	1.39	1.74	

*** Notes:**

All capacities are based on 180°F entering water temperature and 55°F entering air temperature. For other air and water inlet temperature conditions, use the correction factors shown in Table 4 to multiply the given heating capacity for each size.
1 MBH = 1000 BTU/Hr. MBH Required = 0.00108 × CFM × Temp. Rise

Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 12								
1-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	400	600	800	1200	1600	2000	2500	
	Heating Capacity (MBH)							
2.0	17.9	21.5	24.1	27.9	30.7	32.8	34.8	0.55
3.0	18.8	22.9	25.9	30.5	33.8	36.3	38.9	1.21
4.0	19.4	23.7	27.0	31.9	35.6	38.5	41.4	2.11
5.0	19.7	24.2	27.7	32.9	36.8	39.9	43.0	3.24
6.0	20.0	24.6	28.1	33.6	37.6	40.9	44.2	4.61
7.0	20.1	24.8	28.5	34.1	38.3	41.7	45.1	6.22
9.0	20.4	25.2	29.0	34.8	39.2	42.8	46.4	10.11
10.0	20.4	25.3	29.1	35.0	39.4	43.0	46.7	11.22

Air Side Pressure Drop (Inches WC)							
0.02	0.04	0.07	0.15	0.24	0.36	0.52	

UNIT SIZE 12								
2-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	400	600	800	1200	1600	2000	2500	
	Heating Capacity (MBH)							
2.0	28.1	34.8	39.8	46.9	51.9	55.5	59.1	0.45
3.0	29.9	37.7	43.8	52.7	59.1	64.0	68.8	0.99
4.0	30.9	39.4	46.0	56.1	63.4	69.2	75.0	1.74
5.0	31.5	40.5	47.5	58.3	66.4	72.8	79.2	2.68
6.0	32.0	41.2	48.6	59.9	68.5	75.4	82.3	3.83
7.0	32.3	41.8	49.4	61.1	70.1	77.3	84.7	5.17
9.0	32.8	42.5	50.4	62.9	72.4	80.1	88.1	8.45
10.0	32.9	42.8	50.8	63.5	73.2	81.2	89.3	10.37

Air Side Pressure Drop (Inches WC)							
0.05	0.10	0.16	0.32	0.51	0.74	1.08	

UNIT SIZE 12								
3-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	400	600	800	1200	1600	2000	2500	
	Heating Capacity (MBH)							
1.5	33.1	40.4	45.5	52.0	56.1	58.9	61.5	0.37
3.0	37.3	47.9	55.9	67.3	75.3	81.2	86.9	1.40
4.0	38.5	50.0	59.0	72.4	82.0	89.3	96.5	2.44
5.0	39.2	51.4	61.1	75.7	86.5	94.9	103.2	3.76
6.0	39.7	52.3	62.5	78.1	89.8	99.0	108.1	5.34
7.0	40.0	53.0	63.5	79.9	92.2	102.1	111.9	7.22
9.0	40.5	54.0	65.0	82.4	95.7	106.5	117.4	11.73
10.0	40.7	54.3	65.5	83.3	97.0	108.1	119.5	14.42

Air Side Pressure Drop (Inches WC)							
0.08	0.15	0.24	0.47	0.77	1.11	1.62	

UNIT SIZE 12								
4-Row Coil								
GPM	Airflow, CFM							Waterside Head
	400	600	800	1200	1600	2000	2500	Loss
	Heating Capacity (MBH)							(ft.wg.)
2.0	39.3	49.5	56.7	66.3	72.3	76.5	80.3	0.40
4.0	43.0	56.9	67.7	83.7	95.0	103.5	111.6	1.55
5.0	43.8	58.5	70.2	88.0	101.0	110.9	120.6	2.40
6.0	44.3	59.6	72.0	91.1	105.3	116.4	127.3	3.42
8.0	45.0	61.0	74.3	95.2	111.2	123.9	136.7	5.96
9.0	45.2	61.5	75.1	96.6	113.2	126.6	140.1	7.51
10.0	45.4	61.9	75.7	97.8	114.9	128.8	142.9	9.22
12.0	45.6	62.5	76.7	99.6	117.6	132.3	147.3	13.16

Air Side Pressure Drop (Inches WC)							
0.10	0.20	0.32	0.63	1.02	1.49	2.16	

UNIT SIZE 14								
1-Row Coil								Waterside Head Loss (ft.wg.)
GPM	Airflow, CFM							
	500	800	1200	1700	2200	2700	3400	
	Heating Capacity (MBH)							
1.0	20.0	23.8	26.9	29.5	31.2	32.5	33.9	0.20
2.0	23.4	28.9	33.8	38.1	41.2	43.6	46.3	0.76
3.0	24.8	31.1	36.9	42.2	46.1	49.2	52.7	1.65
4.0	25.6	32.4	38.8	44.6	49.0	52.6	56.6	2.87
5.0	26.1	33.2	40.0	46.2	51.0	54.8	59.2	4.41
6.0	26.4	33.7	40.8	47.3	52.4	56.5	61.2	6.26
8.0	26.9	34.5	41.9	48.9	54.3	58.7	63.8	10.92
10.0	27.2	35.0	42.6	49.8	55.5	60.1	65.5	16.80

Air Side Pressure Drop (Inches WC)							
0.02	0.04	0.08	0.14	0.22	0.31	0.46	

UNIT SIZE 14								
2-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	500	800	1200	1700	2200	2700	3400	
	Heating Capacity (MBH)							
1.5	32.3	40.0	46.4	51.5	55.0	57.5	60.1	0.33
3.0	37.6	48.8	59.1	68.1	74.7	79.8	85.2	1.27
4.0	39.1	51.6	63.4	74.0	81.9	88.2	95.0	2.21
5.0	40.2	53.4	66.3	78.0	87.0	94.1	102.0	3.41
6.0	40.9	54.7	68.3	81.0	90.7	98.5	107.2	4.85
7.0	41.4	55.7	69.9	83.2	93.5	101.8	111.3	6.55
9.0	42.1	57.0	72.1	86.4	97.6	106.8	117.3	10.65
10.0	42.4	57.5	72.9	87.6	99.1	108.6	119.5	13.09

Air Side Pressure Drop (Inches WC)							
0.04	0.09	0.17	0.30	0.46	0.65	0.96	

*** Notes:**

All capacities are based on 180°F entering water temperature and 55°F entering air temperature. For other air and water inlet temperature conditions, use the correction factors shown in Table 4 to multiply the given heating capacity for each size.
 1 MBH = 1000 BTU/Hr. MBH Required = 0.00108 × CFM × Temp. Rise

Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 14

3-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	500	800	1200	1700	2200	2700	3400	
	Heating Capacity (MBH)							
2	43.7	55.5	65.3	72.9	77.9	81.5	85.0	0.41
4	48.8	65.7	81.5	95.3	105.3	113.0	121.1	1.55
5	49.9	68.0	85.5	101.2	112.9	121.9	131.8	2.40
6	50.6	69.6	88.3	105.5	118.4	128.7	140.0	3.42
8	51.6	71.6	92.0	111.2	126.1	138.0	151.4	5.97
9	51.9	72.4	93.3	113.3	128.8	141.4	155.6	7.52
10	52.1	72.9	94.4	115.0	131.1	144.2	159.1	9.23
12	52.5	73.8	96.0	117.6	134.6	148.6	164.7	13.15

UNIT SIZE 14

4-Row Coil								
GPM	Airflow, CFM							Waterside Head
	500	800	1200	1700	2200	2700	3400	Loss
	Heating Capacity (MBH)							(ft.wg.)
3.5	52.6	70.8	87.1	100.7	110.0	116.8	123.8	0.49
7	56.3	79.2	102.3	123.5	139.5	152.0	165.8	1.90
10	57.4	82.0	107.6	132.1	151.1	166.5	183.7	3.83
12	57.8	83.1	109.8	135.7	156.1	172.7	191.7	5.49
14	58.1	83.9	111.3	138.3	159.8	177.5	197.7	7.43
16	58.4	84.5	112.6	140.4	162.7	181.2	202.5	9.67
19	58.6	85.2	113.9	142.7	166.0	185.5	208.1	13.57
21	58.8	85.5	114.6	143.9	167.7	187.7	211.0	16.53

Air Side Pressure Drop (Inches WC)

0.06	0.13	0.25	0.45	0.69	0.98	1.44
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Air Side Pressure Drop (Inches WC)

0.08	0.17	0.34	0.60	0.93	1.31	1.92
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UNIT SIZE 16

1-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	600	1000	1500	2000	2500	3500	4400	
	Heating Capacity (MBH)							
2.0	27.5	34.3	39.9	43.8	46.8	51.2	54.0	0.86
3.0	29.3	37.3	44.0	49.0	52.8	58.6	62.4	1.87
4.0	30.4	39.0	46.5	52.1	56.4	63.1	67.6	3.25
5.0	31.0	40.1	48.1	54.1	58.9	66.2	71.2	5.00
6.0	31.5	40.9	49.3	55.6	60.6	68.4	73.8	7.08
7.0	31.8	41.5	50.1	56.7	62.0	70.2	75.8	9.55
8.0	32.1	41.9	50.8	57.5	63.0	71.5	77.4	12.35
10.0	32.5	42.6	51.8	58.8	64.5	73.5	79.8	19.00

UNIT SIZE 16

2-Row Coil								
GPM	Airflow, CFM							Waterside Head
	600	1000	1500	2000	2500	3500	4400	Loss
	Heating Capacity (MBH)							(ft.wg.)
2.0	40.4	51.5	60.2	66.0	70.3	76.1	79.7	0.64
3.0	44.1	57.9	69.5	77.7	83.9	92.8	98.4	1.40
4.0	46.2	61.8	75.3	85.1	92.7	103.9	111.3	2.45
5.0	47.5	64.3	79.2	90.2	98.9	111.9	120.6	3.77
6.0	48.5	66.1	82.0	94.0	103.5	117.9	127.6	5.35
7.0	49.2	67.5	84.1	96.8	107.0	122.6	133.2	7.24
9.0	50.2	69.4	87.2	100.9	112.1	129.4	141.4	11.75
10.0	50.5	70.1	88.3	102.5	114.0	132.0	144.5	14.44

Air Side Pressure Drop (Inches WC)

0.02	0.04	0.08	0.14	0.20	0.36	0.53
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Air Side Pressure Drop (Inches WC)

0.04	0.09	0.18	0.29	0.42	0.74	1.09
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UNIT SIZE 16

3-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	600	1000	1500	2000	2500	3500	4400	
	Heating Capacity (MBH)							
2.5	52.7	68.5	80.5	88.3	93.7	101.0	105.4	0.42
5.0	58.7	81.0	100.4	114.4	125.0	140.4	150.2	1.62
6.0	59.8	83.4	104.5	120.0	132.0	149.7	161.2	2.31
8.0	61.1	86.5	109.9	127.7	141.7	163.0	177.2	4.06
10.0	61.9	88.5	113.4	132.7	148.2	172.0	188.2	6.26
12.0	62.5	89.8	115.9	136.2	152.8	178.5	196.2	8.96
13.0	62.7	90.4	116.8	137.6	154.6	181.1	199.5	10.47
15.0	63.1	91.2	118.4	139.9	157.6	185.5	204.9	13.84

UNIT SIZE 16

4-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	600	1000	1500	2000	2500	3500	4400	
	Heating Capacity (MBH)							
4.5	63.5	87.8	108.0	121.9	132.2	146.3	155.0	0.59
9.0	67.7	98.2	126.5	148.0	165.0	190.4	207.1	2.33
12.0	68.8	101.0	131.9	156.0	175.5	205.3	225.5	4.12
15.0	69.4	102.7	135.3	161.1	182.3	215.3	238.1	6.40
18.0	69.8	103.9	137.7	164.7	187.1	222.5	247.2	9.19
22.0	70.2	105.0	139.9	168.1	191.7	229.4	256.0	13.68
25.0	70.5	105.6	141.1	170.0	194.3	233.4	261.1	17.62
27.0	70.6	106.0	141.7	171.0	195.7	235.5	263.9	20.53

Air Side Pressure Drop (Inches WC)

0.06	0.14	0.27	0.44	0.63	1.11	1.64
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Air Side Pressure Drop (Inches WC)

.08	0.18	0.36	0.58	0.84	1.49	2.18
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*** Notes:**

All capacities are based on 180°F entering water temperature and 55°F entering air temperature. For other air and water inlet temperature conditions, use the correction factors shown in Table 4 to multiply the given heating capacity for each size.

1 MBH = 1000 BTU/Hr. MBH Required = 0.00108 × CFM × Temp. Rise

Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 18								
1-Row Coil								
GPM	Airflow, CFM							Waterside
	1500	2000	3000	4000	5000	6000	8000	Head
								Loss
Heating Capacity (MBH)								(ft.wg.)
2.0	48.6	53.7	60.6	65.2	68.7	71.3	75.2	1.22
3.0	54.1	60.6	69.9	76.3	81.2	85.1	91.0	2.66
4.0	57.4	64.8	75.6	83.3	89.2	94.0	101.3	4.60
5.0	59.5	67.6	79.4	88.0	94.7	100.2	108.7	7.07
6.0	61.0	69.5	82.2	91.5	98.8	104.8	114.2	10.00
7.0	62.2	71.0	84.3	94.1	101.9	108.3	118.4	13.48
8.0	63.0	72.2	85.9	96.2	104.4	111.1	121.8	17.42
10.0	64.3	73.9	88.4	99.3	108.0	115.3	126.9	26.76

UNIT SIZE 18								
2-Row Coil								
GPM	Airflow, CFM							Waterside Head
	1500	2000	3000	4000	5000	6000	8000	Loss
	Heating Capacity (MBH)							(ft.wg.)
2.0	69.3	76.3	85.2	90.7	94.4	97.1	100.8	0.87
3.0	80.8	91.0	104.8	113.8	120.2	125.1	132.1	1.89
4.0	87.9	100.3	117.8	129.7	138.5	145.3	155.2	3.30
5.0	92.6	106.7	127.0	141.3	152.0	160.4	173.0	5.07
6.0	96.1	111.4	134.0	150.1	162.4	172.2	187.0	7.19
7.0	98.7	115.0	139.4	157.0	170.6	181.6	198.4	9.68
8.0	100.8	117.9	143.6	162.5	177.3	189.2	207.7	12.52
10.0	103.8	122.1	150.1	171.0	187.5	201.0	222.2	19.25

Air Side Pressure Drop (Inches WC)

0.04	0.06	0.12	0.20	0.30	0.41	0.67
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Air Side Pressure Drop (Inches WC)

0.08	0.13	0.27	0.43	0.63	0.85	1.38
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UNIT SIZE 18								
3-Row Coil								
GPM	Airflow, CFM							Waterside Head Loss (ft.wg.)
	1500	2000	3000	4000	5000	6000	8000	
	Heating Capacity (MBH)							
2.5	93.3	102.6	113.7	120.2	124.4	127.3	131.3	0.54
4	110.3	125.4	145.3	157.9	166.7	173.1	182.2	1.34
5	116.8	134.7	159.1	175.2	186.7	195.5	207.9	2.05
6	121.4	141.4	169.5	188.5	202.5	213.3	228.9	2.93
8	127.5	150.4	183.9	207.7	225.6	239.7	260.8	5.12
10	131.3	156.1	193.4	220.6	241.6	258.3	283.9	7.88
12	133.9	160.1	200.2	230.0	253.2	272.1	301.2	11.25
15	136.5	164.2	207.3	239.9	265.8	287.1	320.5	17.33

4-Row Coil								
GPM	Airflow, CFM							Waterside Head
	1500	2000	3000	4000	5000	6000	8000	Loss
	Heating Capacity (MBH)							(ft.wg.)
4.5	125.0	142.8	165.9	180.1	189.8	196.9	206.6	0.67
9	144.8	172.5	213.1	241.5	262.7	279.2	303.5	2.64
12	150.2	181.1	228.0	262.2	288.6	309.5	341.2	4.65
15	153.4	186.4	237.6	276.0	306.1	330.5	368.0	7.22
18	155.7	190.1	244.4	285.8	318.7	345.8	387.9	10.35
21	157.3	192.7	249.4	293.1	328.3	357.4	403.3	14.03
24	158.5	194.7	253.2	298.8	335.7	366.5	415.5	18.27
27	159.4	196.3	256.2	303.3	341.7	373.9	425.5	23.05

Air Side Pressure Drop (Inches WC)

0.13	0.20	0.40	0.64	0.94	1.27	2.07
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Air Side Pressure Drop (Inches WC)

0.17	0.27	0.53	0.86	1.25	1.70	2.76
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*** Notes:**

All capacities are based on 180°F entering water temperature and 55°F entering air temperature. For other air and water inlet temperature conditions, use the correction factors shown in Table 4 to multiply the given heating capacity for each size.

1 MBH = 1000 BTU/Hr. MBH Required = 0.00108 × CFM × Temp. Rise

Table 4. Capacity Correction Data for 1,2,3 and 4 Hot Water Reheat Coils.

Entering Air Temp. (°F)	Entering Water Temperature (°F)												Entering Air Temp. (°F)
	120	130	140	150	160	170	180	190	200	210	220		
50	0.54	0.62	0.71	0.79	0.87	0.96	1.04	1.12	1.21	1.29	1.38	50	
55	0.50	0.59	0.67	0.75	0.83	0.92	1.0	1.08	1.17	1.25	1.34	55	
60	0.47	0.55	0.63	0.71	0.79	0.88	0.96	1.04	1.13	1.21	1.30	60	
65	0.43	0.51	0.59	0.67	0.75	0.84	0.92	1.00	1.09	1.17	1.26	65	

Note:

1 MBH = 1000 BTU/Hr. MBH Required = 0.00108 × CFM × Temp. Rise

Table 5. Single Duct Supply Air Terminal Casing & Damper Leakage (in CFM).

Unit Size	Casing Leakage			Damper Leakage		
	1.0" WC	3.0" WC	6.0" WC	1.5" WC	3.0" WC	6.0" WC
4	1	2	3	4	5	6
6	1	2	3	4	6	11
8	1	2	3	5	7	10
10	1	2	3	6	7	10
12	1	2	4	8	12	19
14	2	3	5	6	10	16
16	2	4	7	13	21	38
18	3	6	12	98	154	305

Performance Notes on Leakage Data:

1. Tests conducted in accordance with AHRI 880-2011 and ASHRAE Standard 130-1996, "Methods of Testing for Rating Ducted Air Terminal Units".
2. All pressures in the tables above are based on inlet static pressure in inches of water gauge, in. W.G.
3. Airflows are given in cubic feet per minute (CFM).
4. All data is based on E.H. Price Limited Laboratory Test Files F3700 (casing leakage) and F398 (damper leakage).
5. Optional Reheat Leakage information is not included in the table.

Table 6. Discharge Sound Data for Single Duct Supply Air Terminal.

(Sound Power Levels, Lw dB, re 10⁻¹² Watts)

			125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
Unit Size	Airflow		Octave Band							Octave Band							Octave Band							Octave Band						
	cfm	L/s	2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7	
4	75	35	45	45	43	39	34	32		46	47	47	44	41	39		48	49	51	48	47	46		49	50	54	51	51	50	
	150	71	56	57	51	47	41	36		58	59	55	52	47	43		59	61	59	57	53	50		60	62	62	59	57	55	
	225	106	63	63	56	52	44	39		64	65	60	57	51	46		66	67	64	61	57	53		67	68	67	64	60	57	
	280	132	66	67	58	55	46	40		68	69	63	59	52	47		69	71	67	64	59	55		70	72	69	67	62	59	
6	125	59	46	45	44	39	35	34		49	49	49	44	42	41		52	53	54	49	49	48		54	56	57	52	53	52	
	250	118	55	54	51	47	40	38		58	58	56	52	47	45		61	62	61	57	53	52		63	65	64	60	57	56	
	375	177	60	59	55	51	43	40		63	63	60	56	49	47		66	68	65	61	56	54		68	70	69	64	60	58	
	500	236	63	63	58	54	44	42		67	67	63	59	51	49		70	71	68	64	58	56		72	74	72	67	62	60	
	630	297	66	66	60	57	46	43		69	70	66	62	53	50		73	74	71	67	59	57		74	77	74	70	63	61	
8	175	83	47	43	43	38	35	33		51	50	49	44	42	40		56	56	56	49	49	47		59	60	59	53	53	52	
	375	177	54	51	49	46	40	37		59	57	55	51	47	45		63	64	62	57	54	52		66	67	66	61	58	56	
	575	271	58	55	52	50	43	40		63	62	59	56	50	47		67	68	65	62	57	55		70	72	69	65	61	59	
	775	366	61	58	55	53	46	42		65	65	61	59	52	49		70	71	68	65	59	56		73	75	72	68	63	61	
	975	460	63	61	57	56	47	43		68	67	63	61	54	51		72	73	70	67	61	58		75	77	73	71	65	62	
	1115	526	64	62	58	57	48	44		69	68	64	63	55	51		74	75	71	69	62	59		76	79	75	72	66	63	
10	250	118	51	47	48	44	40	37		55	55	55	50	47	45		60	63	62	56	54	52		63	68	66	60	58	56	
	550	260	56	52	53	50	44	41		61	60	60	56	51	48		66	68	66	62	58	56		69	72	70	65	62	60	
	850	401	59	55	55	52	46	43		64	63	62	59	53	50		69	71	69	65	60	58		72	75	73	68	64	62	
	1150	543	61	57	57	55	48	45		66	65	64	61	55	52		71	72	70	67	62	59		74	77	74	70	66	63	
	1450	684	63	58	58	56	49	46		68	66	65	62	56	53		73	74	72	68	63	60		75	78	76	72	67	64	
	1745	824	64	59	59	57	50	47		69	67	66	64	57	54		74	75	73	70	64	61		77	80	77	73	68	65	
12	350	165	49	49	49	46	41	39		54	56	56	52	47	46		60	63	63	59	54	53		63	67	67	62	58	57	
	850	401	56	54	53	51	45	43		61	61	60	57	52	50		66	68	67	63	59	57		69	73	71	67	63	61	
	1350	637	59	57	56	53	48	45		65	64	63	59	55	52		70	71	70	66	62	59		73	75	74	69	66	63	
	1850	873	62	59	58	55	49	46		67	66	65	61	56	53		72	73	72	67	63	61		75	77	76	71	67	65	
	2350	1109	64	60	59	56	50	47		69	67	66	62	57	54		74	74	73	68	64	62		77	79	77	72	68	66	
	2515	1187	64	61	59	56	51	48		69	68	66	63	58	55		75	75	73	69	65	62		78	79	77	73	69	66	
14	500	236	51	49	48	46	41	38		58	57	55	53	48	46		65	64	62	59	54	53		69	68	65	63	59	58	
	1250	590	56	54	54	52	46	43		63	61	61	58	53	51		70	68	67	65	60	58		73	72	71	69	64	62	
	2000	944	59	56	57	55	49	46		65	63	64	61	56	53		72	70	70	68	63	61		76	74	74	71	67	65	
	2750	1298	60	57	59	57	51	47		67	64	66	63	58	55		74	72	73	70	65	62		78	76	76	73	69	67	
	3420	1614	61	58	61	58	53	48		68	65	67	65	60	56		75	73	74	71	67	63		79	77	78	75	71	68	

Table 6. Discharge Sound Data for Single Duct Supply Air Terminal.(Sound Power Levels, Lw dB, re 10⁻¹² Watts)

			125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
Unit Size	Airflow		Octave Band							Octave Band							Octave Band							Octave Band						
	cfm	L/s	2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7	
16	600	283	49	46	46	46	43	42		55	53	52	52	49	49		61	60	59	58	55	56		65	64	62	62	59	60	
	1400	661	55	51	52	51	48	46		62	58	58	57	54	53		68	65	65	63	60	59		71	70	69	67	64	63	
	2200	1038	59	54	55	54	50	48		65	61	62	60	56	54		71	68	68	66	63	61		75	72	72	70	66	65	
	3000	1416	61	56	57	56	52	49		67	63	64	62	58	56		74	70	70	68	64	62		77	74	74	71	68	66	
	3800	1793	63	58	59	58	53	50		69	65	65	63	59	57		75	72	72	69	66	63		79	76	76	73	69	67	
	4470	2110	64	59	60	58	54	51		71	66	67	64	60	57		77	73	73	70	66	64		80	77	77	74	70	68	
18	1500	708	55	53	51	51	48	45		60	58	57	57	53	50		65	64	63	63	58	55		68	67	66	66	60	59	
	3500	1652	65	62	61	60	57	53		70	68	67	66	62	59		75	73	73	71	67	64		78	76	76	75	70	67	
	5500	2596	70	67	66	64	63	58		75	73	72	70	67	63		80	78	78	76	72	69		83	82	81	79	75	72	
	7500	3540	74	71	70	68	66	61		79	76	76	73	71	67		84	82	81	79	76	72		87	85	85	82	79	75	
	8530	4026	75	72	71	69	67	63		80	78	77	75	72	68		85	83	83	80	77	73		88	86	86	84	80	76	

Performance Notes:

1. Tested in accordance with AHRI 880-2011 and ASHRAE Standard 130-1996: "Methods of Testing for Rating Ducted Air Terminal Units".
2. Airflow given in liters/second L/s; and cubic feet/minute, cfm.
3. Blank spaces "-" indicate sound power levels less than 20.
4. Pressure given in Pascals, (Pa) and inches of water gauge (in. w.g.).

Table 7. Radiated Sound Data for Single Duct Supply Air Terminals(Sound Power Levels, Lw dB, re 10⁻¹² Watts)

			125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
Unit Size	Airflow		Octave Band							Octave Band							Octave Band							Octave Band						
	cfm	L/s	2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7	
4	75	35	37	31	29	21	—	—		37	32	32	25	25	--		37	33	36	30	31	28		37	34	37	32	34	33	
	150	71	51	45	38	29	22	—		51	46	41	33	28	20		51	47	44	38	34	29		51	47	46	40	38	34	
	225	106	59	53	43	34	25	—		59	54	46	38	31	20		59	55	49	42	37	29		59	55	51	45	40	34	
	280	132	63	57	46	36	26	—		63	58	49	40	32	20		63	59	52	45	38	29		63	60	54	47	42	34	
6	125	59	41	33	31	27	23	—		44	37	35	31	29	25		47	41	38	36	35	33		48	44	40	38	38	38	
	250	118	50	43	39	33	27	—		52	47	43	37	32	26		55	52	46	42	38	35		57	54	48	44	42	40	
	375	177	55	49	44	37	29	—		57	53	47	41	34	27		60	58	51	45	40	35		62	60	53	47	44	40	
	500	236	58	53	47	39	30	—		61	58	51	43	36	28		64	62	54	48	42	36		65	64	56	50	45	41	
	630	297	61	57	50	41	31	—		64	61	53	45	37	28		66	65	57	50	43	37		68	68	59	52	46	41	
8	175	83	42	32	29	24	—	—		45	37	34	30	24	--		48	42	40	35	31	25		49	45	43	38	34	29	
	375	177	51	40	36	31	24	—		54	46	42	36	31	25		57	51	47	42	37	32		58	54	50	45	41	35	
	575	271	56	45	41	35	28	23		59	51	46	40	34	29		62	56	52	46	41	35		63	59	55	49	44	39	
	775	366	59	49	44	38	31	25		62	54	49	43	37	31		65	59	55	48	43	38		67	62	58	51	47	42	
	975	460	62	52	46	40	33	27		65	57	51	45	39	33		68	62	57	50	45	40		70	65	60	53	49	43	
	1115	526	64	53	47	41	34	28		67	58	53	46	40	34		70	63	58	51	46	41		71	66	61	55	50	45	
10	250	118	41	31	33	28	22	—		45	36	40	34	29	25		49	42	46	40	36	32		51	45	50	43	40	36	
	550	260	49	39	38	32	27	21		53	45	45	38	33	28		56	50	51	44	40	35		59	54	55	48	44	39	
	850	401	53	43	41	35	29	23		57	49	48	41	36	30		61	55	54	47	42	37		63	58	58	50	46	41	
	1150	543	56	47	43	36	30	24		60	52	50	42	37	31		63	58	56	49	44	38		66	61	60	52	48	42	
	1450	684	58	49	45	38	32	25		62	55	51	44	38	32		66	60	58	50	45	39		68	64	61	53	49	43	
	1745	824	60	51	46	39	33	25		64	57	53	45	39	32		67	62	59	51	46	40		70	66	63	55	50	44	
12	350	165	37	34	36	27	--	--		42	40	43	33	26	23		47	45	49	38	32	30		50	49	52	42	35	33	
	850	401	45	42	42	34	28	22		50	48	49	40	34	29		55	53	55	45	40	35		58	57	58	49	43	39	
	1350	637	50	46	45	37	32	25		55	52	52	43	38	31		60	58	58	49	44	38		63	61	61	52	47	41	
	1850	873	53	49	48	40	35	27		58	55	54	46	40	33		63	60	60	51	46	40		66	64	64	55	50	43	
	2350	1109	55	51	49	42	37	28		60	57	55	48	43	35		65	63	62	53	48	41		68	66	65	57	52	45	
	2515	1187	56	52	50	42	37	29		61	57	56	48	43	35		66	63	62	54	49	41		69	66	66	57	53	45	

Table 7. Radiated Sound Data for Single Duct Supply Air Terminals

(Sound Power Levels, Lw dB, re 10⁻¹² Watts)

			125 Pa (0.5" W.G.)							250 Pa (1.0" W.G.)							500 Pa (2.0" W.G.)							750 Pa (3.0" W.G.)						
Unit Size	Airflow		Octave Band							Octave Band							Octave Band							Octave Band						
	cfm	L/s	2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7		2	3	4	5	6	7	
14	500	236	43	37	35	28	22	—		48	43	41	33	27	—		54	50	47	39	32	26		57	53	51	42	35	29	
	1250	590	49	44	42	35	30	21		55	50	48	41	35	27		60	56	54	46	40	33		63	60	58	50	43	37	
	2000	944	52	47	45	39	34	25		58	53	51	44	39	31		63	59	57	50	44	37		67	63	61	53	47	41	
	2750	1298	54	49	47	41	37	28		60	56	54	47	42	34		66	62	60	52	47	40		69	65	63	56	50	43	
	3420	1614	56	51	49	43	39	30		62	57	55	49	44	36		67	63	61	54	49	42		70	67	65	58	51	45	
16	600	283	37	39	32	28	23	—		42	45	37	33	28	26		47	52	43	37	33	33		51	55	46	40	36	37	
	1400	661	45	45	40	36	31	26		51	51	45	40	36	32		56	58	51	45	42	39		59	61	54	48	45	42	
	2200	1038	50	48	44	40	36	29		55	55	49	44	41	35		60	61	55	49	46	42		63	65	58	52	50	46	
	3000	1416	53	50	47	43	39	31		58	57	52	47	44	37		63	63	58	52	49	44		67	67	61	55	53	48	
	3800	1793	55	52	49	45	41	32		60	58	55	49	46	39		66	65	60	54	52	46		69	68	63	57	55	49	
	4470	2110	57	53	50	46	43	34		62	60	56	51	48	40		67	66	62	55	53	47		70	70	65	58	57	50	
18	1500	708	49	46	40	34	29	23		52	50	44	37	31	26		55	54	48	39	33	29		57	57	50	41	34	31	
	3500	1652	61	56	52	48	44	37		64	60	56	50	46	40		67	65	60	53	48	43		69	67	62	54	49	45	
	5500	2596	68	62	58	55	52	44		71	66	62	58	54	47		74	70	66	60	56	50		75	73	68	62	57	52	
	7500	3540	72	66	63	60	58	49		75	70	67	63	60	52		78	74	70	65	62	56		80	76	73	67	63	57	
	8530	4026	74	67	65	62	60	51		77	71	68	65	62	54		80	76	72	67	64	58		82	78	75	69	65	59	

Performance Notes:

1. Tested in accordance with with AHRI 880-2011 and ASHRAE Standard 130-1996: "Methods of Testing for Rating Ducted Air Terminal Units".
2. Airflow given in liters/second L/s; and cubic feet/minute, cfm.
3. Blank spaces "—" indicate sound power levels less than 20.
4. Pressure given in Pascals, (Pa) and inches of water gauge (in. w.g.).

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Siemens Industry, Inc.
Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, IL 60089-4513
USA
+1 847-215-1000

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