



## HEC4 Series Chilled Water Cooling with Hot Water Heat Cased Horizontal Ceiling Mount Air Handler

### *Standard Features*

- High performance dual constant torque blower design.
- Hot Water heat models supply voltage is 115/1/60.
- Space saving ceiling mount design.
- Galvanized steel blower wheels and housings.
- Pre-wired for cooling, heating and heat pump operation.
- Hydronic control board with built-in water pump cycle timer that cycles the water pump every 6 hours for 60 seconds.
- Water pump is factory installed on these units.
- Freeze protection switch is installed on these units.
- Standard control transformer is 115 VAC primary/ 24 VAC secondary/ 40 VA.
- Secondary circuit of the transformer is grounded per UL60335-2-40 requirements.
- Meets ASHRAE standard 193 low leak requirements.
- Primary and secondary condensate pan drain connections.
- Easy access for service and maintenance.
- High efficiency copper tube and aluminum fin coils.
- Unit can be configured as hot water heat with chilled water cooling using one coil for hot water heat and a second coil for chilled water cooling, (4 Pipe), Refer to the tables in the specification sheet or installation manual for more details.

## HEC4 Series Chilled Water Cooling with Hot Water Heat

### Description:

### Cased Horizontal Ceiling Mount Air Handler

The HEC4 Series horizontal fan coil series is designed for horizontal mounting into a furred down ceiling. This space saving HEC4 series handles up to 1200 CFM of air movement. Chilled water cooling capacities from 20,469 to 36,279 BTU/H, depending on chilled water temperature and water pump GPM. Hot water heat capacity from 6,516 to 55,260 BTU/H, depending on entering water temperature and water pump GPM. Refer to the chilled water and Hot water tables in the installation manual or specification guides. The HEC4 Series are rated for 115/1/60. These units are ETL listed.

### Unit Information Table

| Model No. | Nominal Chilled Water Cooling Capacity in BTU/H @ 80°F/67°F/45°F (Total Heat) | No. of Rows | GPM | Blower Code | Indoor Motor HP | Voltage/ PH/ HZ | Water Pump Amps | Minimum Circuit Ampacity | Maximum Overcurrent Protection | CFM Range @ 0.2 ESP |
|-----------|-------------------------------------------------------------------------------|-------------|-----|-------------|-----------------|-----------------|-----------------|--------------------------|--------------------------------|---------------------|
| HEC418*AA | 20,469                                                                        | 2           | 3.8 | N           | 0.33            | 115/1/60        | 0.52            | 2.69                     | 15                             | 485-857             |
| HEC424*BA | 22,891                                                                        | 2           | 4.4 | O           | 0.33            | 115/1/60        | 0.52            | 2.74                     | 15                             | 486-854             |
| HEC435*BA | 40,174                                                                        | 3           | 7.8 | R           | 0.5             | 115/1/60        | 0.52            | 5.2                      | 15                             | 834-1253            |
| HEC430*CA | 40,469                                                                        | 3           | 8.0 | R           | 0.5             | 115/1/60        | 0.52            | 4.71                     | 15                             | 845-1261            |
| HEC436*DA | 46,642                                                                        | 3           | 9.8 | R           | 0.5             | 115/1/60        | 0.52            | 4.48                     | 15                             | 837-1252            |

### Dimensional Data

| Model Number | Liquid Line | Suction Line | Water Line | A  | B     | C  |
|--------------|-------------|--------------|------------|----|-------|----|
| HEC418*AC    | 3/8         | 3/4          | (2) 5/8    | 37 | 34.25 | 30 |
| HEC424*BC    | 3/8         | 3/4          | (2) 5/8    | 45 | 42.25 | 38 |
| HEC430*CC    | 3/8         | 3/4          | (2) 5/8    | 49 | 46.25 | 42 |
| HEC436*DC    | 3/8         | 3/4          | (2) 5/8    | 56 | 53.25 | 49 |

### Hot Water Heat Table

| Model No. | Heating Capacities |        |        |        |        |        | Heatin g GPM | Press Drop FT- | Voltage VAC/PH/Hz |
|-----------|--------------------|--------|--------|--------|--------|--------|--------------|----------------|-------------------|
|           | 130°F              | 140°F  | 150°F  | 160°F  | 170°F  | 180°F  |              |                |                   |
| HEC218*AA | 19,041             | 22,511 | 25,599 | 28,904 | 32,222 | 35,552 | 3.0          | 2.8            | 115/1/60          |
| HEC224*BA | 22,192             | 25,970 | 29,763 | 33,568 | 37,384 | 41,208 | 3.0          | 0.18           | 115/1/60          |
| HEC230*BA | 25,137             | 29,452 | 33,790 | 38,148 | 42,524 | 46,914 | 3.0          | 3.4            | 115/1/60          |
| HEC236*CA | 26,258             | 30,755 | 35,275 | 39,813 | 44,368 | 48,937 | 3.0          | 2.8            | 115/1/60          |
| HEC230*DA | 27,985             | 32,763 | 37,561 | 42,377 | 47,206 | 52,048 | 3.0          | 0.21           | 115/1/60          |

### Factory Installed Options

- Louvered access panel.
- Non-louvered access panel

### Field Installed Options

- Louvered or non-louvered ceiling access panels.

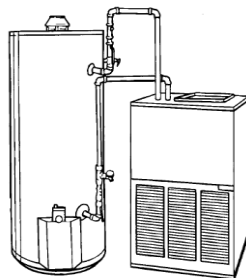
### Field Connections

- 3/4" Male Drain – Primary
- 3/4" Male Drain – Secondary
- 9/16" Thermostat Cable

### Clearance to Combustibles

| Top (in) | Back (in) | Sides (in) | Supply Duct (in) |
|----------|-----------|------------|------------------|
| 0        | 0         | 0          | 0                |

### Hot Water Heat configuration with a Hot Water Tank



### Rear Return Knock

### Air Filter Sizes

| Model  | Filters     |
|--------|-------------|
| HCPL-1 | (2) 16x16x1 |
| HCPL-2 | (2) 16x20x1 |
| HCPL-3 | (2) 16x25x1 |
| HCPL-4 | (2) 16x25x1 |

### Discharge Opening

| Model     | Opening (in) |
|-----------|--------------|
| HEC218*AC | 30.25 x 7.50 |
| HEC224*BC | 38.25 x 7.50 |
| HEC230*CC | 42.25 x 7.50 |
| HEC236*DC | 49 x 7.50    |

### Out Opening

| Model     | Opening (in)  |
|-----------|---------------|
| HEC218*AC | 30.875 x 7.25 |
| HEC224*BC | 38.375 x 7.50 |
| HEC230*CC | 42.375 x 7.50 |
| HEC236*DC | 49.375 x 7.50 |

### Physical Dimensions

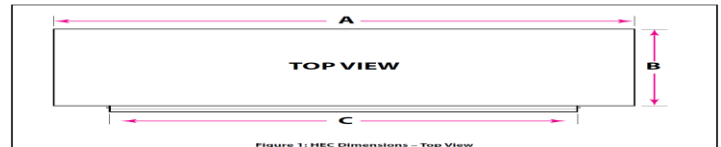


Figure 1: HEC Dimensions - Top View

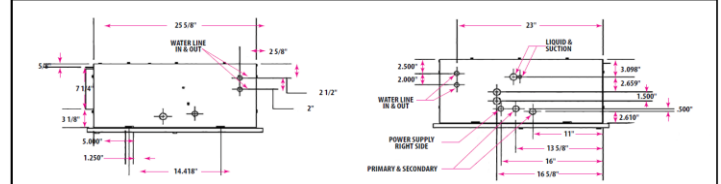


Figure 2: HEC Dimensions - Side Views

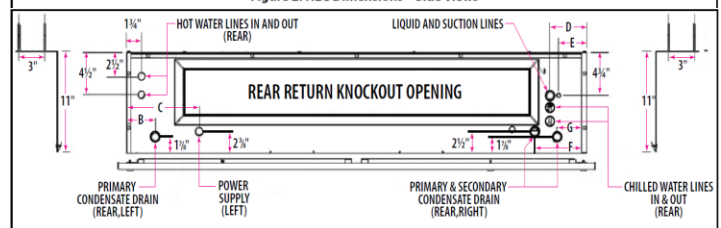


Figure 3: HEC Dimensions - Rear View

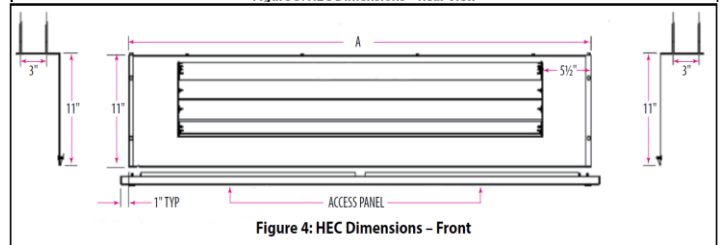


Figure 4: HEC Dimensions - Front

### Louvered Ceiling Panels



| Part No. | Overall frame Dimension | Type         | SunTherm Horizontal Fan |
|----------|-------------------------|--------------|-------------------------|
| HCPL-1   | 27.5 x 43               | Louvered     | HEU118*AC               |
| HCPL-2   | 27.5 x 49               | Louvered     | HEU124*BC               |
| HCPL-3   | 27.5 x 55.5             | Louvered     | HEU130*CC               |
| HCPL-4   | 27.5 x 62.5             | Louvered     | HEU136*DC               |
| CPNL-1   | 27.5 x 43               | Non-Louvered | HEU118*AC               |
| CPNL-2   | 27.5 x 49               | Non-Louvered | HEU124*BC               |
| CPNL-3   | 27.5 x 55.5             | Non-Louvered | HEU130*CC               |
| CPNL-4   | 27.5 x 62.5             | Non-Louvered | HEU136*DC               |

