# **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, 0.010 waii
	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 Term	
Pressure Loss	See Table 2
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





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

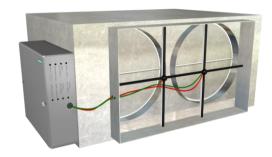


Figure 3. High Capacity Single Duct Supply Air Terminal Components.

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

<sup>\*</sup>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 follo	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		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	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 I	Custom Lining Options		
F	Foil-faced fiberglass		
М	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

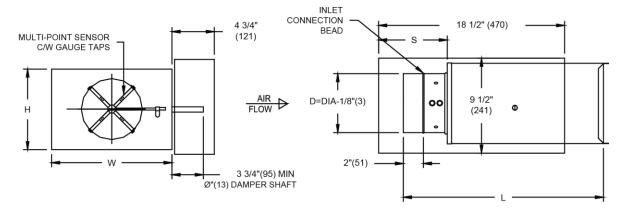
T = Low leakage (O) plus a transformer (120/24 CL.2) and a Disconnect Switch

- 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**



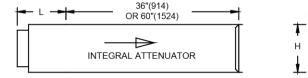
	S.I. UN	IITS mm			IMPERIAL UNITS inches					
ОИТ	LET	INLET	T LENGTH OUTLET		INLET	LENGTH				
W	Н	D	L	S	W	Н	D	L	S	
205	202	102	562		40		4	22 1/8		
305	203	152			12	8	6	ZZ 78		
305	254	203	511	168	12	10	8	20.1/	6 %	
356	318	254	311	100	14	12 ½	10	20 1/8	0 78	
406	381	305			16	15	12			
508	445	356	600	117	20	17 ½	14	23 %	4 %	
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:**

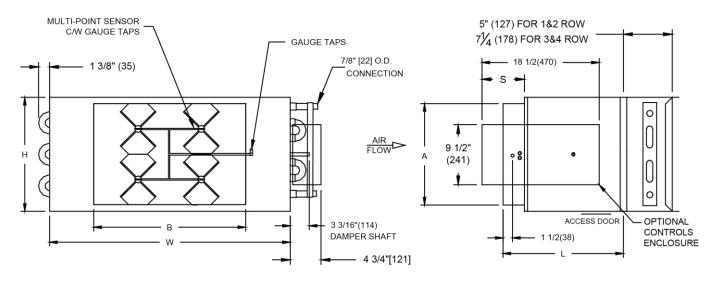
- CONTROLS FACTORY MOUNTED.
- 22GA ZINC COATED STEEL CONTROLS ENCLOSURE.
- 3 FT DISCHARGE ATTENUATOR (INTEGRAL TO LGS CASING)
- 5 FT DISCHARGE ATTENUATOR (INTEGRAL TO LGS CASING)



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

**-** W



	S.I.	UNITS	mm			IMPERIAL UNITS inches					
OUT	LET	INI	LET	LENGTH		OUT	OUTLET INLET LE			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

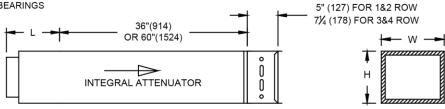
Figure 5. Laboratory Room Single Duct Supply Air Terminal Size 18 without Reheat

	S.I. UN	IITS mm			IMPERIAL UNITS inches					
оит	OUTLET		LENGTH		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 <sup>5</sup> %	
356	318	254	311	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:

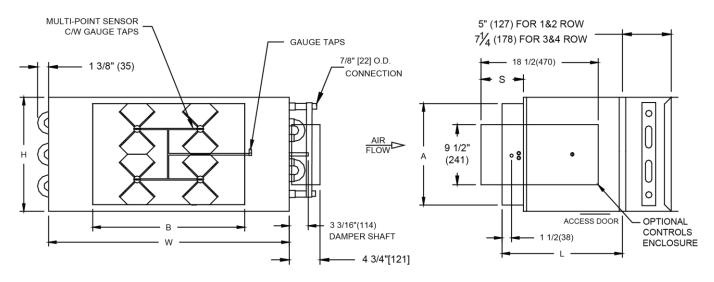
- INTERNAL INSULATION 3/" (119mm) FIBER FREE FOAM WHICH MEETS REQUIREMENTS OF NFPA 90A AND UL181.-
- 22GA ZINC COATED STEEL HOUSING. MECHANICALLY SEALED AND GASKETED.
- HAND OF HOT WATER COIL CONNECTIONS IS DETERMINED VIEWED FROM AIR INLET SIDE. RIGHT HAND IS SHOWN. LEFT HAND IS ALSO AVAILABLE.
- HOT 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						IMPERIAL UNITS inches				
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 F	MAXIMUM FLOW @ 1.0"dp		@ 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	A	irflow	Without	v	Vith Hot Water Co	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	2 Row 0.03 0.05 0.11 0.15 0.05 0.18	0.78	0.97
	175	83	0.01	0.03	0.05	0.07	0.09
00	375	177	0.01	0.08	0.15	0.23	0.30
08	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
40	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		0.87	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		0.53	0.70
18	5500	2596	0.01	0.36		1.11	1.48
	7500	3540	0.01	0.61		1.86	2.48

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Table 3. Hot Water Reheat Coil Capacities.\*

#### **UNIT SIZE 04, 06**

	OINT OILL 04, 00											
				1-Row	Coil							
GPM		Airflow, CFM										
GFIVI	75	100	200	300	400	500	600	Loss				
		(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						
			Δi	flow, C	EM			Waterside			
GPM			All	now, c	ı ı <b>v</b> ı			Head			
GFIVI	75 100 200 300 400 500 600							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)

				- 1- (		•
0.02	0.03	0.08	0.16	0.26	0.38	0.51

#### UNIT SIZE 04, 06

				3- Row	Coil							
GPM			Aiı	rflow, C	FM			Waterside Head				
GFW	75	100	200	300	400	500	600	Loss				
	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			Aiı	flow, C	FM			Waterside Head				
GFIVI	75	Loss										
		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			Aiı	rflow, C	FM			Waterside Head				
GPIN	150	350	500	650	800	950	1100	Loss				
		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	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
-							

## 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		Alliow, or in										
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	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	20.3	36.2	/11 7	46.2	50.0	53.3	3 71				

#### **UNIT SIZE 08**

	4-Row Coil											
	Airflow, CFM											
GPM		7.11.110 H, OT III										
GFIWI	150	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)

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	,										
GFW	200	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			

#### **UNIT SIZE 10**

	2-Row Coil											
GPM		Waterside Head										
GPIVI	200	200   400   600   800   1000   1400   1600										
		ı	Heating	Capacit	у (МВН	)	U.	(ft.wg.)				
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												
	Airflow, CFM												
GPM		AII IIOW, CFIVI											
GFIVI	200	200   400   600   800   1000   1400   1600											
			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		Airflow, CFM												
	400	400   600   800   1200   1600   2000   2500												
			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			7 111					Head					
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	400   600   800   1200   1600   2000   2500										
			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												
			Waterside										
GPM		Airflow, CFM											
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
----------------	----------	--------	------	---

# Air Side Pressure Drop (Inches WC)

/ c.ac : .ccca.c z.cp (cccc)										
0.10	0.20	0.32	0.63	1.02	1.49	2.16				

#### **UNIT SIZE 14**

				1-Row	Coil						
	Airflow, CFM										
GPM	500	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			

#### **UNIT SIZE 14**

	2-Row Coil											
			٨١٠	flow, C	EM			Waterside				
GPM		7.11.10.11, OF III										
GFW	500	500 800 1200 1700 2200 2700 3400										
		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	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)

	0.02	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											
	Airflow, CFM											
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					
	Airflow, CFM									
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										
			Δiı	flow, C	FM			Waterside			
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	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			

				2-Row	Coil			
			Δiı	flow, C	FM			Waterside
GPM			All	, 0				Head
01 141	600	1000	1500	2000	2500	3500	4400	Loss
			(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	

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								
			٨١٠	flow, C	EM			Waterside		
GPM		7								
GFW	600	1000	1500	2000	2500	3500	4400	Loss		
		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												
			Waterside										
GPM			Head										
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	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						

					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**

	3 3. <b></b> 10												
1-Row Coil													
GPM		Waterside Head											
GFIWI	1500	2000	3000	4000	5000	6000	8000	Loss					
		Heating Capacity (MBH)											
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		Head										
GFIVI	1500	2000	3000	4000	5000	6000	8000	Loss				
		(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		
LIMIT SIZE 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											
			Waterside									
CDM		Airflow, CFM										
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			Head									
GPIVI	1500	2000	3000	4000	5000	6000	8000	Loss				
		(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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<sup>\*</sup> 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.)											012		.ə <i>)</i> ) Pa (2	2 N" \/\	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 57	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	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	Airflow 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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