10/23/2018 44OP-239338 Lab Supply Box Schedule.xlsx

Job Name ACC Rio Grande Reno. Entered By John Vorsten Siemens Job No 44OP-239338

Contractor Young & Pratt Inc. Engineer Shah Smith & Associates

		_		Min								r						
#	Tag	Qty	Max Primary (CFM)	Primary (CFM)	Inlet Dia	Reheat (CFM)	EAT (°F)	LAT (°F)	WC Capacity (MBH)	Differential PD (in. w.g.)	Fluid Flow (GPM)	FPD (ft. w.g.)	Rows	Max Coil APD (in. w.g.)	EWT (°F)	LWT (°F)	Coil Orientation	Siemens Part #
1	LS-5-2-01	1	2200	2000	14	2200	55.00	85.20	72.10	0.21	8.00	5.59	2L	0.54	140.00	121.70	Left	LGS-EC11-R-14-BB-B-T
2	LS-5-2-02	1	1035	765	10	1035	55.00	85.30	34.10	0.29	4.00	2.94	2L	0.46	140.00	122.70	Left	LGS-EC11-R-10-BB-B-T
3	LS-5-2-03	1	825	825	10	825	55.00	89.30	30.70	0.43	4.00	2.94	2L	0.32	140.00	124.40	Left	LGS-GX11-R-10-BB-B-T
4	LS-5-2-04	1	300	300	6	300	55.00	94.80	13.00	0.61	2.00	0.52	2L	0.14	140.00	126.90	Left	LGS-GX11-R-06-BB-B-T
5	LS-5-2-05	1	200	200	6	200	55.00	97.80	9.40	0.68	1.00	0.15	2L	0.07	140.00	121.20	Left	LGS-GX11-R-06-BB-B-T
6	LS-5-2-06	1	1020	735	10	1020	55.00	88.00	36.60	0.30	7.00	8.09	2L	0.45	140.00	129.40	Left	LGS-EC11-R-10-BB-B-T
7	LS-5-2-07	1	2000	2000	14	2000	55.00	86.90	69.10	0.29	8.00	5.59	2L	0.46	140.00	122.50	Left	LGS-GX11-R-14-BB-B-T
8	LS-5-3-01	1	1120	1120	12	1120	55.00	89.20	41.50	0.43	5.00	5.40	2L	0.32	140.00	123.20	Left	LGS-GX11-R-12-BB-B-T
9	LS-5-3-02A	1	2200	650	14	2200	55.00	85.70	73.20	0.21	9.00	6.92	2L	0.54	140.00	123.50	Left	LGS-EC11-R-14-BB-B-T
10	LS-5-3-02B	1	2200	650	14	2200	55.00	85.70	73.20	0.21	9.00	6.92	2L	0.54	140.00	123.50	Left	LGS-EC11-R-14-BB-B-T
11	LS-5-3-02C	1	2200	650	14	2200	55.00	85.70	73.20	0.21	9.00	6.92	2L	0.54	140.00	123.50	Left	LGS-EC11-R-14-BB-B-T
12	LS-5-3-02D	1	2200	650	14	2200	55.00	85.70	73.20	0.21	9.00	6.92	2L	0.54	140.00	123.50	Left	LGS-EC11-R-14-BB-B-T
13	LS-5-3-02E	1	2200	650	14	2200	55.00	85.70	73.20	0.21	9.00	6.92	2L	0.54	140.00	123.50	Left	LGS-EC11-R-14-BB-B-T
14	LS-5-3-03	1	1500	1090	12	1500	55.00	90.30	48.60	0.24	6.00	7.51	2L	0.51	140.00	120.60	Left	LGS-EC11-R-12-BB-B-T
15	LS-5-3-04	1	740	740	10	740	55.00	89.50	27.80	0.49	3.00	1.75	2L	0.26	140.00	121.30	Left	LGS-GX11-R-10-BB-B-T
16	LS-5-3-05A	1	2000	935	14	2000	55.00	86.90	69.10	0.29	8.00	5.59	2L	0.46	140.00	122.50	Left	LGS-EC11-R-14-BB-B-T
17	LS-5-3-05B	1	2000	930	14	2000	55.00	86.90	69.10	0.29	8.00	5.59	2L	0.46	140.00	122.50	Left	LGS-EC11-R-14-BB-B-T
18	LS-5-3-06	1	1220	1220	12	1220	55.00	87.60	43.20	0.39	5.00	5.40	2L	0.36	140.00	122.50	Left	LGS-GX11-R-12-BB-B-T

- 18 LS-5-3-06 1 1 1220 1220 12 1220 55.00 87.60 43.20 0.39 5.00

 1. Dashes (-) indicate NC values less than 20.

 2. Sound power levels are given in decibels (dB).

 3. Dashes (-) indicate sound power levels below 36-29-26-22-19-17 for each octave band; values below these sound power levels are considered below significance per AHRI 880.

 4. Minimum operating pressure is the minimum static pressure required to operate the terminal unit assembly at maximum primary flow with a wide open damper.

 5. Airflow is given in cubic feet per minute (cfm).

 6. Air pressure drop is given in inches water gauge (in. w.g.), and water pressure drop is given in feet of water gauge (ft. w.g.).

 7. Water coil performance is rated and certified in accordance with the latest edition of AHRI Standard 410.

				Min			1	I	I			1				1		
			Max Primary	Primary			_	-	_	_	-		_	_	_	_	_	
#	Tag	Qty	(CFM)	(CFM)	Inlet Dia													Siemens Part #
1	GE-6-2-01	1	1995	1665	14	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G865-R-14-AB-S
2	GE-6-2-02	1	1230	630	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G865-R-12-AB-S
3	GE-6-2-06	1	1215	600	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G865-R-12-AB-S
4	GE-6-2-07	1	2150	2150	14	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G904-R-14-AB-S
5	GE-6-3-01	1	995	995	10	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G904-R-10-AB-S
6	GE-6-3-03	1	1740	670	14		-	-	-	-	-	-	-	-	-		-	LGE-G865-R-14-AB-S
7	GE-6-3-05	1	740	0	10	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G865-R-10-AB-S
8	GE-6-3-06	1	1220	1220	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-G904-R-12-AB-S
9	LE-6-2-01	1	485	155	08	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-08-BA-S-T
10	LE-6-2-02	1	485	155	08	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-08-BA-S-T
11	LE-6-2-03	1	1320	1320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-GX10-R-12-AB-S
12	LE-6-2-06	1	485	155	08	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-08-BA-S-T
13	LE-6-3-01	1	125	125	06	-	-	-	-	-	-	-	-	-	-	-	-	LGE-GX10-R-06-BA-S
14	LE-6-3-02A	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
15	LE-6-3-02B	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
16	LE-6-3-02C	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-		LGE-E011-R-12-BA-S-T
17	LE-6-3-02D	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-		LGE-E011-R-12-BA-S-T
18	LE-6-3-02E	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
19	LE-6-3-02F	1	660	195	10	-	-	-	-	-	-	-	-	-	-	-		LGE-E011-R-10-BA-S-T
20	LE-6-3-02H	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
21	LE-6-3-021	1	1050 1050	320 320	12 12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T LGE-E011-R-12-BA-S-T
23	LE-6-3-02J	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
24	LE-6-3-02K	1	1050	320	12		-		-	-			H				-	LGE-E011-R-12-BA-S-T
25	LE-6-3-03A	1	485	155	08			-	-	-	_		-			_	-	LGE-E011-R-08-BA-S-T
26	LE-6-3-03B	1	485	155	08		-	-	-	-	-	_	-	-	_	-	-	LGE-E011-R-08-BA-S-T
27	LE-6-3-05A	1	485	155	08	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-08-BA-S-T
28	LE-6-3-05B	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
29	LE-6-3-05C	1	1050	320	12	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-12-BA-S-T
	LE-6-3-05D	1	785	240	10	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-10-BA-S-T
31	LE-6-3-05E	1	785	240	10	-	-	-	-	-	-	-	-	-	-	-	-	LGE-E011-R-10-BA-S-T
32	LE-7-2-05	1	350	350	08	-	-	-	-	-	-	-	-	-	-	-	-	LGE-GX10-R-08-BA-S-T
33	LE-7-2-08	1	260	260	06	-	-	-	-	-	-	-	-	-	-	-	-	LGE-GX10-R-06-BA-S-T
34	LE-7-3-04	1	890	890	10	-	-	-	-	-	-	-	-	-	-	-	-	LGE-GX10-R-10-BA-S
35	LS-5-3-05A	1	2000	935	14	-	-	-	-	-	-	-	-	-	-	-	-	LGS-EC11-R-14-BB-B-T

SIEMENS

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

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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	e 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 Measureme	ent
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 (Sensor only, per AMCA 610.)
Installation	Rigid duct of the same diameter 1 x
Requirements	duct diameters upstream from the sensor, or taper angle less than 30 degrees.
Airflow Control	
Damper Blade	Round single blade with 90 degree control.
Environmental	
Operating	40 to 120°F (4 to 50°C)
Temperature/% RH	0 to 95% non-condensing
Storage	-10 to 150°F (-23 to 65°C)
Temperature/% RH	0 to 95% non-condensing
Dimensions	
Sizes	See Figure 2 and Figure 3
Weight	20 to 32 lbs. (9.1 to 14.5 kg)

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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				

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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

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

Inlet Size	2-digit Number	Inlet Size	2-digit number
(in inches)		(in inches)	
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	_	_

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

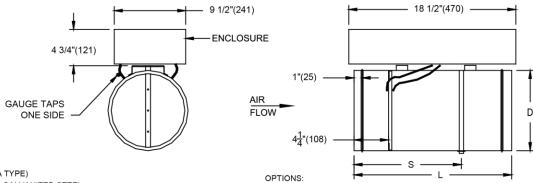
Casing Material	and Sensor Type						
AA	AA Galvanized steel casing with orifice sensor.						
AB	Galvanized steel casing with multi-point sensor. (Does not apply to inlet sizes 4, 11, or 18.)						
BA	Stainless steel casing with orifice sensor.						
CA	Teflon®-coated steel casing with orifice sensor.						

- 6. Select the End fitting, and append that letter to the part number:
 - S = Slip
 - F = Flange
- 7. (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

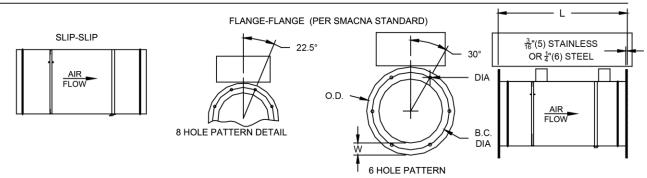
Dimensions



- NOTES: (AA TYPE)
 - 22 GA GALVANIZED STEEL
 - RIVETED DUCT CONSTRUCTION, SEALED WITH SILICONE.
 - TEFLON DAMPER BEARINGS
 - ZINC PLATED CONTINUOUS SHAFT WITH POSITION INDICATOR
 - ORIFICE RING FLOW SENSOR
 - NO DAMPER GASKET

- (BA TYPE) 20 GA 316L STAINLESS STEEL CONTINUOUSLY WELDED CONSTRUCTION C/W STAINLESS SHAFT.
- (CA TYPE) 18 GA COLD ROLLED STEEL c/w TEFLON COATING INSIDE. PAINTED OUTSIDE. c/w CONTINUOUS STAINLESS STEEL DAMPER SHAFT.
- CONTROLS ENCLOSURE, 22 GA, ZINC COATED
- CONTROLS FACTORY MOUNTED

OPTIONAL END CONFIGURATIONS



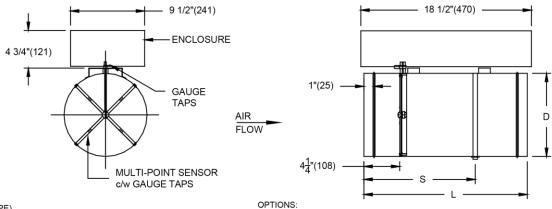
IMPERIAL/(METRIC)

NOM	D (mm)	L (mm)	S (mm)	# OF	FLANGE W	/ (mm)	HOLE DIA	(mm)	B.C. DIA	O.D. (mm)	
SIZE	D (IIIIII)	L (IIIII)	S (IIIII)	HOLES	BA	CA, AA	BA	CA, AA	(mm)	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.

FUM0497R2



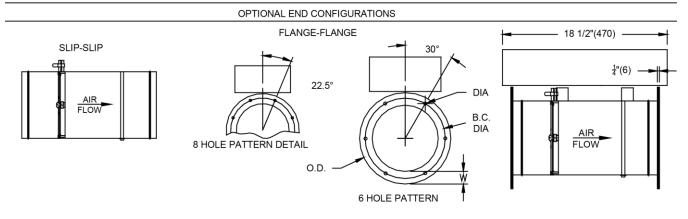
NOTES: (AA TYPE)

- 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

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

END CONFIGURATIONS AS SHOWN BELOW:

- SLIP SLIP
- FLANGE FLANGE



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

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

MANAGED

Table 1. Minimum Pressure Drop at Listed Airflow.

Unit Size	Flow		Minimum Pressure	Operating Drop	Unit Size	Flow		Minimum Pressure	Operating Drop
	CFM	Lps	IN WG	Pa		CFM	Lps	IN WG	Pa
	36	17	0.01	2.5		238	112	0.01	2.5
	44	21	0.02	5.0		273	129	0.01	2.5
4	87	41	0.06	15	10	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
	89	42	0.01	2.5		339	160	0.00	0.0
	98	46	0.02	5		393	185	0.00	0.0
6	196	92	0.04	10	12	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
	121	57	0.01	2.5		460	217	0.00	0.0
	134	63	0.01	3		535	252	0.00	0.0
7	267	126	0.03	8	14	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
	148	70	0.01	2.5		626	295	0.00	0.0
	175	83	0.01	3		698	329	0.00	0.0
8	349	165	0.04	10	16	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
	196	92	0.01	2.5		791	373	0.00	0.0
	221	104	0.01	3		884	417	0.00	0.0
9	442	209	0.04	10	18	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

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Table 2. Exhaust Terminal Casing Leakage in CFM.

	L	GE Casing	Leakage (Per ASHR	AE 130-199	96)								
		Imp	erial Units (C	FM, Inches W	ater)									
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														
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, N	lo Seals (Per A	SHRAE 130-1	1996)	
		Impe	erial Units (C	FM, Inches W	ater)		
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
		ı	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	E Blade Seal I	Leakage (VC	LARA; Per AS	HRAE 130-19	996)	
		Impe	erial Units (C	FM, Inches W	ater)		
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

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Table 4. Flow Range for Orifice Air Flow Sensor.

			Flow Range	for Sensor "A"			
Inlet Size	Maximum Fl	ow @ 1.0" dp	Minimum Flo	ow @ 0.02" dp	Flow Senso	or Inlet Area	Flow
	CFM.	Lps	CFM	Lps	SQ.FT	M ²	Coefficient
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 1	or Sensor "B"			
Inlet Size	Maximum Fl	ow @ 1.0" dp	Minimum Flo	w @ 0.02" dp	Flow Senso	or Inlet Area	Flow
	CFM.	Lps	CFM	Lps	SQ.FT	M2	Coefficient
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.

-	Pres Dr	sure op		125	Pa (0).5" W	.G.)			250	Pa (1	.0" W	.G.)			500	Pa (2	.0" W	.G.)			750	Pa (3	3.0" W	.G.)	
Unit	Airf	low		(Octave	Ban	d			(Octave	e Ban	d			(Octave	Ban	d			(Octave	e Ban	d	
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
-	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
4	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
-	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
6	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
6	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
	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
7	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

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-		sure		125	5 Pa (0).5" W	.G.)			250) Pa (1	.0" W	.G.)			500) Pa (2	.0" W	.G.)			750) Pa (3	3.0" W	.G.)	
Unit		low		(Octav	e Ban	d			(Octav	e Ban	d			(Octave	Ban	d			(Octave	e Ban	d	
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
	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
8	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
	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
9	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
	118	250	43 I 45	28	23	24	25	24	46 I 40	32	28	29	30	30	49 54	36	32	34	34	35	51 52	39	34	36	37	39
	260 401	550 850	45 46	33 36	32 37	30 34	30 33	29 31	48 49	37 40	37 41	35 39	35 38	34 37	51 52	41 44	41 46	40 44	40 43	40 42	53 54	44 47	43 48	43 47	43 46	43 45
10	543	1150	47	38	41	37	35	33	50	40	45	39 41	40	38	53	46	49	46	45 45	44	55	47	40 52	49	48	45 47
	684	1450	47	40	43	39	37	34	50	44	48	43	42	40	53	48	49 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
	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
11	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
	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
12	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
12	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
	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
14	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
	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 54	51 55	51 54	53	49
16	1038	2200	53	44	46	42	42	36	55	48	49	47	47	43	57	52 55	53	51	52 54	49	58	54	55 57	54 56	55 57	52
	1416 1793	3000 3800	55 56	47 49	49 51	44 46	44 45	39 40	57 58	51 53	52 54	49 51	49 50	45 46	59 60	55 56	55 57	54 55	54 55	51 52	60 61	57 59	57 59	56 58	57 58	54 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
	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
18	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
.5	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.).

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

				405	D- /	E 14	(C)				Do /1		C ,			Enc	D- /	0" 141	ć,		, - 	750	D- /^	0" 141	C /	
Unit	Δirf	low).5" W e Ban	•) Pa (1 Octave		•				Pa (2 Octave						Pa (3 Octave		•	
Size	Lps	cfm	2	3	4	5 5	6	7	2	3	4	5 5	6	7	2	3	4	5 5	6	7	2	3	4	5 5	6	7
	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
4	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
	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
6	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
	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
7	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
	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
8	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
	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
9	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
	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
10	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
	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
11	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 57	55 57	53	52	46	66	60	60	58	57 50	53	70	66	65	63	63	60	73	69	68	66	67	64
	701 165	1485 350	64 46	57 41	57 41	54 41	53 42	47 36	68 50	62 46	62 46	59 46	59 48	43	72 55	67 51	67 50	64 51	65 54	62 50	75 57	70 54	70 53	67 54	68 57	66 54
	401	850	56	51	51	49	48	43	60	56	56	40 54	4 0 54	43 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
12	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
12	1109	2350	67	61	62	58	56	4 9	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
	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
14	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
	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
16	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

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	4				Pa (0		•) Pa (1		,				Pa (2		•				•	.0" W	,	
Unit	Airf	IOW		•	Octave	Ban	a			•	Octavo	Bane	a			•	Octavo	Bane	a			(octave	e Ban	a	
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
	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
18	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
10	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

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 prepackaged 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

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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/ft3
	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	22 gauge, galvanized casing,
(optional)	Aluminum sine wave fins
	(thickness 0.0045") Copper tubes, 0.016"wall
	Copper tubes, 0.016 wall
	Meets ARI 410
Dimensions	
Sizes	See Figures 4, 5, 6 and 7
Weight	19 to 63 lbs. (8.6 to 28.6 kg)
Materials (outside air s	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	Rigid duct of the same diameter
Requirements	1 × 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 Tern	ninal
Pressure Loss	See Table 2
Environmental	
Operating (a)	40 to 120°F (4 to 50°C)
Temperature/% rh	0 to 95% non-condensing
Storage	-10 to 150°F (-23 to 65°C)
Temperature/% rh	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).

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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: LGSO575R14DBBO

Model Number	Control Package Number	Shaft/Coil Orientation	Inlet (Duct) Size	Reheat Coil Configuration	Lining	Construction	(Custom) Integral Attenuator
LGS	O575	R	14	DB	В	0	_
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	1				
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.

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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	550-819B	BACnet OAM - Off-board Air Module
	Module	DXR2.E17C-103B	Lab DXR BACnet IP Controller, 30 dp
		DXR2.E17CX-103B	Lab DXR BACnet IP Controller, 60 dp
		DXA.S04P1	Lab DXR Airflow Pressure Sensor 0-1"
		540-104N	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

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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)			
00	No coil.			
AB	1 row, Left			
AH	1 row, Left HIGH CAPACITY			
BB	2 rows, Left.			
ВН	2 rows, Left HIGH CAPACITY			
СВ	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			
НВ	4 rows, Right			

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

Standard	I Lining Options
В	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				
Α	Solid metal liner (M) with Agion Anit-Microbial coating				
Х	No liner in discharge casing				

7. Choose the Construction type:

O = Low Leakage

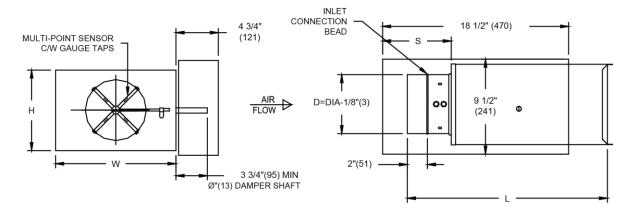
T = Low leakage (O) plus a transformer (120/24 CL.2) and a Disconnect Switch

- 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



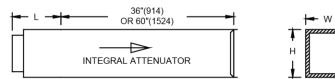
S.I. UNITS mm					IN	IPERIAL L	JNITS in	ches	
ОИТ	LET	INLET	LENGTH		OUTLET		INLET	LENGTH	
W	Н	D	L	S	W	Н	D	L	S
205	202	102	562		40		4	22 1/8	
305	203	152			12	8	6		
305	254	203	511	168	12	10	8	20.1/	6 ⁵ %
356	318	254	311	100	14	12 ½	10	20 1/8	0 78
406	381	305			16	15	12		
508	445	356	600	117	20	17 ½	14	23 %	4 ⁵ / ₈
610	457	406	000	'''	24	18	16	23 78	4 78

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

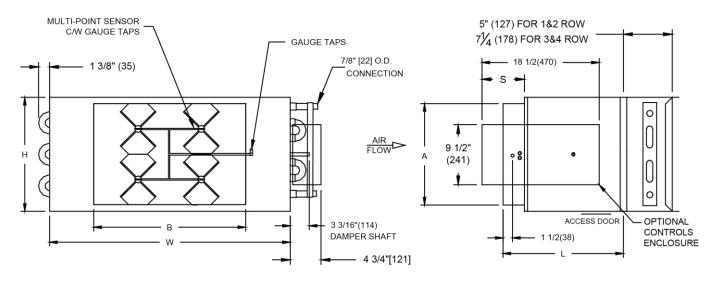
OPTIONS:

- 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					
OUT	LET	INI	LET	LENGTH		OUTLET INL		LET	LENGTH		
W	Н	В	Α	L	S	W	Н	В	Α	L	S
965	457	603	403	483	178	38	18	23 1/8	15 1/8	19	7

NOTES:

- LARGER ENCLOSURE REQUIRED FOR Q575 CONTROL PACKAGE.
- INTERNAL INSULATION 3/" (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



OPTIONS:

- 2 ROW WATER COIL - 1 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

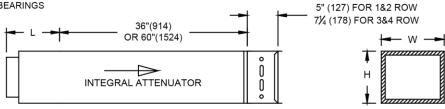
Figure 5. Laboratory Room Single Duct Supply Air Terminal Size 18 without Reheat

	S.I. UNITS mm				IMPERIAL UNITS inches						
оит	LET	INLET	LENGTH		OUTLET		OUTLET		INLET	LENGTH	
W	Н	D	L	S	W	Н	D	L	S		
205	202	102	562		40	8	4	22 1/8			
305	203	152			12	0	6				
305	254	203	511	168	12	10	8	20 1/8	6 ⁵ %		
356	318	254		"		100	14	12 ½	10	20 %	0 78
406	381	305			16	15	12				
508	445	356	600	117	20	17 ½	14	23 %	4 5%		
610	457	406	000	'''	24	18	16	23 78	4 78		

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

NOTES:

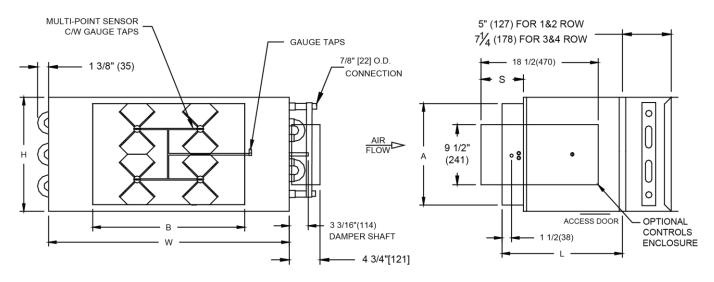
- INTERNAL INSULATION 3/" (119mm) FIBER FREE FOAM WHICH MEETS REQUIREMENTS OF NFPA 90A AND UL181.-
- 22GA ZINC COATED STEEL HOUSING. MECHANICALLY SEALED AND GASKETED.
- HAND OF HOT WATER COIL CONNECTIONS IS DETERMINED VIEWED FROM AIR INLET SIDE. RIGHT HAND IS SHOWN. LEFT HAND IS ALSO AVAILABLE.
- HOT 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
- ZINC PLATED STEEL DAMPER SHAFT WITH VISIBLE POST - 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							AL UNI	TS inch	es	
OUT	LET	INI	LET	LENGTH		OUT	LET	INI	LET	LENGTH	
W	Н	В	Α	L	S	W	Н	В	Α	L	S
965	457	603	403	483	178	38	18	23 1/8	15 1/8	19	7

NOTES:

- LARGER ENCLOSURE REQUIRED FOR Q575 CONTROL PACKAGE.
- INTERNAL INSULATION 3/" (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



OPTIONS:

- 2 ROW WATER COIL - 1 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.

	MAXIMUM FLOW @ 1.0"dp		MINIMUM FLOW @ 0.02"dp		FLOW SENSOR	INLET AREA	Flow	
INLET SIZE	CFM	L/S	CFM	L/S	SQ. FT	M2	Coefficient	
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(16×24)	7785	3674	1101	520	2.667	0.248	0.729	

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

Terminal	Ai	rflow	Without	V	Vith Hot Water Coi	ils (in. W.C.)	
Size	CFM	L/s	Reheat (inch W.C)	1 Row	2 Row	3 Row	4 Row
	75	35	0.01	0.02	0.03	0.03	0.04
04	125	59	0.01	0.03	0.05	0.07	0.08
04	225	106	0.01	0.05	0.11	0.16	0.21
	280	132	0.01	0.08	0.15	0.22	0.30
	125	59	0.01	0.03	0.05	0.07	0.08
00	250	118	0.01	0.11	0.18	0.24	0.30
06	375	177	0.01	0.24	0.36	0.48	0.59
	500	236	0.01	0.40	0.60	0.78	0.97
	175	83	0.01	0.03	0.05	0.07	0.09
08	375	177	0.01	0.08	0.15	0.23	0.30
UO	775	366	0.01	0.24	0.49	0.74	0.98
	975	460	0.01	0.35	0.72	1.08	1.43
	250	118	0.01	0.03	0.05	0.07	0.09
40	550	260	0.01	0.08	0.16	0.23	0.30
10	1150	543	0.01	0.25	0.51	0.76	1.01
	1450	684	0.01	0.36	0.75	1.11	1.48
	350	165	0.01	0.03	0.05	0.06	0.09
	380	401	0.01	0.09	0.19	0.27	0.36
12	1850	873	0.01	0.32	0.66	0.99	1.31
	2350	1109	0.01	0.48	0.98	1.47	1.96
	500	236	0.01	0.03	0.05	0.07	0.09
	1250	590	0.01	0.09	0.19	0.28	0.36
14	2000	944	0.01	0.20	0.40	0.60	0.80
	2750	1298	0.01	0.33	0.68	1.02	1.36
	600	283	0.01	0.03	0.05	0.07	0.09
	1400	661	0.01	0.08	0.17	0.25	0.33
16	3000	1416	0.01	0.28	0.58	0.87	1.16
	3800	1793	0.01	0.42	0.86	1.29	1.72
	1500	708	0.01	0.05	0.09	0.14	0.18
	3500	1652	0.01	0.17	0.35	0.53	0.70
18	5500	2596	0.01	0.36	0.74	1.11	1.48
	7500	3540	0.01	0.61	1.25	1.86	2.48

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Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 04, 06

	1-Row Coil												
GPM		Waterside Head											
	75	Loss											
		ı	Heating	Capaci	ty (MBH)	l.	(ft.wg.)					
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						
		Airflow, CFM									
GPM			All	now, C	1 141			Head			
GFW	75	Loss									
		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

	UNIT SIZE 04, 06											
	3- Row Coil											
		Waterside										
GPM		Head										
0	75	75 100 200 300 400 500 600										
			Heating	Capaci	y (MBH)		(ft.wg.)				
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			Aiı	flow, C	FM			Waterside Head					
GFIVI	75	100	200	300	400	500	600	Loss					
		(ft.wg.)											
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										
СРМ	Airflow, CFM										
GFIN	150	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										
			Δiı	flow. C	FM .			Waterside			
GPM			All	now, c				Head			
GFIVI	150	350	1100	Loss							
			l.	(ft.wg.)							
0.6	10.2	14.7	16.4	17.7	18.5	19.2	19.8	0.06			
1.0	11.4	11.4 17.5 20.2 22.1 23.6 24.7 25.7									
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	13.3 23.0 28.0 32.0 35.3 38.1 40.5									
6.0	13.4	23.3	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

Air Side Pressure Drop (Inches WC)

						•
0.03	0.13	0.23	0.36	0.51	0.68	0.87

^{*} Notes:

Table 3. Hot Water Reheat Coil Capacities.*

5.71

8.11

UNIT SIZE 08

	3-Row Coil											
		Airflow, CFM										
GPM		7.11.11G-11, G1 III										
GPIVI	150	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	15.8 27.8 33.8 38.5 42.2 45.2 47.8										
3.0	15.9	28.4	50.1	2.14								
4.0	16.1	20.3	36.2	/11 7	46.2	50.0	53.3	3 71				

UNIT SIZE 08

	4-Row Coil										
	Airflow, CFM										
GPM	,										
GFIWI	150	350	1100	Loss							
		I		(ft.wg.)							
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	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)

51.8

53.1

54.4

56.9

						•
0.05	0.19	0.35	0.54	0.77	1.02	1.31

42.9

43.7

47.7

48.8

Air Side Pressure Drop (Inches WC)

0.06	0.26	0.46	0.72	1.02	1.36	1.74

UNIT SIZE 10

	UNIT SIZE 10										
	1-Row Coil										
	Airflow, CFM										
GPM			All	, 0				Head			
GFW	200	400	600	800	1000	1400	1600	Loss			
		ı	Heating	Capacit	ty (MBH)		(ft.wg.)			
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	1.9 17.3 21.0 23.9 26.2 29.9 31.3									
7.0	11.9	17.5	31.9	4.74							
8.0	12.0	17.6	21.4	24.4	26.9	30.7	32.3	6.13			

UNIT SIZE 10

	2-Row Coil										
GPM			Waterside Head								
GPIVI	200	400	1600	Loss							
		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)

				• •		•
0.01	0.04	0.08	0.13	0.19	0.33	0.42

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										
								Head				
	200	400	600	800	1000	1400	1600	Loss				
		ı	Heating	Capaci	ty (MBH)		(ft.wg.)				
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				

UNIT SIZE 10

	4-Row Coil										
		Waterside									
GPM		Head									
GFIVI	200	400	600	800	1000	1400	1600	Loss			
			Heating	Capacit	у (МВН)		(ft.wg.)			
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)

0.04	0.13	0.25	0.41	0.59	1.04	1.30

Air Side Pressure Drop (Inches WC) 0.06 | 0.17 | 0.34 | 0.54 | 0.79 | 1.39 | 1

* Notes:

5.0

6.0

16.2

16.3

29.8

30.2

37.1

37.7

Table 3. Hot Water Reheat Coil Capacities.*

LINIT SIZE 12

	UNIT SIZE 12											
1-Row Coil												
GPM		Waterside Head										
	400	2500	Loss									
			Heating	Capacit	у (МВН)	l.	(ft.wg.)				
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				

UNIT SIZE 12

	2-Row Coil										
		Airflow, CFM									
GPM											
01 141	400	600	800	1200	1600	2000	2500	Loss			
		l	Heating	Capacit	y (MBH)		(ft.wg.)			
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)

0.02	0.04	0.07	0.15	0.24	0.36	0.52

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										
	400	600	800	1200	1600	2000	2500	Loss				
			leating	Capacit	у (МВН)		(ft.wg.)				
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				

UNIT SIZE 12

	4-Row Coil											
		Airflow, CFM										
GPM		Head										
0	400	600	800	1200	1600	2000	2500	Loss				
		l	Heating	Capacit	у (МВН)	•	(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)

0.08 0.15 0.24	0.47 0.7	7 1.11	1.62	l
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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										
		Airflow, CFM									
GPM	500	Head Loss									
			Heating	Capacit	y (MBH)		(ft.wg.)			
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			

UNIT SIZE 14

	2-Row Coil												
			٨١٠	flow C	EM			Waterside					
GPM		Airflow, CFM											
GFW	500	800	1200	1700	2200	2700	3400	Loss					
			Heating	Capacit	у (МВН)	l.	(ft.wg.)					
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	42.1 57.0 72.1 86.4 97.6 106.8 117.3											
10.0	42.4	57.5	72.9	87.6	99.1	108.6	119.5	13.09					

Air Side Pressure Drop (Inches WC)

	0.02	0.04	0.08	0.14	0.22	0.31	0.46
--	------	------	------	------	------	------	------

Air Side Pressure Drop (Inches WC) 0.04 | 0.09 | 0.17 | 0.30 | 0.46 | 0.65 | 0.9

* Notes:

Table 3. Hot Water Reheat Coil Capacities.*

UNIT SIZE 14

	LINIT SIZE 1/

0.08

	3-Row Coil												
		Waterside Head											
GPM	500	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					

	4-Row Coil												
		Waterside Head											
GPM	500	500 800 1200 1700 2200 2700 3400											
		Heating Capacity (MBH)											
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					

All v	olue Fie	SSUIE L	nop (iii	THES AND	•)
0.17	0.34	0.60	0.93	1.31	1.92

UNIT SIZE 16

UNIT SIZE 16

	1-Row Coil											
		Airflow, CFM										
GPM	· ·											
0	600	1000	1500	2000	2500	3500	4400	Loss				
		l	Heating	Capacit	у (МВН)		(ft.wg.)				
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	32.1 41.9 50.8 57.5 63.0 71.5 77.4										
10.0	32.5	42.6	51.8	58.8	64.5	73.5	79.8	19.00				

	2-Row Coil											
			Δiı	flow, C	FM			Waterside				
GPM		·, • ·										
01 141	600	1000	1500	2000	2500	3500	4400	Loss				
		l	Heating	Capaci	у (МВН)		(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	50.2 69.4 87.2 100.9 112.1 129.4 141.4										
10.0	50.5	70.1	88.3	102.5	114.0	132.0	144.5	14.44				

					hes WC	,
0.02	0.04	0.08	0.14	0.20	0.36	0.53

Air Side Pressure Drop (Inches WC)

0.04 | 0.09 | 0.18 | 0.29 | 0.42 | 0.74 | 1.09

UNIT SIZE 16

UNIT SIZE 16

	3-Row Coil												
		Airflow, CFM											
CDM	GPM												
GFW	600	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					

	4-Row Coil												
			Δiı	flow C	EM			Waterside					
GPM		Airflow, CFM											
GFW	600	1000	1500	2000	2500	3500	4400	Loss					
		ı	Heating	Capacit	у (МВН)		(ft.wg.)					
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	70.5 105.6 141.1 170.0 194.3 233.4 261.1											
27.0	70.6	106.0	141.7	171.0	195.7	235.5	263.9	20.53					

	Air S	ide Pre	ssure D	rop (Inc	hes WC	;)
0.06	0.14	0.27	0.44	0.63	1.11	1.64

					ches WC	•
.08	0.18	0.36	0.58	0.84	1.49	2.18

Notes:

Table 3. Hot Water Reheat Coil Capacities.*

0.08

UNIT SIZE 18

	1-Row Coil											
GPM		Airflow, CFM										
GFIWI	1500	2000	3000	4000	5000	6000	8000	Loss				
		ı	Heating	Capaci	ty (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										
	Waterside										
GPM		Airflow, CFM Head									
GFIVI	1500	2000	3000	4000	5000	6000	8000	Loss			
			Heating	Capacit	у (МВН)	l.	(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
		-	INIT CIT	7E 10		

Air S	Air Side Pressure Drop (Inches WC)										
0.13	0.13 0.27 0.43 0.63 0.85 1.38										
	UNIT SIZE 18										

	3-Row Coil											
		Airflow, CFM										
CDM												
GPM	1500	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				

	4-Row Coll											
		Airflow, CFM										
GPM												
GPIVI	1500	2000	3000	4000	5000	6000	8000	Loss				
			Heating	Capacit	у (МВН)		(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				

	Air S	ide Pre	ssure D	rop (Inc	hes WC)
12	0.20	0.40	0.64	0.04	1 27	-

239.9 265.8

287.1

320.5

17.33

164.2

207.3

136.5

0.13	0.20	0.40	0.64	0.94	1.27	2.07

					ches WC	•
0.17	0.27	0.53	0.86	1.25	1.70	2.76

159.4 196.3 256.2 303.3 341.7

373.9 425.5

23.05

15

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												Entering
Air Temp.					Enterin	ng Water	Tempe	rature (°	F)			Air Temp.
(°F)												(°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 = $0.00108 \times CFM \times Temp$. Rise

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^{*} Notes:

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

		Casing Leakag	е	Damper Leakage								
Unit Size	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.)												
1.1-14	۸:۵	9									•						•				Octave Band						
Unit		low	_			e Band		7	_		Octav			7	_		Octave			7	_					7	
Size	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	
	75 450	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	
4	150 225	71	56	57 63	51	47 52	41	36 39	58	59 65	55 60	52 57	47	43	59	61 67	59	57	53	50	60	62 68	62	59	57	55 57	
		106	63		56		44		64	65		57 50	51	46	66		64	61	57 50	53 55	67		67	64	60		
	280 125	132 59	66 46	67	58	55 39	46 35	40 34	68	69 49	63 49	59	52 42	47	69	71 53	67 54	64	59	55 48	70 54	72 56	69 57	67 52	62 53	59 52	
			_	45	44				49			44		41	52			49	49		_						
	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	
6	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	
	500 630	236 297	63	63	58	54 57	44	42	67	67 70	63	59	51	49 50	70	71 74	68 71	64	58 50	56	72	74 77	72 74	67 70	62	60 61	
	175		66 47	66 43	60	57 38	46	43 33	69 51	70 50	66 49	62	53 42	50	73 56	74 56	71 56	67	59	57 47	74 59	77	74 59	70 53	63 53	61 52	
	375	83 177	54	43 51	43 49		35	33 37	_			44		40	63		62	49 57	49 54	47 52	66	60					
8	575	271	54 58	55	49 52	46 50	40 43	37 40	59 63	57 62	55 59	51 56	47 50	45 47	67	64 68	65	57 62	54 57	52 55	70	67 72	66 69	61 65	58 61	56 59	
0		366								62 65							68										
	775 975	366 460	61 63	58 61	55 57	53 56	46 47	42 43	65 68	67	61 63	59 61	52 54	49 51	70 72	71 73	70	65 67	59 61	56 58	73 75	75 77	72 73	68 71	63 65	61 62	
	1115	526	64	62	58	57	48	43 44	69	68	64	63	55	51	74	75	71	69	62	59	76	77 79	75	72	66	63	
	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	40	41	61	60	60	56	51	48	66	68	66	62	58	56	69	72	70	65	62	60	
10	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	
10	1150	543	61	57	57	55	48	45	66	65	64	61	55	52	71	72	70	67	62	59	74	77	73 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	
	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	
12	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	
-	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	
14	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	
			1						1						1						1						

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

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

				125	5 Pa (0	0.5" W	.G.)		250 Pa (1.0" W.G.)							500) Pa (2	2.0" W	.G.)	750 Pa (3.0" W.G.)							
Unit	Airf	low	Octave Band							Octave Band							Octave	e Band	ł		Octave Band						
Size	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	
	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	
16	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	
	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	
18	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)

								(00	Julia		,ı Lov	C10, L	.w ab	, 10 1	, ,_	vvali	3)										
				125	Pa (0).5" V	/.G.)			250	Pa (1	1.0" V	V.G.)			500	Pa (2	2.0" W	/.G.)		750 Pa (3.0" W.G.)						
Unit	Airf	low		(Octave	e Ban	ıd			C	Octav	e Bar	nd			C)ctave	e Ban	d		Octave Band						
Size	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	
	75	35	37	31	29	21	_	_	37	32	32	25	25		37	33	36	30	31	28	37	34	37	32	34	33	
4	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	
	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	
6	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	
	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	
8	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	
	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	
10	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	
	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	
12	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	

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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 Airflow Octave Band Octave Band Octave Band Octave Band Size cfm L/s

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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