



AIR ZONE INDUSTRIES, INC

Series: HDT / VDT-FC

ETL CERTIFIED

Double Wall Casing Option

8 Standard Sizes

600 to 8,800 CFM

Quality Construction

Quiet Operation

Indoor or Outdoor Design

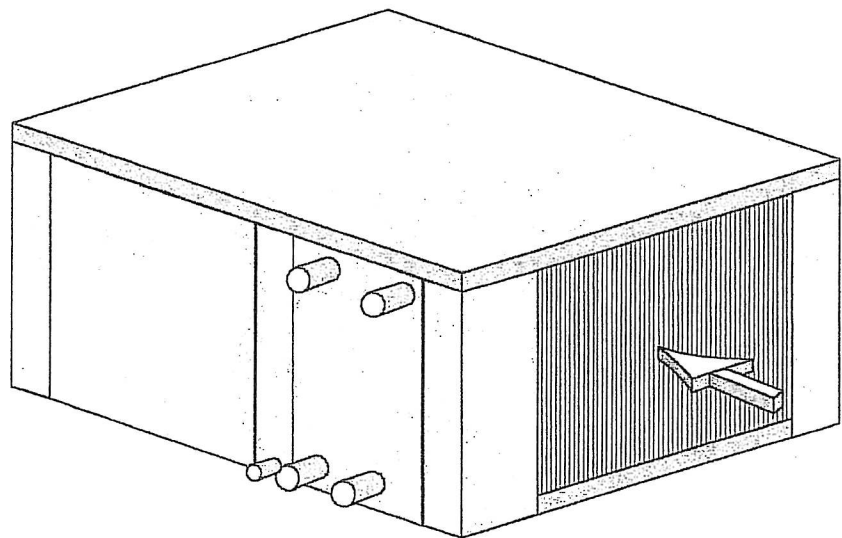
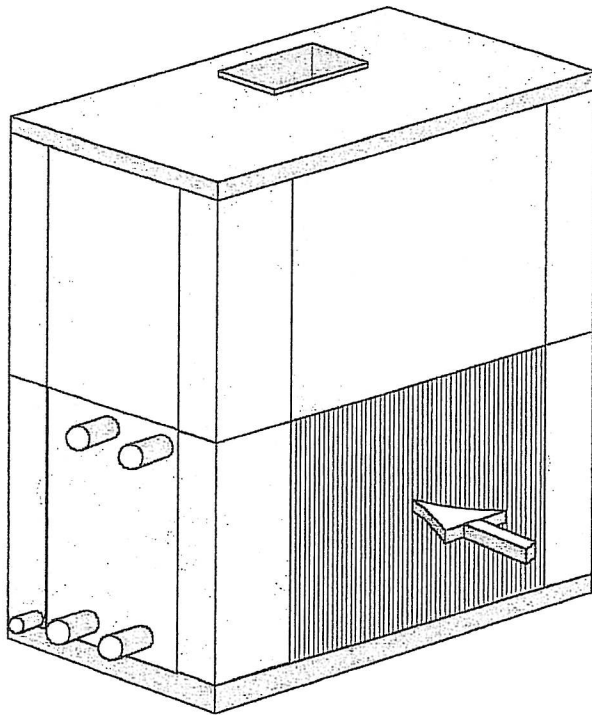
CW or DX Cooling with

Electric, Water or Steam Heat

Stainless Steel Drain Pan

Internal Isolation Optional

Valve & Piping Optional



PHYSICAL DATA

STANDARD COIL DATA

MODEL / SIZE		02	03	04	06	08	10	12	16
COIL SIZE	Large Coil Face Area	2.08	3.02	4.06	5.97	8.06	10.07	12.08	16.11
	Fin Height X Fin Width	15.0 x 20.0	15.0 x 29.0	15.0 x 39.0	20.0 x 43.0	20.0 x 58.0	25.0 x 58.0	30.0 x 58.0	40.0 x 58.0
	Medium Coil Face Area	1.74	2.52	3.39	5.23	7.05	9.06	11.08	14.1
	Fin Height X Fin Width	12.5 x 20.0	12.5 x 29.0	12.5 x 39.0	17.5 x 43.0	17.5 x 58.0	22.5 x 58.0	27.5 x 58.0	35.0 x 58.0
	Small Coil Face Area	1.39	2.01	2.71	4.48	6.04	8.06	10.07	12.08
	Fin Height X Fin Width	10.0 x 20.0	10.0 x 29.0	10.0 x 39.0	15.0 x 43.0	15.0 x 58.0	20.0 x 58.0	25.0 x 58.0	30.0 x 58.0

- Notes:** 1. Coils of intermediate sizes are available consult factory.
2. Face & By-Pass coil application requires the use of the small coil.

STANDARD CFM BASED ON LARGE COIL

MODEL / SIZE		02	03	04	06	08	10	12	16
CFM LARGE COIL	300 FPM Face Velocity	624	906	1218	1791	2418	3021	3624	4833
	350 FPM Face Velocity	728	1057	1421	2090	2821	3525	4228	5639
	400 FPM Face Velocity	832	1208	1624	2388	3224	4028	4832	6444
	450 FPM Face Velocity	936	1359	1827	2687	3627	4532	5436	7250
	500 FPM Face Velocity	1040	1510	2030	2985	4030	5035	6040	8055
	550 FPM Face Velocity	1144	1661	2233	3284	4433	5539	6644	8861

- Notes:** 1. Maximum coil face velocity is 550 FPM for effective moisture control.

STANDARD FAN DATA

MODEL / SIZE		02	03	04	06	08	10	12	16
FAN SIZE	Standard Fan	9 - 4	9 - 7	9 - 7	9 - 9	10 - 10	12 - 12	15 - 11	15 - 15
	Alternate Fan	9 - 7	9 - 9	9 - 9	10 - 10	12 - 12	15 - 11	15 - 15	18 - 18

- Notes:** 1. Non-standard fans may be selected subject to factory approval.

STANDARD FILTER DATA

MODEL / SIZE		02	03	04	06	08	10	12	16
FLAT SECT.	Nominal Face Area	2.78	5.56	5.56	8.00	10.00	10.00	14.00	16.62
	(Qty) 12" x 24"					1	1	3	
	(Qty) 24" x 24"				2	2	2	2	
	(Qty) 20" x 20"	1	2	2					6

MODEL / SIZE		02	03	04	06	08	10	12	16
LOW VEL. SECT.	Nominal Face Area	5.56	11.12	11.12	16.00	20.00	20.00	28.00	33.24
	(Qty) 12" x 24"					2	2	6	
	(Qty) 24" x 24"				4	4	4	4	
	(Qty) 20" x 20"	2	4	4					12

MODEL / SIZE		02	03	04	06	08	10	12	16
HIGH EFF. SECT.	Nominal Face Area	2.78	5.56	5.56	8.00	10.00	10.00	14.00	16.62
	(Qty) 12" x 24"					1	1	3	
	(Qty) 24" x 24"				2	2	2	2	
	(Qty) 20" x 20"	1	2	2					6

- Notes:** 1. Combination Mixing & Low Velocity Filter Section requires the same filters as shown for the Low Velocity Section.
2. Final filtered downstream of fan require a diffuser section.

DESIGN DATA

ARI* CAPACITY RATINGS

MODEL	TONS (1)	CFM (2)	COOLING (3)	HEATING (4)	HP (5)	dBa (6)
02	2	800	29.10	33.40	1/2	57
03	3	1200	39.83	51.04	3/4	59
04	4	1600	56.18	69.57	1	60
06	5	2400	82.46	104.18	1 1/2	63
08	7.5	3200	111.32	135.14	2	64
10	10	4000	140.80	172.19	2	64
12	15	4800	171.08	205.96	3	66
16	20	6400	224.02	272.27	5	67

Notes:

* In accordance with ARI

1. Nominal tons of cooling capacity, based on standard air see notes 2 & 3 below.
2. Based on standard air at 70 degree f, 0' elevation & 0.075 air density in accordance AMCA.
3. Standard 4 row coil with 80/67 EAT and 45-55 CW and standard air, see note 2 above.
4. Standard 1 row coil with 55 EAT and 180-160 HW and standard air, see note 2 above.
5. Operating at 1.75" WG, TSP with standard air, see note 2 above.
6. DBA, 10' from unit with open return and ducted outlet based on FC fan and standard air, see 2 above.

INCREASED CAPACITY

- 6 or 8 Row CW or DX Coils and various fin series provide cooling capacities to meet any requirements.
 2 Row HW or Steam Coils and various fin series provide heating capacities to meet any requirements.
 A maximum of 8 rows of cooling and heating coils may be installed in the standard coil section.

COMPONENT PRESSURE LOSS

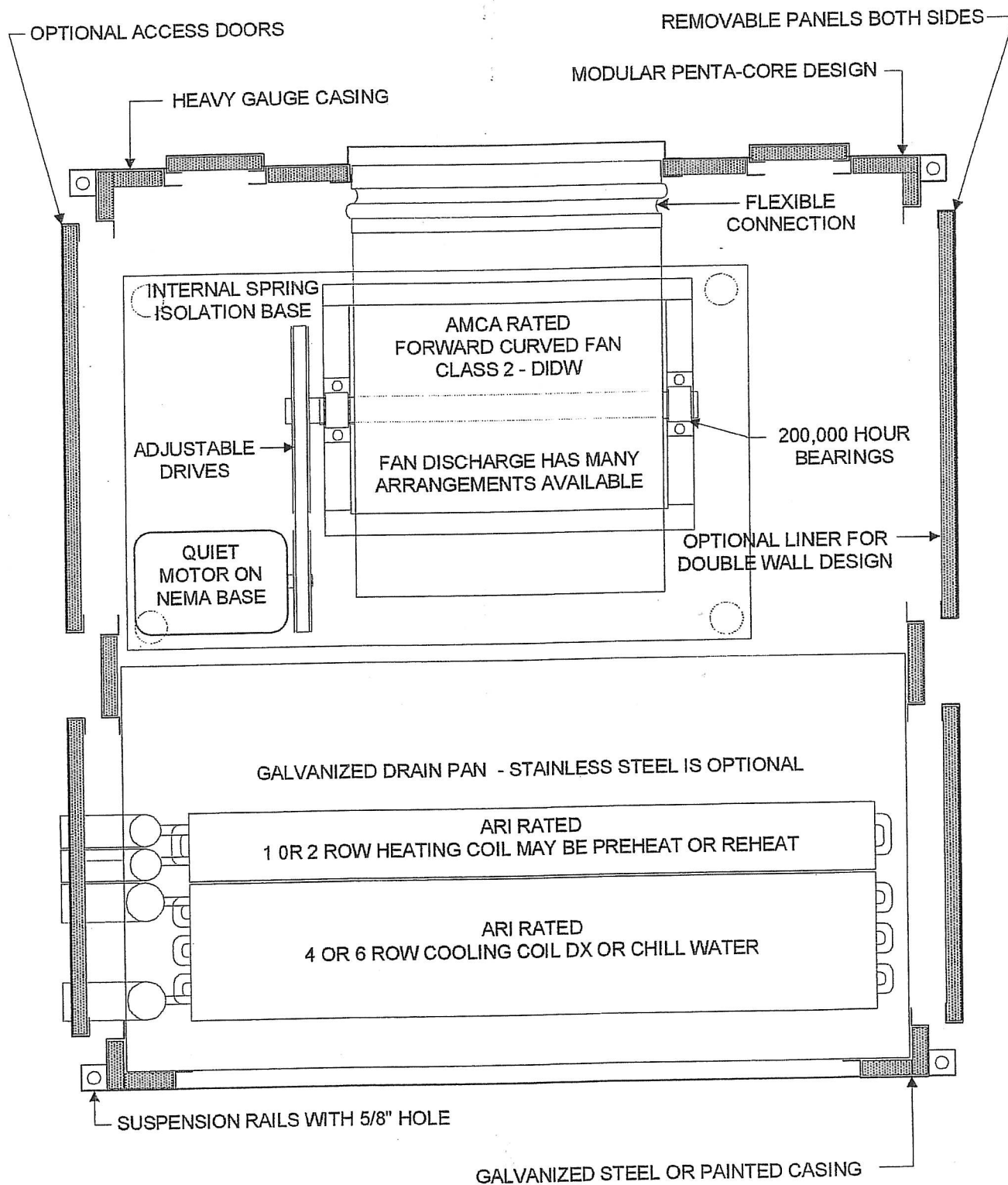
COMPONENT DESCRIPTION	Face Velocity					
	300	350	400	450	500	550
2' Disposable Filter	0.08	0.11	0.14	0.17	0.20	NR
2' 30% Pleated Filter	0.11	0.15	0.19	0.23	0.28	NR
2' Cleanable Filter	0.03	0.05	0.07	0.08	0.11	0.13
Electric Heater	0.15	0.16	0.17	0.18	0.19	0.20

DAMPER DESCRIPTION	Velocity							
	500	600	700	800	900	1000	1100	1200
Parallel Blade Mixing Section	0.03	0.04	0.06	0.08	0.11	0.14	0.17	0.19
Opposed Blade Face & By-Pass	0.06	0.09	0.13	0.17	0.21	0.25	0.29	0.33
Rainhood & OA Damper	0.08	0.11	0.15	0.20	0.25	0.31	0.37	0.44

Wet Cooling Coil		Face Velocity					
Cooling Coil Rows	Fins Per Inch	300	350	400	450	500	550
4	8	0.14	0.18	0.23	0.28	0.33	0.39
	10	0.17	0.22	0.27	0.33	0.39	0.45
	12	0.19	0.25	0.31	0.37	0.44	0.51
	14	0.22	0.28	0.35	0.42	0.49	0.57
6	8	0.21	0.28	0.34	0.42	0.5	0.58
	10	0.25	0.33	0.4	0.49	0.58	0.68
	12	0.29	0.37	0.46	0.56	0.66	0.77
	14	0.33	0.42	0.52	0.62	0.74	0.86
8	8	0.29	0.37	0.46	0.56	0.66	0.78
	10	0.34	0.43	0.54	0.65	0.77	0.9
	12	0.39	0.50	0.62	0.74	0.88	1.03
	14	0.44	0.56	0.69	0.77	0.91	1.15

Dry Heating Coil		Face Velocity					
		300	350	400	450	500	550
1	8	0.02	0.03	0.04	0.05	0.05	0.06
	10	0.03	0.04	0.05	0.05	0.06	0.08
	12	0.03	0.04	0.05	0.06	0.08	0.09
	14	0.04	0.05	0.06	0.07	0.09	0.10
2	8	0.05	0.06	0.07	0.09	0.11	0.13
	10	0.06	0.07	0.09	0.11	0.13	0.15
	12	0.07	0.09	0.11	0.13	0.15	0.17
	14	0.08	0.10	0.12	0.14	0.17	0.2

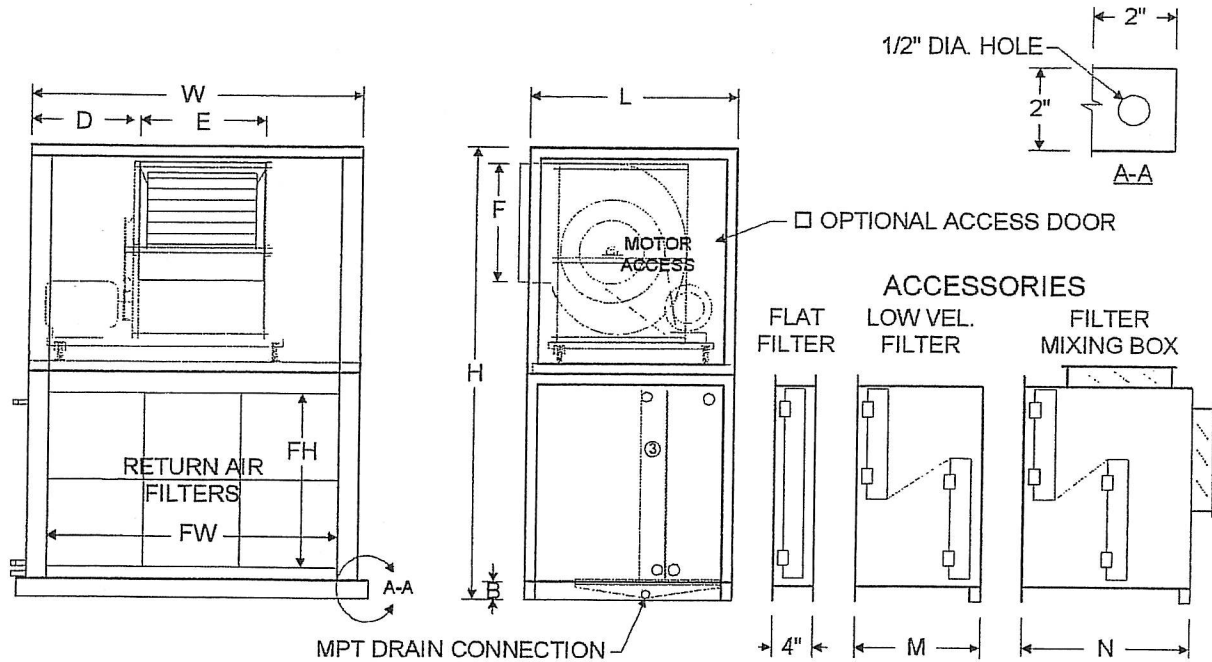
DETAILS OF CONSTRUCTION



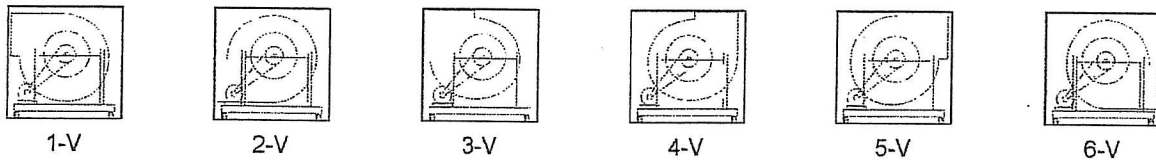
HORIZONTAL UNIT SHOWN; VERTICAL UNIT SIMILAR

DIMENSIONAL DATA

DOUBLE WALL WITH ISOLATION



ARRANGEMENT



DIMENSIONS

MODEL	H	W	L	B	D	E	F	M	N	R	S	FH	FW	DRAIN
VDT-02LFC	56	33	30	3	16	9 1/4	10 1/4	12	16	29	6	20	20	3/4
VDT-03LFC	56	42	30	3	18	11 7/8	10 1/4	12	16	38	6	20	40	3/4
VDT-04LFC	56	52	30	3	25	11 7/8	10 1/4	12	16	48	6	20	40	1
VDT-06LFC	60	56	33	3	28	13 1/8	11 3/8	12	16	52	6	24	48	1
VDT-08LFC	68	71	36	4	28	15 5/8	13 1/2	12	16	67	6	24	60	1 1/4
VDT-10LFC	72	71	38	4	28	18 5/8	15 7/8	14	18	67	8	24	60	1 1/4
VDT-12LFC	78	71	38	4	28	18 5/8	15 7/8	16	20	67	10	36	60	1 1/4
VDT-16LFC	96	71	42	4	28	21 7/8	18 7/8	18	22	67	12	40	60	1 1/4

ALL DIMENSIONS ARE IN INCHES.

Notes:

1. Optional large coil section is required if more than 6-row cooling, more than 2-Rows of Heating or when Pre-Heat - Cooling - Reheat is required. The larger coil section will increase the length 6".
2. Heating coil may be reheat position as shown or in the optional pre-heat position.
3. Optional face & by-pass, increase length 12".
4. Optional Return Air Grille, increase length 4".
5. Optional Discharge plenum with diffuser, increase length 8".

FAN PERFORMANCE DATA

9-4 FAN

Note: Use ball bearings on applications above 1000 RPM or ¼ HP motor. Maximum 2100 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
600		816 0.10	978 0.13	1125 0.17							
700		991 0.16	1130 0.21	1265 0.30							
800		1016 0.20	1144 0.25	1265 0.30	1379 0.35						
900			1167 0.30	1280 0.35	1388 0.41	1492 0.46	1592 0.52	1688 0.58			
1000				1303 0.41	1404 0.47	1503 0.53	1599 0.60	1691 0.66	1779 0.72	1865 0.79	
1100					1428 0.55	1521 0.61	1612 0.68	1699 0.74	1785 0.81	1870 0.89	1950 0.96
1200						1546 0.70	1632 0.77	1716 0.84	1798 0.91	1877 0.99	1957 1.07
1300							1657 0.88	1737 0.95	1815 1.03	1892 1.10	1966 1.18
1400								1765 1.07	1839 1.15	1912 1.23	1982 1.31

9-7 FAN

Note: Use ball bearings on applications above 1000 RPM or ¼ HP motor. Maximum 2100 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
900	797 0.15	940 0.20									
1000	793 0.17	945 0.24	1088 0.31								
1200	833 0.24	968 0.31	1096 0.39	1217 0.47	1332 0.56	1443 0.66	1539 0.81				
1400	883 0.33	1004 0.41	1117 0.48	1230 0.57	1336 0.67	1439 0.77	1538 0.84	1634 1.05			
1600			1198 0.63	1295 0.71	1388 0.79	1479 0.88	1568 0.97	1656 1.07	1741 1.16	1825 1.27	
1800				1342 0.89	1430 0.98	1514 1.07	1595 1.17	1676 1.27	1755 1.37	1833 1.48	1910 1.59
2000				1394 1.10	1477 1.20	1557 1.30	1634 1.41	1708 1.51	1782 1.62	1854 1.73	1925 1.84
2200					1530 1.46	1606 1.57	1679 1.68	1750 1.79	1819 1.91	1896 2.02	1953 2.14

9-9 FAN

Note: Use ball bearings on applications above 1000 RPM or ¼ HP motor. Maximum 2100 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
1200	821 0.20	974 0.27	1116 0.34								
1400	851 0.26	996 0.34	1125 0.42	1248 0.50							
1600	887 0.33	1024 0.42	1148 0.51	1262 0.60	1371 0.70	1476 0.80					
1800		1056 0.52	1175 0.62	1285 0.72	1387 0.82	1486 0.93	1580 1.04	1674 1.16			
2000		1095 0.64	1206 0.73	1312 0.86	1411 0.97	1505 1.08	1595 1.20	1681 1.32	1766 1.44	1850 1.57	
2200			1242 0.90	1343 1.01	1439 1.14	1529 1.22	1616 1.38	1699 1.51	1779 1.64	1858 1.77	1936 1.91
2400				1377 1.19	1470 1.32	1557 1.46	1642 1.59	1722 1.73	1800 1.86	1878 2.00	1949 2.14
2600				1417 1.40	1509 1.85	1588 1.68	1670 1.82	1681 1.32	1766 1.44	1850 1.57	1858 1.77

10-10 FAN

Note: Use ball bearings on applications above 1000 RPM or ¼ HP motor. Maximum 2100 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
1600	724 0.27	851 0.35	972 0.44								
1800	751 0.34	868 0.43	980 0.52	1087 0.62	1184 0.72						
2000		892 0.52	995 0.62	1095 0.72	1192 0.83	1283 0.95					
2200		919 0.62	1017 0.73	1110 0.84	1200 0.96	1288 1.08	1373 1.20				
2400		949 0.74	1042 0.86	1130 0.97	1214 1.10	1298 1.22	1379 1.36	1458 1.49	1534 1.63		
2600			1070 1.00	1154 1.13	1234 1.26	1313 1.39	1389 1.52	1464 1.67	1539 1.81	1611 1.96	1680 2.11
2800			1100 1.16	1181 1.30	1258 1.44	1332 1.57	1405 1.75	1476 1.86	1547 2.01	1616 2.17	1684 2.33
3000				1210 1.49	1284 1.64	1356 1.78	1425 1.99	1493 2.08	1560 2.24	1627 2.40	1692 2.56
3200					1313 1.86	1382 2.01	1448 2.17	1513 2.33	1578 2.49	1641 2.65	1703 2.82
3400					1343 2.10	1410 2.27	1475 2.43	1537 2.60	1598 2.76	1659 2.94	

SPECIFICATIONS

Series HDT / VDT-LFC

Unit Base is constructed of G-90 galvanized steel channels continuously welded and braced for rigidity to form a unitized assembly. The unit base is designed to serve as a solid structural support for all components and a sound absorption panel to provide quiet operation.

Unit Casing is constructed of single wall panels (*double wall is optional*) fabricated of galvanized steel (minimum 0.396" thickness) reinforced and supported with galvanized steel angles and channels to form a rugged assembly. Full service access panels are provided on both sides for easy service (*access doors are optional*). The casing is insulated with 1" "Tuff Skin", dual-density insulation, in full accordance with NFPA 90A and UL 181 and is secured in place with a suitable UL listed adhesive.

Drain Pan is constructed of G-90 galvanized steel (*stainless steel is optional*) adequately reinforced and continuously welded. The drain pan meets the latest IAQ standards and is designed to drain dry when the equipment is not in operation. All welds on galvanized steel are cleaned and protected with a zinc rich paint.

Coils are constructed of copper tubes on staggered centers with all joints brazed. Secondary fin material consists of aluminum fins for maximum efficiency and structural strength. All fins have full drawn collars to provide a continuous surface over the entire tube for maximum heat transfer. All tubes are mechanically expanded into the fins to provide a continuous primary surface and maximum heat transfer. Coils are tested with 315 pounds air pressure under warm water and suitable for operation at 250 psig working pressure. Casings are G-90 galvanized steel (*stainless steel is optional*) with internal supports on all coils exceeding 48" fin length. Coils are rated in accordance with ARI Standard 410.

Fans are standard as Class 2, DIDW Forward Curved type, selected for optimum performance. All fans are rated according to AMCA. All fan and motors are assembled and mounted on a common base with nominal 1" deflection open spring isolators (*seismic restraints are optional*). All fans are statically and dynamically balanced with a solid, high carbon steel shaft designed with the operating speed below the first critical speed. Bearings are self-aligning ball bearing type and selected for 200,000 hours average life.

Motors are standard high efficient open drip proof type. Motors may be 115/230/1/60 PSC or 208-230/460/3/60. The motor service factor is 1.15, rated for continuous duty, NEMA Design B with oversized bearings. The fan motor is mounted on a NEMA adjustable base for easy service.

Drives are selected for not less than 120% of design horsepower and preset in the mid range position. The motor pulley is standard with a variable pitch design. All pulleys are cast iron and matched for long belt life.

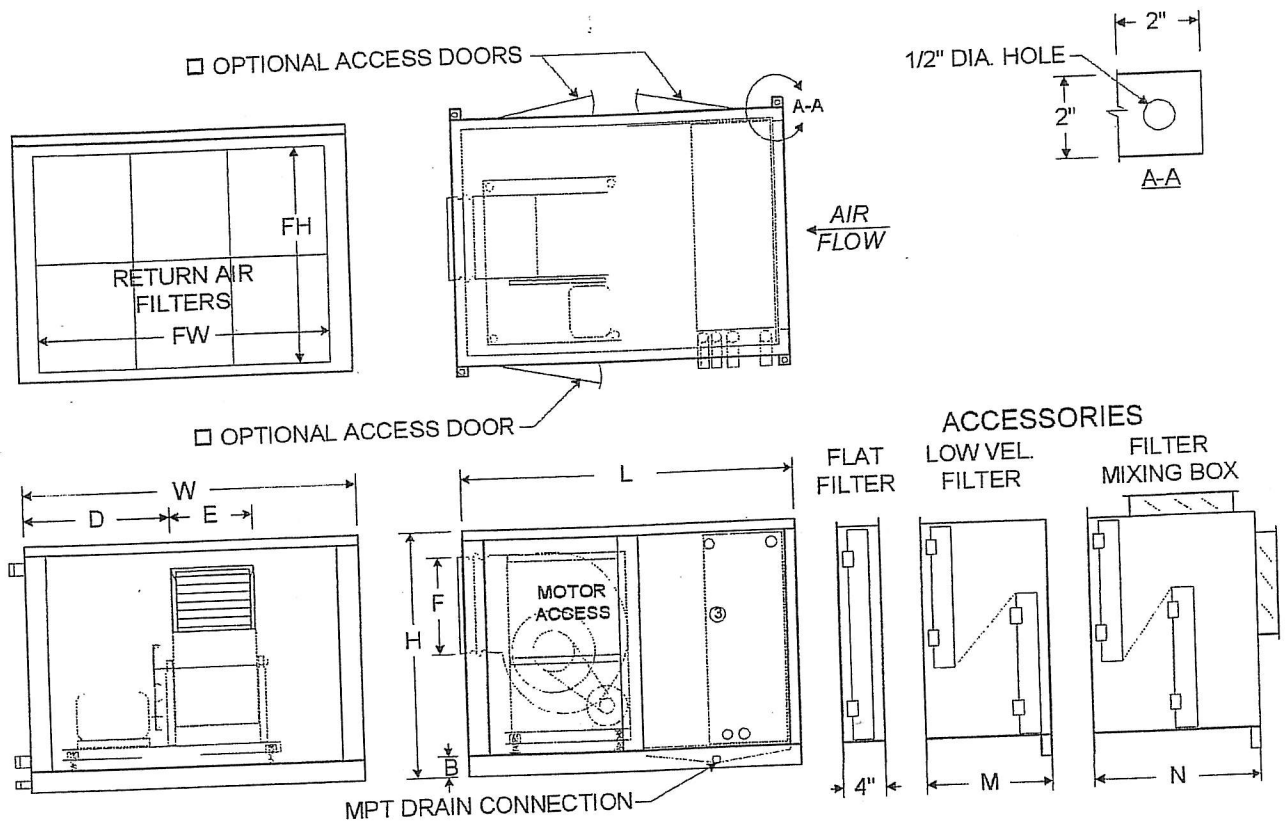
Dampers are constructed of G-90 galvanized steel with a low-leak design that includes stainless steel side seals and extruded blade edge seals. Blades are bolted to the solid shafts that rotate in bronze bearings that are lifetime lubricated. All hardware is zinc plated and all pivot points are brass.

Exterior Finish is G 90 mill galvanized with a minimum 1.25 ounces of zinc per square foot on both sides and conforms to ASTM A525, coating class, and lock-forming quality. All welds are cleaned and protected with a minimum 4 mils zinc rich paint (*Painting is optional*).

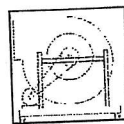
Options:

Construction	☐ Solid Inner Liner	☐ Perforated Inner Liner	☐ Roof Top Curb Mount Design
Filter Section	☐ Flat Filter Section	☐ Low Velocity Filter	☐ Comb. Filter/Mixing
Filter Media	☐ Disposable Filters	☐ 30% Pleated Filters	☐ Permanent Frame TA Pad
Mixing Boxes	☐ No Dampers	☐ Standard dampers	☐ Low Leak Dampers
Coil Options	☐ Cu. Tube/Cu. Fin	☐ Cu. Tube/Cu. Fin	☐ Epoxy Coating ☐ Anti-Microbial
Coil Casing	☐ Standard Galvanized	☐ Optional Stainless	☐ Anti-Microbial
Drain Pan	☐ Standard Galvanized	☐ Optional Stainless	☐ Anti-Microbial
Sections	☐ Large Coil Section	☐ Discharge Section	☐ Intake Section ☐ Face & By-Pass
	☐ Electric Heater	☐ Discharge Diffuser	☐ Intake Grille ☐ Intake Louver
Motor Controls	☐ Motor Starter	☐ N-F Disconnect	☐ Fuses ☐ V-F Drive
Installation	☐ Indoor Installation	☐ Outdoor Installation	☐ Roof Curb ☐ Intake Hood
Exterior Finish	☐ Standard Galvanized	☐ Polyurethane Gray	☐ Gray Epoxy ☐ Special Color

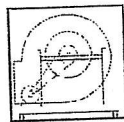
DIMENSIONAL DATA DOUBLE WALL WITH ISOLATION



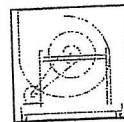
ARRANGEMENT



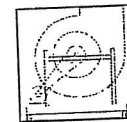
1-H



2-H



3-H



4-H

DIMENSIONS

MODEL	H	W	L	B	D	E	F	M	N	R	S	FL	FW	DRAIN
HDT-02LFC	27	33	60	3	16	9 1/4	10 1/4	12	16	29	6	20	20	3/4
HDT-03LFC	27	42	60	3	18	11 7/8	10 1/4	12	16	38	6	20	32	3/4
HDT-04LFC	27	52	60	3	25	11 7/8	10 1/4	12	16	48	6	20	40	1
HDT-06LFC	33	56	60	3	28	13 1/8	11 3/8	12	16	52	6	20	50	1
HDT-08LFC	36	71	66	4	28	15 5/8	13 1/2	12	16	67	6	25	60	1 1/4
HDT-10LFC	38	71	68	4	28	18 5/8	15 7/8	14	18	67	8	32	60	1 1/4
HDT-12LFC	40	71	68	4	28	18 5/8	15 7/8	16	20	67	10	36	60	1 1/4
HDT-16LFC	50	71	71	4	28	21 7/8	18 7/8	18	22	67	12	45	60	1 1/4

ALL DIMENSIONS ARE IN INCHES.

Notes:

- Optional large coil section is required if more than 6-row cooling, more than 2-Rows of Heating or when Pre-Heat - Cooling - Reheat is required. The larger coil section will increase the length 6".
- Heating coil may be reheat position as shown or in the optional pre-heat position.
- Optional face & by-pass, increase length 12".
- Optional Return Air Grille, increase length 4".
- Optional Discharge plenum with diffuser, increase length 8".

FAN PERFORMANCE DATA

12-12 FAN Note: Use ball bearings on applications above 1000 RPM or 1 HP motor. Maximum 1900 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
2200	595 0.32	707 0.47	808 0.59	901 0.72							
2600	622 0.49	724 0.62	819 0.76	906 0.89	989 1.04	1066 1.18					
3000		748 0.80	836 0.95	919 1.11	997 1.27	1071 1.43	1142 1.59	1209 1.76	1275 1.93		
3400			860 1.19	937 1.36	1011 1.54	1082 1.72	1149 1.90	1214 2.08	1277 2.27	1338 2.76	1396 2.65
3800			889 1.48	961 1.67	1031 1.86	1098 2.05	1163 2.25	1225 2.45	1285 2.65	1343 2.86	1400 3.41
4200				990 2.02	1056 2.23	1119 2.44	1181 2.65	1240 1.87	1298 3.09	1354 3.31	1409 3.53
4400					1070 2.43	1131 2.65	1191 2.87	1250 3.10	1306 3.32	1361 3.56	1415 3.79
4600					1085 2.66	1144 2.88	1203 3.11	1260 3.34	1315 3.58	1369 3.82	1422 4.06

15-11 FAN Note: Use ball bearings on applications above 1000 RPM or 1 HP motor. Maximum 1600 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
2500	486 0.39	578 0.51	662 0.64	738 0.77							
3000	508 0.68	592 0.68	670 0.83	743 0.98	810 1.14	874 1.29	932 1.45				
3500		613 0.90	686 1.07	753 1.24	818 1.42	879 1.59	936 1.77	991 1.96	1043 2.14	1093 2.33	
4000			706 1.37	770 1.55	830 1.75	888 1.94	943 2.15	997 2.35	1048 2.56	1097 2.76	1144 2.97
4500				791 1.93	848 2.14	903 2.36	955 2.58	1006 2.80	1050 2.98	1103 3.25	1149 3.49
5000					870 2.61	922 2.84	972 3.08	1020 3.32	1067 3.52	1113 3.81	1157 4.06
5500						944 3.40	992 3.66	1038 3.92	1083 4.19	1127 4.15	1170 4.72
6000							1016 4.33	1060 4.61	1103 4.89	1145 5.18	1185 5.46

15-15 FAN Note: Use ball bearings on applications above 1000 RPM or 1 HP motor. Maximum 1600 RPM or 3 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
3000	486 0.45	581 0.60	665 0.77								
3500	500 0.59	591 0.77	671 0.94	745 1.13	815 1.33						
4000	579 0.78	604 0.96	682 1.16	752 1.36	818 1.57	880 1.79	941 2.03				
4500		620 1.20	964 1.41	763 1.64	827 1.86	886 2.10	943 2.34	998 2.59	1052 2.85		
5000			709 1.71	776 1.95	838 2.20	951 2.71	1003 2.97	1003 2.97	1054 3.24	1103 3.52	1152 3.81
5500			727 2.07	790 2.32	850 2.59	907 2.86	961 3.13	1012 3.41	1061 3.70	1109 3.99	1170 4.72
6000				847 2.75	863 3.03	920 3.32	973 3.61	1023 3.91	1071 4.21	1118 4.52	1162 4.83

18-18 FAN Note: Use ball bearings on applications above 1000 RPM or 1 HP motor. Maximum 1200 RPM or 10 HP.

FAN CFM	.50 RPM BHP	.75 RPM BHP	1.00 RPM BHP	1.25 RPM BHP	1.50 RPM BHP	1.75 RPM BHP	2.00 RPM BHP	2.25 RPM BHP	2.50 RPM BHP	2.75 RPM BHP	3.0 RPM BHP
5000	439 0.94	516 1.21	585 1.49	649 1.77	707 2.06	761 2.36					
5500	451 1.12	525 1.42	592 1.72	654 2.03	711 2.34	764 2.66	815 2.99	863 3.32			
6000		535 1.66	600 1.98	660 2.31	716 2.65	768 2.99	818 3.34	865 3.69	910 4.05		
6500			609 2.28	667 2.63	722 2.99	773 3.35	822 3.72	869 4.10	913 4.48	956 4.86	997 5.26
7000				676 2.98	729 3.36	780 3.75	827 4.14	873 4.54	917 4.94	959 5.34	1000 5.76
7500				686 3.36	738 3.77	787 4.18	834 4.60	878 5.01	921 5.44	963 5.87	1003 6.30
8000				697 3.79	747 4.22	795 4.65	841 5.09	885 5.53	927 5.98	968 6.43	1007 6.88
8500				708 4.25	757 4.70	804 5.16	849 5.62	892 6.09	934 5.65	974 7.03	1013 7.51
9000					768 5.23	814 5.72	858 6.20	900 6.69	941 7.19	980 7.68	1019 8.18

Notes:

1. Fan size 12-12 requires pillow block type bearings when applied with 5.
2. Fan size 15-11 and 15-15 require pillow block type bearings when applied to 5 and 7 ½ HP.
3. Fan size 18-18 requires pillow block bearings when applied to 7 ½ and 10 HP.

COOLING CAPACITIES

HDT / VDT-02FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
700	45	5.0	18.55	25.80	55.77	55.15	19.88	28.18	53.9	53.9	17.75	24.96	56.53	55.66
800	45	6.0	20.94	29.10	56.06	55.33	23.89	34.91	52.69	52.64	19.55	27.18	57.37	56.34
900	45	7.0	23.28	32.23	56.34	55.53	25.33	35.65	54.26	54.14	21.51	29.24	57.87	56.69

HDT / VDT-03FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
1050	45	7.0	28.04	39.32	55.58	54.94	30.36	43.34	53.56	53.52	27.57	39.53	55.69	54.97
1200	45	8.0	29.90	39.83	57.21	56.45	34.21	48.43	53.93	53.87	30.28	42.97	56.63	55.66
1350	45	9.0	33.02	43.68	57.63	56.75	37.95	53.36	54.30	54.17	33.19	45.92	57.23	56.34

HDT / VDT-04FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
1400	45	10	36.95	51.17	55.86	55.26	41.94	61.22	52.60	52.60	36.11	51.92	56.12	55.31
1600	45	11	41.11	56.18	56.50	55.78	46.82	67.60	53.24	53.16	39.88	55.93	56.92	56.00
1800	45	12	45.12	60.98	57.08	56.21	51.64	73.80	53.76	53.63	43.45	59.24	57.65	56.69

HDT / VDT-06FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
2100	45	14	54.89	75.77	56.10	55.43	62.89	90.57	52.83	52.83	53.85	75.60	56.26	55.66
2400	45	15	60.78	82.46	56.84	56.04	69.36	99.09	53.51	53.52	59.35	82.34	57.10	56.34
2700	45	17	67.28	90.61	57.21	56.33	77.09	109.46	53.89	53.80	65.82	88.57	57.61	56.69

HDT / VDT-08FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
2800	45	20	75.43	106.42	55.36	54.73	83.49	121.50	52.73	52.73	74.08	106.57	55.51	54.97
3200	45	22	81.70	111.32	56.65	55.89	93.20	134.22	53.37	53.28	81.41	116.27	56.44	55.31
3600	45	24	82.73	114.32	56.36	55.56	94.66	137.70	52.95	52.87	89.34	124.23	57.02	56.00

HDT / VDT-10FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
3500	45	26	95.18	135.25	55.13	54.50	99.99	141.19	53.88	53.87	92.57	133.21	55.51	57.97
4000	45	28	102.70	140.80	56.52	55.74	117.48	169.51	53.14	53.11	101.77	145.34	56.44	55.31
4500	45	30	112.48	151.98	57.14	56.25	129.06	184.04	53.77	53.67	111.68	155.28	57.02	56.00

HDT / VDT-12FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
4200	45	32	111.70	156.07	55.68	55.04	120.47	170.82	53.77	53.75	111.09	159.85	55.51	54.97
4800	45	35	124.27	171.08	56.32	55.59	141.80	205.87	52.98	52.92	122.12	174.41	56.44	55.31
5400	45	37	135.55	183.94	57.04	56.15	155.48	222.71	53.67	53.54	134.01	186.34	57.02	56.00

HDT / VDT-16FC			4 Row Chill Water				6 Row Chill Water				4 Row Direct Expansion			
SPECIFIC DATA			EAT 80/67				EAT 80/67				EAT 80/67 with 45 SST			
COIL	CW	FLOW	MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR		MBH	MBH	LEAVING AIR	
CFM	TEMP.	GPM	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB	SENS.	TOTAL	DB	WB
5600	45	40	147.53	210.07	55.02	54.41	154.73	218.96	53.80	53.79	148.11	213.14	55.51	54.79
6400	45	44	163.97	224.02	56.56	55.81	187.23	269.74	53.25	53.20	162.83	232.55	56.44	55.31
7200	45	48	179.97	243.17	57.14	56.25	206.49	297.47	53.77	53.67	178.69	248.45	57.02	56.00

Note: 1 See Page 11 for Hot Water and Steam Distributing coil capacity.
2. Contact the factory for a copy of the ARI extended rating program.

HEATING CAPACITIES

HDT / VDT-02FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
700	180	2.0	0.33	24.64	92.46	0.05	0.37	39.79	112.41	0.10	49.70	47.80	122.70	0.07
800	180	4.0	1.20	30.02	94.61	0.06	0.28	46.82	113.97	0.12	53.66	51.61	119.24	0.08
900	180	6.0	2.54	33.72	94.65	0.07	0.57	53.86	115.18	0.15	57.32	55.13	116.25	0.10

HDT / VDT-03FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
1050	180	3.0	0.80	37.99	93.36	0.05	0.93	61.08	113.64	0.10	73.49	70.68	121.82	0.07
1200	180	6.0	2.86	45.70	95.12	0.06	0.67	72.15	115.44	0.13	79.31	76.28	118.37	0.09
1350	180	9.0	6.03	51.04	94.86	0.08	1.36	82.42	116.30	0.15	84.68	81.45	115.40	0.11

HDT / VDT-04FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
1400	180	4.0	1.54	52.00	94.25	0.05	0.38	78.93	111.99	0.10	98.34	94.58	122.04	0.07
1600	180	8.0	5.43	62.10	95.79	0.06	1.28	98.58	116.81	0.13	106.15	102.09	118.59	0.09
1800	180	12.0	2.41	66.76	94.20	0.08	2.60	112.17	117.46	0.16	113.35	109.01	115.61	0.11

HDT / VDT-06FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
2100	180	6.0	2.14	78.05	94.27	0.05	0.57	118.93	112.22	0.11	144.71	139.17	120.86	0.08
2400	180	12.0	7.54	92.95	95.71	0.07	1.92	148.05	116.88	0.13	156.08	150.11	117.43	0.10
2700	180	18.0	3.17	100.05	94.17	0.08	3.91	168.20	117.44	0.16	166.56	160.19	114.48	0.12

HDT / VDT-08FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
2800	180	9.0	5.05	108.47	95.72	0.05	1.34	167.58	115.19	0.10	193.89	186.48	121.16	0.07
3200	180	18.0	3.47	123.68	95.64	0.06	4.50	204.80	119.01	0.13	209.17	201.17	117.17	0.09
3600	180	27.0	7.44	137.67	95.26	0.08	9.16	231.05	119.18	0.15	223.25	214.72	114.77	0.11

HDT / VDT-10FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
3500	180	11.0	4.94	135.09	95.59	0.05	1.31	208.39	114.90	0.10	247.02	237.58	122.23	0.07
4000	180	22.0	3.32	154.18	95.54	0.06	4.65	255.21	118.83	0.13	266.67	256.47	118.88	0.09
4500	180	33.0	7.13	171.73	95.19	0.08	9.49	288.14	119.04	0.15	284.80	273.91	115.90	0.11

HDT / VDT-12FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
4200	180	14.0	5.57	163.65	95.93	0.05	1.63	253.44	115.64	0.10	293.97	282.73	121.82	0.07
4800	180	28.0	3.71	186.30	95.79	0.06	5.52	308.70	119.30	0.13	317.26	305.12	118.37	0.09
5400	180	42.0	7.97	207.17	95.38	0.08	1.80	336.51	117.46	0.15	338.74	325.78	115.40	0.11

HDT / VDT-16FC			1 Row Hot Water				2 Row Hot Water				1 Row Steam			
SPECIFIC DATA			EAT 60				EAT 60				EAT 60 / 5 PSIG			
COIL	HW	FLOW	WATER	MBH	LVG.	AIR	WATER	MBH	LVG.	AIR	LBS.	MBH	LVG.	AIR
CFM	TEMP.	GPM	PD	TOTAL	DB	PD	PD	TOTAL	DB	PD	COND.	TOTAL	DB	PD
5600	180	16.0	4.31	212.62	95.01	0.05	1.31	325.78	113.64	0.10	394.01	378.95	122.14	0.07
6400	180	32.0	2.78	243.76	95.12	0.06	4.43	402.71	118.02	0.13	425.31	409.04	118.69	0.09
7200	180	48.0	5.96	272.27	94.87	0.08	9.05	456.22	118.43	0.15	454.18	436.81	115.71	0.00

- Note:**
1. Maximum recommended leaving air temperature is 130 degrees f.
 2. Steam coils are Non-Freeze, steam distributing type with 5/8" OD exterior tube and 3/8" inner distributing tube.

ADDITIONAL PRODUCTS MANUFACTURED

Sonatrol Sound Attenuators

Series: LP/MP/HP

Standard Sizes 12" x 6" to 48" x 48"
Custom Sizes Available
Straight Thru or Elbow Design
Duct or Wall Mounted

Slot Diffusers

Series: N-Slot

Available from 12" to 72"
Optional Height Available
Optional Down Blow Section
Optional Return section
Optional Inlet Sensors
Laboratory Tested & Certified
Lay In, Spline or Donn Ceiling
Internal or External Insulation

Series: A, BS, C, CS & D Slots

Available from 12" to 72"
One through 4 Slot Optional
Optional Height Available
Optional Down Blow Section
Optional return section
Lay In, Spline or Donn Ceiling
Internal or External Insulation

Light Troffer Diffusers

Series: DS and SS

Available in Dual or Single Side
Nominal Size 1 x 4 through 4 x 4
Custom Designed for Each Fixture
Low Profile - Low Leak Design
Complete Factory Assembly
Knock Down Optional
Internal or External Insulation

Custom Metal Products

Series: Design & Build

All Products Available as Custom
Replacement or Retrofit Terminals

Fan/Coil Units

Series: HDT / VDT-FC

Available 600 through 8,800 CFM
Horizontal or Vertical
Enclosed Cabinet Type
Belt or Direct Drive
Single or Double Wall

Compact Air Units

Series: HDT / VDT-PC

Available 600 through 60,000 CFM
Modular Design up to 6.0" TSP
FC, BI, AF or Plenum Fans
Indoor, Outdoor or Roof Top Design
Single or Double Wall

Commercial Air Units

Series: HDT / VDT

Available 600 through 60,000 CFM
Modular Design up to 8.0" TSP
FC, BI, AF, Plenum or Vane Axial Fans
Indoor, Outdoor or Roof Top Design
Single or Double Wall

Roof Top Air Units

Series: HDT-RT

Available 1,000 through 60,000 CFM
Modular Design up to 8.0" TSP
FC, BI, AF, Plenum or Vane Axial Fans
Roof Top Design
Bottom Supply & Return Standard
Internal Pipe Chase
Single or Double Wall

Custom Air Units

Series: RTAH

Available 1,000 through 200,000 CFM
Modular Design up to 12.0" TSP
FC, BI, AF, Plenum or Vane Axial Fans
Indoor, Outdoor or Roof Top Design
Single or Double Wall