# Engineered Comfort

## VERTICAL HI-RISE FAN COIL UNITS WITH EPIC ECM OR 3-SPEED ECM MOTOR
**TYPE S** CONCEALED SLAVE
2 PIPE OR 4 PIPE
**MODEL SERIES: 39VH • UNIT SIZES 3 – 21**

### MODELS:
- ❑ **39VHZ** Chilled/Hot Water (2-pipe).
- ❑ **39VHZE** Chilled Water & Electric Heat (2-pipe).
- ❑ **39VHZW** Chilled & Hot Water (4-pipe).
- ❑ **39VHW** Hot Water (2-pipe).

### STANDARD FEATURES:
- 20 ga. (1.0) galvanized steel casing.
- 1/2" (13), 2 lb/cu.ft. density water repellent fiberglass insulation.
- 1" (25) throwaway filter.
- Galvanized steel insulated drain pan.
- Factory installed P-Trap.
- Double deflection supply grille(s).
- Front return panel (not shown, see drawing 39VH-6) with AW Appliance White powder coat finish.
- Factory installed piping package(s).

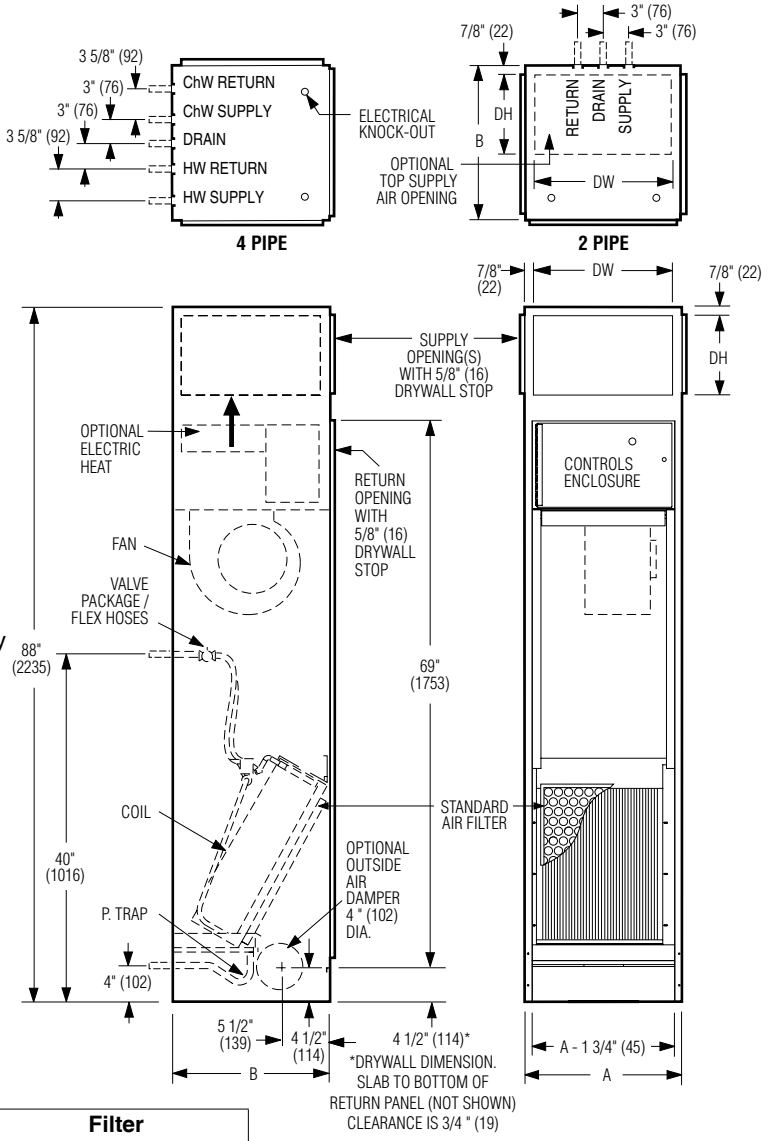
### OPTIONS:
- ❑ 1/2" (13) Fiber-Free liner.
- ❑ 1/2" (13) Steri-liner.
- ❑ 1" (25) MERV 8 pleated filter.
- ❑ Full riser chase.
- ❑ Electric heat.
- ❑ Stainless steel drain pan.
- ❑ Drain pan float switch.
- ❑ Toggle disconnect switch.
- ❑ Outside air damper.
- ❑ Thermostat / Controls (by Engineered Comfort).
- ❑ Special features: _____ .

### WATER COIL:
- 1/2" (13) Copper tubes with aluminum ripple fins.
- Manual air vents.
- Stainless steel flexible hose connections.

**Coil Options:**

2 Pipe system:
- ❑ 3 Row C/HW.
- ❑ 4 Row C/HW.
- ❑ 1 Row HW Only.
- ❑ 2 Row HW Only.
- ❑ 3 Row HW Only.

4 Pipe system:
- ❑ 3/1 CW/HW Rows.
- ❑ 3/2 CW/HW Rows.
- ❑ 4/1 CW/HW Rows.




### Dimensional Data

| Unit Size | Footprint A x B | Supply Grille Nominal DW x DH | Filter Size |
|---|---|---|---|
| **3, 5, 6** | 18 x 18 (457 x 457) | 16 x 10 (406 x 254) | 13 1/8 x 16 3/4 (333 x 425) |
| **8, 10** | 20 x 20 (508 x 508) | 18 x 10 (457 x 254) | 15 1/2 x 24 (394 x 610) |
| **12, 15** | 24 x 24 (610 x 610) | 22 x 10 (559 x 254) | 18 1/2 x 29 (470 x 737) |
| **19, 21** | 30 x 24 (762 x 610) | 28 x 10 (711 x 254) | 24 1/2 x 29 (622 x 737) |

C ETL LISTED US Intertek

AHRI CERTIFIED™ www.ahridirectory.org Room Fan-Coils AHRI Standard 440

**NOTES:**
1. Wiring from electrical entry knock-out to controls enclosure is furnished and field installed by others.
2. Risers available from 3/4" (19) to 3" (76) dia. with either 1/2" (13) or 3/4" (19) thick insulation.
3. Max. riser length is 120" (3048), 100" (2540) min.
4. Back riser connection location shown. See drawing 39VH/L-1 for available riser and discharge grille unit configurations.
5. All piping and insulation between slave unit and risers is furnished and field installed by others.
6. All coil and drain connections are retracted internally for shipping.
7. Coil connections are 5/8" (16) O.D. sweat. Drain P-Trap is designed to accept 7/8" (22) O.D. copper tube.
8. Slave unit riser connections are built "mirror image" to master unit.
9. Slave units are furnished with factory installed shut-off valves and field connection tubes, unless master unit risers are shipped loose. See drawing 39VH/L-2 for shipped loose riser details.


Dimensions are in inches (mm).

| | | | | |
|---|---|---|---|---|
| **SCHEDULE TYPE:** | | | | |
| **PROJECT:** | | | | |
| **ENGINEER:** | **DATE** | **B SERIES** | **SUPERSEDES** | **DRAWING NO.** |
| **CONTRACTOR:** | **5 - 15 - 26** | **39** | **8 - 5 - 16** | **39VH-5** |

Engineered Comfort reserves the right to change any information concerning product or pricing without notice.

## Electrical Data

| Unit Size | EPIC ECM Motor FLA | | | | | 3-Speed ECM FLA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Motor HP | 120V | 208V | 240V | 277V | Motor HP | 120V | 208V | 240V | 277V |
| **3** | * | — | — | — | — | 1/3 | 1.6 | 1.1 | 1.1 | 1.0 |
| **5** | * | — | — | — | — | 1/3 | 2.0 | 1.4 | 1.4 | 1.2 |
| **6** | * | 3.6 | 2.3 | 2.2 | 2.0 | 1/3 | 2.5 | 1.8 | 1.7 | 1.6 |
| **8** | * | — | — | — | — | 1/3 | 3.4 | 2.4 | 2.3 | 2.1 |
| **10** | * | 6.8 | 4.0 | 4.3 | 3.6 | 1/2 | 4.7 | 3.3 | 3.2 | 2.9 |
| **12** | * | — | — | — | — | 3/4 | 5.3 | 3.7 | 3.7 | 3.3 |
| **15** | * | 8.7 | 5.8 | 5.4 | 4.6 | 3/4 | 8.0 | 5.6 | 5.5 | 5.0 |
| **19** | * | 12.7 | 8.5 | 7.8 | 6.5 | 1 | 11.9 | 8.3 | 8.2 | 7.4 |
| **21** | * | — | — | — | — | 1 | 12.5 | 8.8 | 8.6 | 7.8 |

***** The EPIC ECM is a variable horsepower motor. Refer to Selectworks schedule for actual power consumption.
FLA = Full load amperage (high speed fan). All motors are single phase/60 Hz.

### MOTOR OPTIONS:

- ❑ EPIC ECM. Ultra-high efficiency fan motor with overload protection. EPIC fan volume controller, 0–10 Vdc.
- ❑ 3-Speed ECM. Ultra-high efficiency fan motor with overload protection.

### ELECTRIC HEAT:

- Class 'A' 80/20 Ni./Cr. wire.
- Automatic reset high limit cut-outs (one per element).
- Magnetic contactors per stage.

**Voltage:**

Single phase, 60 Hz.

❑ 120V ❑ 208V ❑ 240V ❑ 277V

**Electric heat options:**

- ❑ Door interlocking disconnect switch.
- ❑ Main fusing.
- ❑ Quiet contactors.
- ❑ Manual reset secondary Hi-limit thermal cut out.
- ❑ UV light w/safety switch.



| SCHEDULE TYPE: | | | | |
|---|---|---|---|---|
| PROJECT: | | | | |
| ENGINEER: | DATE | B SERIES | SUPERSEDES | DRAWING NO. |
| CONTRACTOR: | 5 - 15 - 26 | 39 | 8 - 5 - 16 | 39VH-5 |

Engineered Comfort reserves the right to change any information concerning product or pricing without notice.