

## **MODEL**

• TVHC - Vertical High Performance Fan Coil Unit

#### **FEATURES**

- Heavy gauge galvanized steel construction
- 1/2" thick fiberglass insulation, Scrim reinforced foil faced fiberglass insulation (Optional),
- Elastomeric closed cell foam insulation (Optional)
- 1" duct discharge collar
- 1" flat filter rack with throwaway filters, 2" flat filter rack (Optional), 1" & 2" Merv 8 and Merv 13 filters (Optional), Spare filters (Optional)
- Removable access panels sized for easy handling
- Double deflection discharge grille (Optional)
- Quarter turn quick open access panel fasteners (Optional)
- Selectable Front or Bottom return and supply plenums (Optional)

### COILS

- Cooling 3 or 4 row chilled water
- Heating 1 or 2 row hot water reheat position
- 6 total rows of cooling and heating coils maximum
- 1/2" O.D. seamless copper tubes
- 0.016" tube wall thickness, 0.025" tube wall thickness (Optional)
- Stainless steel coil casings (Optional)
- · Left- or Right-hand connections
- 450 PSIG working pressure at 200°F
- · Removable for service
- Manual air vents, Automatic air vents (Optional)

# **DRAIN PANS**

- Single wall, galvanized steel, externally insulated fire retardant and antimicrobial closed cell foam
- Positively sloped to drain connection
- Condensate Overflow Switch (Optional)
- 3/4" MPT galvanized drain connection
- Single wall, stainless steel with external insulation (Optional)

### FAN/MOTOR ASSEMBLIES

- Forward curved, DWDI centrifugal type
- 115, 208-230 & 277 volt, 1- phase, 3-speed PSC motors
- 115, 208-230 & 277 volt, 1- phase, 3-speed fixed EC and 3-speed adjustable, constant torque ECM spoked rotor EC motors (Optional)
- PWM Speed control options: ICM "Sync" 2-10V or ICM "Select" 3-speed (Optional)
- Quick disconnect motor connections
- Removable fan(s)/motor(s) for service



### **ELECTRICAL**

- Electrical junction box for field wiring terminations
- · Terminal block for field connections
- Front access electrical enclosure (Optional)
- SCR fan speed controller, only for high speed (Optional)
- Fan relay packages (Optional)
- Disconnect Switch: Toggle disconnect switch (Optional),
  Door interlocking disconnect switch (Optional)
- Main fusing (Optional)
- Unit and remote mounted three speed fan switches (Optional)

## **ELECTRIC HEAT**

- Integral electric heat assembly with removable elements for easy service
- Automatic reset primary and back-up secondary manual thermal limits
- Single point power connection
- Hinged electrical enclosure
- Main fusing (Optional)

## PIPING PACKAGES (OPTIONAL)

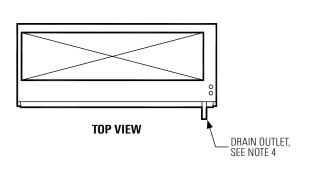
- 1/2", 3/4", 1", 11/4", 11/2" 2-way and 3-way, normally closed, 2-position electric motorized valves
- 1/2", 3/4", 1" piping packages factory-assembled and shipped loose with unions for field installation
- 11/4" and 11/2" piping packages ship as parts kit with instructions for field assembly and installation
- Isolation ball valves with memory stop
- 24V floating point modulating control valves, 0-10V proportional control valves
- Fixed (FC) and adjustable (PICV) flow control devices
- · Unions, Y-strainers and P/T ports
- Remote mounted digital display and programmable thermostats



# INLET DAMPER SECTION (OPTIONAL)

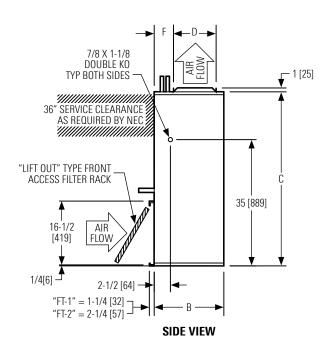
- · Factory assembled and installed
- Heavy gauge galvanized steel formed blade dampers with parallel blade operation
- Low-leak dampers with extruded vinyl blade seals and flexible metal jamb seals

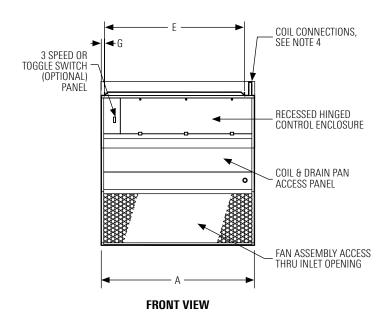
## **DIMENSIONAL DATA**

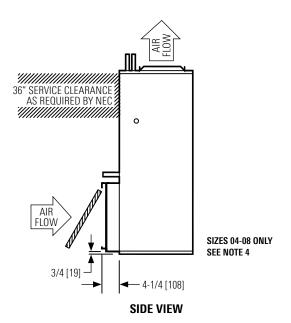


## **CERTIFICATIONS**

- AHRI 440 certified and labeled
- AHRI 410 certified and labeled Coils
- All units cETLus listed in compliance with UL/ANSI Standard 60335







# NOTES:

- 1. Dimensions in parentheses are in millimeters (mm).
- 2. See table below for dimensional references.
- 3. Provide access clearance for electrical enclosure per local and national electrical code requirements.
- 4. Dimensions shown apply to filter access panel for unit sizes 04-08 only.



# PERFORMANCE AND DIMENSIONAL DATA

Size	Performance							Dimensions													
Unit Size	CFM Range (Note 1)		AHRI Total Cooling Capacity (MBH) (Note 2)		AHRI Heating Capacity (Note 4)		A		В		С		D		Ш		F		G		
	PSC	ECM	Total Capacity	Sensible Capacity	1 row (MBH)	2 row (MBH)	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
04	485-600	240-475	13.6	9.4	12.5	21.2	22	559	15	381	48	1219	7 1/2	190	17	432	5 3/4	146	1 1/4	32	
06	540-750	295-650	18	12.9	14.9	26.4	22	559	15	381	48	1219	7 1/2	190	17	432	5 3/4	146	1 1/4	32	
08	850-1040	480-1100	24.3	17.2	20.5	36.3	22	559	15	381	48	1219	10	254	17	432	3 1/4	83	1 1/4	32	
10	800-1250	475-1100	33.6	23	30.7	52.9	29	737	18	457	48	1219	12 3/4	324	24	610	3 3/4	95	1 1/4	32	
12	1285-1475	550-1340	40.4	27.5	33.5	58.5	29	737	18	457	48	1219	12 3/4	324	24	610	3 3/4	95	1 1/4	32	
16	1520-2200	790-1700	57.6	38.4	50.4	89	46	1168	18	457	48	1219	12 3/4	324	39	991	3 3/4	95	3	76	
20	1540-2250	1000-2275	66.4	45.7	56	100.9	46	1168	18	457	48	1219	12 3/4	324	39	991	3 3/4	95	3	76	

#### NOTES:

- 1. The minimum external static pressure required is .1 inches w.g.
- 2. Capacity based on 80°F DB and 67°F WB EAT, 45°F EWT, 10°F temperature rise, high fan speed, PSC motor. 4 Row Coil 10 fpi. Airflow under dry coil conditions.
- 3. Airflow rate CFM on sizes 16 and 20 exceed maximum ratings in AHRI 440 and are therefore not certified.
- 4. Based on 70°F EAT, 180°F EWT, 20°F temperature drop, high fan speed.