Coil Data: TVB Series

COILS

Titus offers hot water, chilled water, direct expansion, and standard single tube steam coils for specific application with all Vertical Floor fan coil units. Strict on-site inspection before, during, and after installation guarantees the highest quality and performance available.

Standard Features

- Cooling - 3 or 4 row chilled water or DX
- Heating - 1 or 2 row hot water
- Total rows of cooling and heating coils: TVB: 4 maximum,
- ½" O.D. seamless copper tubes
- 0.016" tube wall thickness
- High efficiency aluminum fin surface for optimizing heat transfer, pressure drop and carryover
- Left or right hand, same or opposite side connections
- Manual air vents

Optional Features

- Automatic air vents
- Stainless steel coil casings
- DX coils are heat pump compatible

Titus offers fan coil rating and selection program, TEAMS for complete unit, coil and sound selection. See your representative for more information.

TVB NOMINAL COIL CONNECTION SIZES

Unit Size	Coil Type											
	Hot Water		Chilled Water		Steam		Refrigerant (DX)					
	1 Row	2 Row	3 Row	4 Row	1 Row	2 Row	2 Row		3 Row		4 Row	
							Liquid	Suction	Liquid	Suction	Liquid	Suction
02-12	5/8 [16]	5/8 [16]	5/8 [22]	5/8 [22]	5/8 [16]	5/8 [16]	3/8 [10]	5/8 [16]	3/8 [10]	5/8 [16]	3/8 [10]	5/8 16]

Notes:
1. Connection sizes are for standard circuit coils. Consult factory for special applications.
2. See submittal drawings for connection locations
3. All dimensional data is outside diameter (O.D.), measured in inches [millimeters]

TVB FACE AREA, FREE AREA AND FILTER SIZES

Unit Size	Coil Face Area	Discharge Grille Free Area	Filter Face Area	Nominal Filter Sizes
02	0.97 [.090]	0.47 [.044]	1.40 [.130]	9.25 X 21.75 X 1 [235 X 552 X 25.4]
03	1.25 [.116]	0.56 [.052]	1.65 [.154]	9.25 X 25.75 X 1 [235 X 654 X 25.4]
04	1.67 [.155]	0.66 [.061]	2.04 [.189]	9.25 X 31.75 X 1 [235 X 806 X 25.4]
06	2.36 [.219]	0.94 [.087]	2.68 [.249]	9.25 X 41.75 X 1 [235 X 1060 X 25.4]
08	2.50 [.023]	0.94 [.087]	2.79 [.260]	(2) 9.25 X 21.75 X 1 [235 X 552 X 25.4]
10	3.47 [.322]	1.31 [.122]	3.69 [.343]	(1) 9.25 X 25.75 X 1 [235 X 654 X 25.4] (1) 9.25 X 31.75 X 1 [235 X 806 X 25.4]
12	4.03 [.374]	1.50 [.139]	4.19 [.389]	(3) 9.25 X 21.75 X 1 [235 X 552 X 25.4]

Notes:
1. Face and free areas are in square feet [square meters]
2. Filter sizes are in inches [millimeters]

Coil Data: TVB Series

TVB HEATING CAPACITY

Unit Type	Unit Size	Nom CFM	1 Row			2 Row		
			QS (MBH)	GPM	WPD	QS (MBH)	GPM	WPD
TVBC	02	239	7.8	0.4	0.45	13.2	0.7	0.39
	03	330	10.8	0.6	0.80	18.6	1.0	0.61
	04	503	13.2	0.7	0.24	26.9	1.4	1.39
	06	590	15.0	0.8	0.12	32.3	1.7	0.25
	08	693	9.0	0.5	0.01	38.1	2.0	0.34
	10	900	24.4	1.3	0.10	52.4	2.7	0.69
	12	954	31.6	1.6	0.18	52.3	2.7	0.14
TVBA	02	239	7.8	0.4	0.45	13.3	0.7	0.39
	03	345	11.1	0.6	0.84	19.0	1.0	0.64
	04	489	13.0	0.7	0.24	26.5	1.4	1.36
	06	599	19.1	1.0	0.93	32.6	1.7	0.71
	08	672	21.2	1.1	1.18	37.1	1.9	0.33
	10	967	25.5	1.3	0.11	54.4	2.8	0.74
	12	1031	33.0	1.7	0.2	55.1	2.8	0.16
TVBF	02	239	7.8	0.4	0.45	13.3	0.7	0.39
	03	345	11.1	0.6	0.84	19.0	1.0	0.64
	04	489	13.0	0.7	0.24	26.5	1.4	1.36
	06	599	19.1	1.0	0.93	32.6	1.7	0.71
	08	672	21.2	1.1	1.18	37.1	1.9	0.33
	10	967	25.5	1.3	0.11	54.4	2.8	0.74
	12	1031	33.0	1.7	0.2	55.1	2.8	0.16

Note: Based on 70°F DB EAT, 180°F EWT, 40°F temperature drop, high fan speed

Physical Data: TVB Series

TVB AHRI STANDARD RATINGS

Model/Size	Coil		Airflow CFM (Dry Flow)	Cooling Capacity		Water		Power Input (Watts)
	Rows	FPI		QT (BTUH)	QS (BTUH)	Flow Rate (GPM)	WPD (ft-wg)	
TVBC 02	3	10	231	7210	5199	1.4	14.13	45
TVBC 03	3	10	308	7940	6199	1.6	4.1	60
TVBC 04	3	10	442	12170	9159	2.4	8.2	70
TVBC 06	3	10	558	16479	12180	3.3	6.1	80
TVBC 08	3	10	650	19500	14270	3.9	8.52	114
TVBC 10	3	10	845	27000	19319	5.4	18.01	132
TVBC 12	3	10	893	28379	20500	5.6	5.99	142
TVBA 02	3	10	233	7309	5269	1.5	14.17	45
TVBA 03	3	10	318	8029	6320	1.6	4.09	60
TVBA 04	3	10	452	12270	9270	2.4	8.2	70
TVBA 06	3	10	566	16709	12340	3.3	6.29	80
TVBA 08	3	10	628	18950	13859	3.8	8.04	114
TVBA 10	3	10	830	26590	19010	5.3	17.25	132
TVBA 12	3	10	970	30250	21930	6.1	6.81	142
TVBF 02	3	10	233	7309	5269	1.5	14.17	45
TVBF 03	3	10	318	8029	6320	1.6	4.09	60
TVBF 04	3	10	452	12270	9270	2.4	8.2	70
TVBF 06	3	10	566	16709	12340	3.3	6.29	80
TVBF 08	3	10	628	18950	13859	3.8	8.04	114
TVBF 10	3	10	830	26590	19010	5.3	17.25	132
TVBF 12	3	10	970	30250	21930	6.1	6.81	142

Note: Based on 80°F DB and 67°F WB EAT, 45°F EWT, 10°F temperature rise, high fan speed. Motor type is PSC and motor voltage is 115/1/60. Airflow under dry coil conditions. Models TVBF and TVBA tested at 0.0" external static pressure. Model TVBC tested at 0.05" external static pressure.

TVB UNIT WEIGHT DATA

Component		Unit Size						
		02	03	04	06	08	10	12
TVBC Base Unit		36 [16]	45 [20]	55 [25]	62 [28]	66 [30]	92 [42]	105 [48]
TVBF Base Unit		66 [30]	74 [34]	87 [39]	96 [44]	102 [46]	131 [59]	149 [68]
TVBA Base Unit		68 [31]	76 [34]	89 [40]	99 [45]	102 [46]	135 [61]	153 [69]
Total Coil Rows	1 Row - Dry	11 [5]	12 [5]	14 [6]	18 [8]	19 [9]	23 [10]	26 [12]
	1 Row - Wet	14 [6]	15 [7]	20 [9]	24 [11]	25 [11]	32 [15]	37 [17]
	2 Row - Dry	14 [6]	15 [7]	19 [9]	22 [10]	24 [11]	30 [14]	33 [15]
	2 Row - Wet	19 [9]	20 [9]	25 [11]	31 [14]	32 [15]	41 [19]	47 [21]
	3 Row - Dry	18 [8]	20 [9]	23 [10]	29 [13]	30 [14]	37 [17]	43 [20]
	3 Row - Wet	23 [10]	25 [11]	32 [15]	39 [18]	41 [19]	52 [24]	61 [28]
	4 Row - Dry	22 [10]	25 [11]	30 [14]	36 [16]	39 [18]	47 [21]	54 [24]
	4 Row - Wet	30 [14]	32 [15]	41 [19]	50 [23]	52 [24]	65 [29]	77 [35]

Note: Unit weight data is in pounds [kilograms]

Electric Heat

Titus offers electric heating coils for specific application with all Vertical Floor Series Fan Coil units. This allows the flexibility to provide an unrivaled amount of electric heat options in one complete package.

Standard Features

- » ETL listed as an assembly for safety compliance
- » Single point power connection
- » Mounted in reheat position
- » Automatic reset primary and back-up secondary thermal limits
- » Internal wiring rated at 105°C
- » Integral electric heat assembly with removable element for easy service
- » Stainless steel terminals and hardware
- » Finned tubular heater virtually eliminates the risk of shock from accidental contact

Optional Features

- » Silent solid state relays on heaters up to 18 amps
- » Door interlocking disconnect switch
- » Main fusing

Useful Formulas

$$kW^{*} = \frac{CFM \times \Delta T \times 1.085^{**}}{3413}$$

$$1\text{Ø AMPs} = \frac{kW \times 1000}{Volts}$$

* 1kW = 3413 BTU/H
** Capacity at sea level
Altitude Considerations:
Reduce by 0.034 for each 1000 ft. of altitude above sea level.

Example: 5000 ft./1000 ft. = 5
5 x 0.034 = 0.17
1.085 - 0.17 = 0.915

Electrical Calculations Information

1. Contact your local Titus sales office
2. Non-Fused Door Interlock Disconnect Switch shall be sized according to MCA
3. Fused Door Interlock Disconnect Switch and Main Fusing shall be sized according to MOP

TVB ELECTRIC HEAT SELECTION CHART (AMPS)

Unit Size	MBH	3.4	5.1	6.8	10.2	13.7	17.1	20.5
	KW	1.0	1.5	2.0	3.0	4.0	5.0	6.0
	Volts	AMPS						
02	115	8.3						
	208	4.8						
	240	4.2						
	277	3.6						
03	115	8.3	12.5					
	208	4.8	7.2					
	240	4.2	6.3					
	277	3.6	5.4					
04	115	8.3	12.5	16.7				
	208	4.8	7.2	9.6				
	240	4.2	6.3	8.3				
	277	3.6	5.4	7.2				
06	115	8.3	12.5	16.7	25.0			
	208	4.8	7.2	9.6	14.4			
	240	4.2	6.3	8.3	12.5			
	277	3.6	5.4	7.2	10.8			
08	115	8.3	12.5	16.7	25.0			
	208	4.8	7.2	9.6	14.4	19.2		
	240	4.2	6.3	8.3	12.5	16.7		
	277	3.6	5.4	7.2	10.8	14.4		
10	115	8.3	12.5	16.7	25.0			
	208	4.8	7.2	9.6	14.4	19.2	24.0	
	240	4.2	6.3	8.3	12.5	16.7	20.8	
	277	3.6	5.4	7.2	10.8	14.4	18.1	
12	115	8.3	12.5	16.7	25.0			
	208	4.8	7.2	9.6	14.4	19.2	24.0	28.9
	240	4.2	6.3	8.3	12.5	16.7	20.8	25.0
	277	3.6	5.4	7.2	10.8	14.4	18.1	21.7

Notes:

1. Shaded areas of the electric heat selection chart indicate kW and voltage options not available
2. Available voltages are single phase, 60 hertz
3. Size heater for Leaving Air Temperature (LAT) less than 104°F
4. Silent, solid state heater relay is available for heater currents less than 18 amps
5. Ask your representative about continuously modulating electric heat using SSR and special control options

TVB SERIES PERFORMANCE DATA

Unit Data						3 Row Chilled Water Coil					
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	EWT/ LWT (°F)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	231	(1) 1/50	0.40	45	58.3/55.6	5.1	4.2	45/55	1.0	10.5
	03	308	(1) 1/20	0.60	60	66.1/59.8	3.0	3.0	45/55	0.6	0.72
	04	442	(1) 1/20	0.75	70	59.9/56.8	8.2	7.3	45/55	1.6	4.66
	06	558	(1) 1/20	0.75	80	58.9/56.2	11.3	9.8	45/55	2.3	3.3
	08	650	(1) 1/10	1.10	114	58.9/56.1	13.3	11.4	45/55	2.6	4.53
	10	845	(2) 1/20	1.50	132	58.0/55.4	19.0	15.7	45/55	3.8	9.95
	12	893	(2) 1/20	1.50	142	58.1/55.7	19.4	16.5	45/55	3.9	3.00
TVBA	02	233	(1) 1/50	0.40	45	58.4/55.7	5.1	4.2	45/55	1.0	10.50
	03	318	(1) 1/20	0.60	60	66.3/59.9	3.0	3.0	45/55	0.6	0.74
	04	452	(1) 1/20	0.75	70	60.0/56.8	8.4	7.4	45/55	1.7	4.85
	06	566	(1) 1/20	0.75	80	59.0/56.3	11.3	9.9	45/55	2.3	3.30
	08	628	(1) 1/10	1.10	114	58.8/56.1	13.0	11.1	45/55	2.6	4.35
	10	830	(2) 1/20	1.50	132	57.9/55.3	19.0	15.5	45/55	3.8	9.95
	12	970	(2) 1/20	1.50	142	58.5/55.9	20.5	17.5	45/55	4.1	3.30
TVBF	02	233	(1) 1/50	0.40	45	58.4/55.7	5.1	4.2	45/55	1.0	10.50
	03	318	(1) 1/20	0.60	60	66.3/59.9	3.0	3.0	45/55	0.6	0.74
	04	452	(1) 1/20	0.75	70	60.0/56.8	8.4	7.4	45/55	1.7	4.85
	06	566	(1) 1/20	0.75	80	59.0/56.3	11.3	9.9	45/55	2.3	3.30
	08	628	(1) 1/10	1.10	114	58.8/56.1	13.0	11.1	45/55	2.6	4.35
	10	830	(2) 1/20	1.50	132	57.9/55.3	19.0	15.5	45/55	3.8	9.95
	12	970	(2) 1/20	1.50	142	58.5/55.9	20.5	17.5	45/55	4.1	3.30

Note: Based on 75°F DB EAT, 63°F WB, and 3 row cooling coil. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

TVB SERIES PERFORMANCE DATA

Unit Data						4 Row Chilled Water Coil					
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	EWT/ LWT (°F)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	227	(1) 1/50	0.40	45	62.9/58.7	3.0	3.0	45/55	0.6	0.91
	03	296	(1) 1/20	0.60	60	55.4/54.2	7.6	6.3	45/55	1.5	5.04
	04	421	(1) 1/20	0.75	70	55.0/53.7	11.4	9.2	45/55	2.3	9.99
	06	539	(1) 1/20	0.75	80	55.3/54.2	13.8	11.6	45/55	2.8	2.87
	08	614	(1) 1/10	1.10	114	55.2/54.0	16.1	13.2	45/55	3.2	3.83
	10	815	(2) 1/20	1.50	132	54.1/53.0	23.6	18.7	45/55	4.7	8.89
	12	842	(2) 1/20	1.50	142	52.7/51.8	26.9	20.5	45/55	5.4	13.28
TVBA/TVBF	02	229	(1) 1/50	0.40	45	62.9/58.7	3.0	3.0	45/55	1.0	10.50
	03	312	(1) 1/20	0.60	60	55.5/54.3	7.9	6.6	45/55	0.6	0.74
	04	431	(1) 1/20	0.75	70	55.1/53.8	11.6	9.4	45/55	1.7	4.85
	06	549	(1) 1/20	0.75	80	55.5/54.3	13.9	11.7	45/55	2.3	3.30
	08	603	(1) 1/10	1.10	114	55.0/53.9	16.0	13.2	45/55	2.6	4.35
	10	805	(2) 1/20	1.50	132	54.0/52.9	23.4	18.5	45/55	3.8	9.95
	12	934	(2) 1/20	1.50	142	53.2/52.2	28.8	22.3	45/55	4.1	3.30

Note: Based on 75°F DB EAT, 63°F WB, and 4 row cooling coil. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

Unit Data						3 Row Chilled Water Coil					1 Row Hot Water Coil			
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/ WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (Ft.)	LAT DB/ WB (°F)	Sensable Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	227	(1) 1/50	0.40	45	58.2/55.6	5.0	4.2	1.0	10.50	100.7	7.5	0.4	0.44
	03	296	(1) 1/20	0.60	60	65.9/59.8	3.0	3.0	0.6	0.70	101.6	10.1	0.5	0.71
	04	421	(1) 1/20	0.75	70	59.7/56.7	8.0	7.0	1.6	4.48	95.6	11.8	0.6	0.21
	06	539	(1) 1/20	0.75	80	58.8/56.1	11.0	9.5	2.2	3.17	94	14.0	0.7	0.11
	08	614	(1) 1/10	1.10	114	58.8/56.0	12.7	11.0	2.5	4.17	83.1	8.7	0.4	0.01
	10	815	(2) 1/20	1.50	132	57.8/55.2	18.8	15.4	3.8	9.96	95.6	22.6	1.2	0.09
	12	842	(2) 1/20	1.50	142	58.0/55.6	18.5	15.7	3.7	2.70	101.8	29.0	1.5	0.16
TVBA/TVBF	02	229	(1) 1/50	0.40	45	58.2/55.6	5.0	4.1	1.0	10.50	100.7	7.6	0.4	0.45
	03	312	(1) 1/20	0.60	60	66.2/59.9	3.0	3.0	0.6	0.72	100.7	10.4	0.5	0.75
	04	431	(1) 1/20	0.75	70	59.8/56.8	8.1	7.1	1.6	4.48	95.7	12.0	0.6	0.21
	06	549	(1) 1/20	0.75	80	59/56.2	11.1	9.6	2.2	3.17	93.9	14.2	0.7	0.11
	08	603	(1) 1/10	1.10	114	58.6/56.0	12.6	10.8	2.5	4.17	83.3	8.7	0.4	0.01
	10	805	(2) 1/20	1.50	132	57.8/55.2	18.4	15.1	3.6	9.41	95.7	22.4	1.2	0.08
	12	934	(2) 1/20	1.50	142	58.3/55.8	28.8	17.0	4.0	3.15	100.4	30.8	1.6	0.18

Note: Based on 70°F EAT, 180°F EWT, 40°F temperature drop. Cooling coil data based on 75°F DB EAT, 63°F WB, 45°F EWT, 55°F LWT. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

TVB SERIES PERFORMANCE DATA

Unit Data						3 Row Chilled Water Coil					
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	EWT/ LWT (°F)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	231	(1) 1/50	0.40	45	59.0/56.3	6.1	4.8	45/55	1.2	12.92
	03	308	(1) 1/20	0.60	60	61.2/58.2	6.5	5.7	45/55	1.3	2.96
	04	442	(1) 1/20	0.75	70	60.7/57.6	10.1	8.4	45/55	2.0	6.37
	06	558	(1) 1/20	0.75	80	59.6/56.9	13.8	11.2	45/55	2.8	4.67
	08	650	(1) 1/10	1.10	114	59.6/56.8	16.3	13.1	45/55	3.3	6.44
	10	845	(2) 1/20	1.50	132	58.8/56.1	22.8	17.8	45/55	4.5	13.01
	12	893	(2) 1/20	1.50	142	58.8/56.3	23.7	18.8	45/55	4.7	4.30
TVBA	02	233	(1) 1/50	0.40	45	59.1/56.4	6.1	4.8	45/55	1.2	12.92
	03	318	(1) 1/20	0.60	60	61.3/58.2	6.7	5.8	45/55	1.3	3.12
	04	452	(1) 1/20	0.75	70	60.8/57.6	10.3	8.5	45/55	2.0	6.56
	06	566	(1) 1/20	0.75	80	59.7/57	13.9	11.3	45/55	2.8	4.67
	08	628	(1) 1/10	1.10	114	59.5/56.8	15.8	12.7	45/55	3.1	6.05
	10	830	(2) 1/20	1.50	132	58.6/56.0	22.7	17.6	45/55	4.5	13.01
	12	970	(2) 1/20	1.50	142	59.1/56.5	25.2	20.1	45/55	5.0	4.84
TVBF	02	233	(1) 1/50	0.40	45	59.1/56.4	6.1	4.8	45/55	1.2	12.92
	03	318	(1) 1/20	0.60	60	61.3/58.2	6.7	5.8	45/55	1.3	3.12
	04	452	(1) 1/20	0.75	70	60.8/57.6	10.3	8.5	45/55	2.0	6.56
	06	566	(1) 1/20	0.75	80	59.7/57	13.9	11.3	45/55	2.8	4.67
	08	628	(1) 1/10	1.10	114	59.5/56.8	15.8	12.7	45/55	3.1	6.05
	10	830	(2) 1/20	1.50	132	58.6/56.0	22.7	17.6	45/55	4.5	13.01
	12	970	(2) 1/20	1.50	142	59.1/56.5	25.2	20.1	45/55	5.0	4.84

Note: Based on 78°F DB EAT, 65°F WB, and 3 row cooling coil. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

TVB SERIES PERFORMANCE DATA

Unit Data						4 Row Chilled Water Coil					
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	EWT/ LWT (°F)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	227	(1) 1/50	0.40	45	56.8/55.6	6.5	5.3	45/55	1.3	3.71
	03	296	(1) 1/20	0.60	60	55.7/54.6	9.3	7.2	45/55	1.8	6.80
	04	421	(1) 1/20	0.75	70	55.3/54.1	13.7	10.4	45/55	2.7	12.31
	06	539	(1) 1/20	0.75	80	55.6/54.5	16.9	13.2	45/55	3.3	3.99
	08	614	(1) 1/10	1.10	114	55.3/54.3	19.7	15.2	45/55	3.9	5.48
	10	815	(2) 1/20	1.50	132	54.3/53.3	28.3	21.2	45/55	5.7	11.89
	12	842	(2) 1/20	1.50	142	53.0/52.1	31.8	23.1	45/55	6.4	17.45
TVBA/TVBF	02	229	(1) 1/50	0.40	45	56.8/55.6	6.5	5.3	45/55	1.3	3.70
	03	312	(1) 1/20	0.60	60	55.9/54.7	9.6	7.6	45/55	1.9	7.23
	04	431	(1) 1/20	0.75	70	55.5/54.2	13.9	10.6	45/55	2.8	12.44
	06	549	(1) 1/20	0.75	80	55.6/54.5	17.2	13.5	45/55	3.4	4.16
	08	603	(1) 1/10	1.10	114	55.3/54.2	19.4	15.0	45/55	3.8	5.29
	10	805	(2) 1/20	1.50	132	54.3/53.3	27.9	20.9	45/55	5.5	11.46
	12	934	(2) 1/20	1.50	142	53.5/52.5	34.3	25.1	45/55	6.9	20.05

Note: Based on 78°F DB EAT, 65°F WB, and 4 row cooling coil. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

Unit Data						3 Row Chilled Water Coil					1 Row Hot Water Coil			
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (Ft.)	LAT DB/ WB (°F)	Sensable Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	227	(1) 1/50	0.40	45	58.9/56.2	6.1	4.8	1.2	12.9	100.7	7.5	0.4	0.44
	03	296	(1) 1/20	0.60	60	61.1/58.1	6.3	5.5	1.3	2.8	101.6	10.1	0.5	0.71
	04	421	(1) 1/20	0.75	70	60.5/57.5	9.7	8.1	1.9	6.0	95.6	11.8	0.6	0.21
	06	539	(1) 1/20	0.75	80	59.6/56.9	13.3	10.9	2.6	4.3	94.0	14.0	0.7	0.11
	08	614	(1) 1/10	1.10	114	59.4/56.7	15.7	12.5	3.1	6.1	83.1	8.7	0.4	0.01
	10	815	(2) 1/20	1.50	132	58.5/55.9	22.5	17.4	4.5	13.0	95.6	22.6	1.2	0.09
	12	842	(2) 1/20	1.50	142	58.6/56.2	22.6	17.9	4.5	4.0	101.8	29.0	1.5	0.16
TVBA/TVBF	02	229	(1) 1/50	0.40	45	59/56.3	6.1	4.8	1.2	12.9	100.7	7.6	0.4	0.45
	03	312	(1) 1/20	0.60	60	61.3/58.2	6.5	5.7	1.3	3.0	100.7	10.4	0.5	0.75
	04	431	(1) 1/20	0.75	70	60.5/57.5	10.0	8.3	2.0	6.4	95.7	12.0	0.6	0.21
	06	549	(1) 1/20	0.75	80	59.6/56.9	13.6	11.1	2.7	4.5	93.9	14.2	0.7	0.11
	08	603	(1) 1/10	1.10	114	59.3/56.6	15.4	12.3	3.1	5.9	83.3	8.7	0.4	0.01
	10	805	(2) 1/20	1.50	132	58.5/55.9	22.2	17.2	4.4	12.3	95.7	22.4	1.2	0.08
	12	934	(2) 1/20	1.50	142	59/56.5	24.3	19.4	4.8	4.5	100.4	30.8	1.6	0.18

Note: Based on 70°F EAT, 180°F EWT, 40°F temperature drop. Cooling coil data based on 78°F DB EAT, 65°F WB, 45°F EWT, 55°F LWT. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

TVB SERIES PERFORMANCE DATA

Unit Data						3 Row Chilled Water Coil					
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	EWT/ LWT (°F)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	231	(1) 1/50	0.40	45	57.7/55.5	4.4	3.6	45/55	0.9	8.83
	03	308	(1) 1/20	0.60	60	64.4/59.3	2.5	2.5	45/55	0.5	0.54
	04	442	(1) 1/20	0.75	70	59.2/56.6	7.1	6.2	45/55	1.4	3.74
	06	558	(1) 1/20	0.75	80	58.5/56.2	9.5	8.2	45/55	1.9	2.42
	08	650	(1) 1/10	1.10	114	58.4/56	11.4	9.7	45/55	2.3	3.48
	10	845	(2) 1/20	1.50	132	57.3/55.1	17.0	13.6	45/55	3.4	8.36
	12	893	(2) 1/20	1.50	142	57.7/55.6	16.7	14.0	45/55	3.3	2.28
TVBA	02	233	(1) 1/50	0.40	45	57.7/55.5	4.4	3.6	45/55	0.9	8.83
	03	318	(1) 1/20	0.60	60	64.6/59.3	2.6	2.6	45/55	0.5	0.56
	04	452	(1) 1/20	0.75	70	59.3/56.7	7.1	6.2	45/55	1.4	3.74
	06	566	(1) 1/20	0.75	80	58.6/56.3	9.5	8.2	45/55	1.9	2.42
	08	628	(1) 1/10	1.10	114	58.2/55.9	11.3	9.5	45/55	2.3	3.48
	10	830	(2) 1/20	1.50	132	57.3/55.1	16.7	13.4	45/55	3.3	8.10
	12	970	(2) 1/20	1.50	142	57.9/55.7	17.8	14.9	45/55	3.6	2.56
TVBF	02	233	(1) 1/50	0.40	45	57.7/55.5	4.4	3.6	45/55	0.9	8.83
	03	318	(1) 1/20	0.60	60	64.6/59.3	2.6	2.6	45/55	0.5	0.56
	04	452	(1) 1/20	0.75	70	59.3/56.7	7.1	6.2	45/55	1.4	3.74
	06	566	(1) 1/20	0.75	80	58.6/56.3	9.5	8.2	45/55	1.9	2.42
	08	628	(1) 1/10	1.10	114	58.2/55.9	11.3	9.5	45/55	2.3	3.48
	10	830	(2) 1/20	1.50	132	57.3/55.1	16.7	13.4	45/55	3.3	8.10
	12	970	(2) 1/20	1.50	142	57.9/55.7	17.8	14.9	45/55	3.6	2.56

Note: Based on 72°F DB EAT, 62°F WB, and 3 row cooling coil. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

TVB SERIES PERFORMANCE DATA

Unit Data						4 Row Chilled Water Coil					
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	EWT/ LWT (°F)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	227	(1) 1/50	0.40	45	61.1/58.2	2.5	2.6	45/55	0.5	0.70
	03	296	(1) 1/20	0.60	60	55.4/54.2	6.5	5.4	45/55	1.3	3.96
	04	421	(1) 1/20	0.75	70	54.7/53.7	10.1	8.0	45/55	2.0	8.52
	06	539	(1) 1/20	0.75	80	55.4/54.5	11.8	9.8	45/55	2.3	2.14
	08	614	(1) 1/10	1.10	114	55.1/54.1	14.0	11.4	45/55	2.8	3.00
	10	815	(2) 1/20	1.50	132	53.9/53.0	21.0	16.2	45/55	4.2	7.35
	12	842	(2) 1/20	1.50	142	52.6/51.9	24.2	17.9	45/55	4.9	11.27
TVBA/TVBF	02	229	(1) 1/50	0.40	45	61.7/58.3	2.6	2.5	45/55	0.5	0.70
	03	312	(1) 1/20	0.60	60	55.6/54.5	6.8	5.6	45/55	1.3	4.17
	04	431	(1) 1/20	0.75	70	54.9/53.8	10.2	8.1	45/55	2.0	8.52
	06	549	(1) 1/20	0.75	80	55.5/54.6	11.8	9.9	45/55	2.3	2.14
	08	603	(1) 1/10	1.10	114	55.0/54.1	13.8	11.2	45/55	2.8	3.00
	10	805	(2) 1/20	1.50	132	53.8/52.9	20.9	16.1	45/55	4.2	7.35
	12	934	(2) 1/20	1.50	142	53/52.2	26.1	19.5	45/55	5.2	12.72

Note: Based on 72°F DB EAT, 62°F WB, and 4 row cooling coil. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

Unit Data						3 Row Chilled Water Coil					1 Row Hot Water Coil			
Unit Type	Unit Size	Air Flow (CFM)	Motor (HP)	Fan AMPS (FLA)	Fan Watts	LAT DB/ WB (°F)	Total Capacity (MBH)	Sensable Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (Ft.)	LAT DB/ WB (°F)	Sensable Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (Ft.)
TVBC	02	227	(1) 1/50	0.40	45	57.6/55.4	4.4	3.6	0.9	8.84	100.7	7.5	0.4	0.44
	03	296	(1) 1/20	0.60	60	64.2/59.2	2.5	2.5	0.5	0.54	101.6	10.1	0.5	0.71
	04	421	(1) 1/20	0.75	70	59.1/56.6	6.8	5.9	1.3	3.38	95.6	11.8	0.6	0.21
	06	539	(1) 1/20	0.75	80	58.3/56.1	9.4	8	1.9	2.42	94.0	14.0	0.7	0.11
	08	614	(1) 1/10	1.10	114	58.1/55.9	11	9.3	2.2	3.31	83.1	8.7	0.4	0.01
	10	815	(2) 1/20	1.50	132	57.2/55.1	16.4	13.2	3.3	7.84	95.6	22.6	1.2	0.09
	12	842	(2) 1/20	1.50	142	57.6/55.6	15.8	13.3	3.1	2.02	101.8	29.0	1.5	0.16
TVBA/TVBF	02	229	(1) 1/50	0.40	45	57.6/55.5	4.3	3.6	0.9	10.5	100.7	7.6	0.4	0.45
	03	312	(1) 1/20	0.60	60	64.5/59.3	2.5	2.5	0.5	0.54	100.7	10.4	0.5	0.75
	04	431	(1) 1/20	0.75	70	59.1/56.6	6.9	6.1	1.4	3.56	95.7	12.0	0.6	0.21
	06	549	(1) 1/20	0.75	80	58.4/56.2	9.4	8.1	1.9	2.42	93.9	14.2	0.7	0.11
	08	603	(1) 1/10	1.10	114	58.2/55.9	10.8	9.1	2.1	3.15	83.3	8.7	0.4	0.01
	10	805	(2) 1/20	1.50	132	57.1/55.0	16.4	13.1	3.3	7.84	95.7	22.4	1.2	0.08
	12	934	(2) 1/20	1.50	142	57.8/55.7	17.3	14.5	3.5	2.42	100.4	30.8	1.6	0.18

Note: Based on 70°F EAT, 180°F EWT, 40°F temperature drop. Cooling coil data based on 72°F DB EAT, 62°F WB, 45°F EWT, 55°F LWT. All selections made at High speed, .05" ESP, 115 V motor, Concealed style of unit, Altitude of 0'. Fan watts shown at operating conditions. FLA based on motor nameplate.

TVB Series Motor and Fan Data

TVB PSC MOTOR AND FAN DATA

Unit Size	Fan Speed	Motor H.P. (QTY)	# Of Fan	115 Volts		208-230 Volts		277 Volts	
				FLA	WATTS	FLA	WATTS	FLA	WATTS
02	High	(1) 1/50	1	0.40	45	0.27	53	0.21	57
	Medium				35		41		44
	Low				28		36		40
03	High	(1) 1/20	1	0.60	60	0.40	67	0.31	73
	Medium				48		54		60
	Low				43		49		54
04	High	(1) 1/20	2	0.75	70	0.39	71	0.35	76
	Medium				61		60		65
	Low				58		52		58
06	High	(1) 1/20	2	0.75	80	0.39	81	0.35	87
	Medium				74		71		77
	Low				61		59		64
08	High	(1) 1/10	2	1.10	114	0.51	109	0.46	114
	Medium				81		77		80
	Low				71		66		70
10	High	(2) 1/20	4	1.50	132	0.78	140	0.70	144
	Medium				114		116		120
	Low				107		101		106
12	High	(2) 1/20	4	1.50	142	0.78	147	0.70	154
	Medium				126		125		131
	Low				114		107		114

Notes:

1. TVBF 3-row coil, no EH, no toe kick, standard throw away panel filter. Fan watts shown at operating conditions
2. Data was taken without ductwork
3. Unit size 04, 06, 08, 10 and 12 data generated at 115v, 230v and 277v
4. Unit size 02 & 03 data generated with 115v, 240v to 120v transformer (230v line voltage) and 277v to 120v transformer (277v line voltage)
5. FLA based on motor nameplate

TVB SERIES ECM MOTOR AND FAN DATA

Note: Contact Titus regarding EC motor data before project submission

VERTICAL CONCEALED (TVBC)

Unit Size	Fan Speed	Motor H.P. (QTY)	# Of Fan	WATTS	115 Volts		208-230 Volts		277 Volts	
					FLA	3-Phase Neutral	FLA	3-Phase Neutral	FLA	3-Phase Neutral
02	High	(1) 1/25	1	34	0.7	1.0	0.5	0.8	0.5	0.8
03	High	(1) 1/25	1	48	1.0	1.5	0.8	1.2	0.7	1.0
04	High	(1) 1/25	2	55	1.2	1.7	0.9	1.3	0.9	1.3
06	High	(1) 1/25	2	63	1.4	2.0	1.1	1.6	1.1	1.6
08	High	(1) 1/25	2	83	1.7	2.5	1.3	1.9	1.2	1.7
10	High	(2) 1/25	4	106	2.2	3.2	1.6	2.4	1.6	2.4
12	High	(2) 1/25	4	120	3.0	4.4	2.4	3.4	2.2	3.2

VERTICAL EXPOSED (TVBF) / SLOPED TOP (TVBA)

Unit Size	Fan Speed	Motor H.P. (QTY)	# Of Fan	WATTS	115 Volts		208-230 Volts		277 Volts	
					FLA	3-Phase Neutral	FLA	3-Phase Neutral	FLA	3-Phase Neutral
02	High	(1) 1/25	1	38	0.7	1.0	0.5	0.8	0.5	0.8
03	High	(1) 1/25	1	48	1.0	1.5	0.7	1.0	0.7	1.0
04	High	(1) 1/25	2	53	1.1	1.6	0.9	1.3	0.9	1.3
06	High	(1) 1/25	2	66	1.4	2.0	1.1	1.6	1.0	1.5
08	High	(1) 1/25	2	93	1.8	2.6	1.3	1.9	1.3	1.9
10	High	(2) 1/25	4	115	2.8	4.0	2.2	3.2	2.2	3.2
12	High	(2) 1/25	4	120	3.0	4.4	2.2	3.2	2.2	3.2

Notes:

1. Exposed, 3-row coil, no EH, no toe kick, standard throw away panel filter
2. Watts as shown are for .05" ESP, 3 row coil, 115/1/60, 12 FPI, and throwaway filters
3. Motor HP as noted is a nominal rating
4. Data as supplied is for reference only. For project specific operational points see seletion tool report out.

TVB Series Sound Data

Unit Size	Fan Speed	SCFM	Total Sound Power Level						
			Octave Band / Center Frequency (HZ)						
			2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
02	High	233	60	65	60	55	50	47	39
	Medium	190	51	54	47	44	37	27	30
	Low	149	44	46	32	29	22	26	28
03	High	321	60	62	56	54	50	45	38
	Medium	280	57	57	52	49	45	38	32
	Low	246	51	53	47	44	38	29	30
04	High	454	61	64	63	57	50	48	40
	Medium	420	59	60	60	52	47	40	34
	Low	334	51	56	49	42	34	28	30
06	High	570	62	64	68	57	48	45	38
	Medium	492	58	60	65	52	44	39	32
	Low	362	51	54	49	40	32	27	30
08	High	633	68	68	65	61	55	51	45
	Medium	549	63	62	63	56	51	44	38
	Low	436	59	57	56	48	40	33	31
10	High	836	65	66	70	60	53	51	40
	Medium	792	61	63	68	59	52	45	38
	Low	697	58	59	65	53	45	41	33
12	High	978	65	66	66	59	52	47	39
	Medium	888	64	65	66	57	51	45	37
	Low	697	57	57	61	49	41	34	31

Notes:

1. Sound data tested in accordance with AHRI-350-2008
2. Sound levels expressed in decibels, dB RE: 1 x 10-12 watts
3. Total sound power level data based on exposed cabinet model with fan CFM at corresponding motor tap with 115/1/60 volt motor, 3 row coil, 1" throwaway filter, 0.0" external static pressure and standard rated internal pressure losses