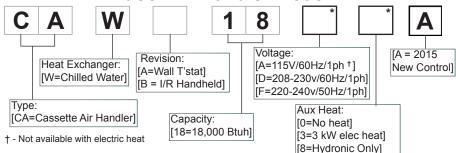


# Specifications & Submittal



## 18,000 Btuh Hydronic Fan Coil Ceiling Cassette Air Handler

#### **Indoor Air Handler Model:**



#### **Order Quantity of Air Handler**

18,000 Btuh Hydronic Fan Coil Ceiling Cassette Air Handler

\* Select Voltage and Aux Heat option

No derate for 50Hz or 115v

| P | Please indicate desired quantity of optional accessories for <u>each</u> air handler (max allowed) |  |   |  |  |  |  |  |  |  |  |
|---|--|--|---|--|--|--|--|--|--|--|--|
|   | 24VAC Wired Thermostat, Single-Stage, 1-Heat/1-Cool, Manual Changeover, #240008208 (1)             |  | 51/4"Ø Discharge Air Duct Collar Kit, 2pcs, #240009786 (1 kit, any 2 non-adjacent sides)                                      |  |  |  |  |  |  |  |  |
|   | 24VAC Wired Thermostat, Single-Stage, 1-Heat/1-Cool, Auto Changeover, #240008210 (1)               |  | 3"Ø Fresh Air Duct Collar Kit, 3 pcs, #240003416 (1 kit)  |  |  |  |  |  |  |  |  |
|   | OEM Hand-Held Infrared Remote Control (#240006566)  (1, For all CAWB air handlers)                 |  | Condensate Pump, 144" lift, External Floor Mount, 208/230v-<br>#240003106 / 115v-#240003107 (Unit comes w/ 30" lift pump) (1) |  |  |  |  |  |  |  |  |

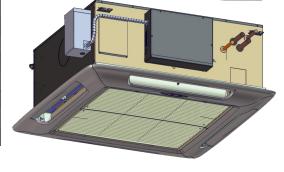
NOTE: Every air handler requires either a 24VAC Wall Thermostat or Hand-Held Infrared Remote

| Electrical Specifications |              |            |     |           |     |       |       |      |      |  |  |
|---------------------------|--------------|------------|-----|-----------|-----|-------|-------|------|------|--|--|
| Model #                   | Volts/Ph/Hz  | Fan Motors |     | Elec Heat |     | Total | Min   |      | HACR |  |  |
| Wiodei #                  | VOILS/P11/HZ | Amps       | HP  | Amps      | kW  | Amps  | Volt. | MCA  | BRKR |  |  |
| CAW_18D0                  | 208-230/1/60 | 0.55       | 1/8 | -         | -   | 0.6   | 197   | 0.7  | 15   |  |  |
| CAW_18F0                  | 220-240/1/50 | 0.55       | 1/8 | -         | -   | 0.6   | 198   | 0.7  | 15   |  |  |
| CAW_18A0                  | 115/1/60     | 1.1        | 1/8 | -         | -   | 1.1   | 104   | 1.4  | 15   |  |  |
| CAW_18D3                  | 208-230/1/60 | 0.55       | 1/8 | 13.04     | 3.0 | 13.6  | 197   | 17   | 20   |  |  |
| CAW_18F3                  | 220-240/1/50 | 0.5        | 1/8 | 13.6      | 3.2 | 14.2  | 198   | 17.7 | 20   |  |  |





| Miscellaneous Technical Data |       |              |                    |                           |  |  |  |  |  |  |
|------------------------------|-------|--------------|--------------------|---------------------------|--|--|--|--|--|--|
| Indoor Fan Details           | High  | Low          | Vertical Clearance | ** 141/8" (0.36m) min     |  |  |  |  |  |  |
| Discharge Air Volume         | 650   | 550          | Ceiling Opening    | 33%" x 33%" (860 x 860mm) |  |  |  |  |  |  |
| [CMF (L/S)]                  | (307) | (260)        | Gross Weight       | 108 lbs (49.1 kg)         |  |  |  |  |  |  |
| Indoor Sound Levels [dBA]    | 44    | 42 Washable  |                    | 2, Mesh, Metal Frame      |  |  |  |  |  |  |
| Supply Water Inlet           | *7/8  | 3" Ø         | Air Filter         | 80% Arrestance            |  |  |  |  |  |  |
| Return Water Outlet          | *7/8  | 3" Ø         | Condens            | ate Pump Details          |  |  |  |  |  |  |
| Brand Air Duct Collar        | 3" Ø  |              | Lift               | Nominal Flow Rate         |  |  |  |  |  |  |
| Fresh Air Duct Collar 5" Ø   |       | 30" Max Head | 0.1 GPM            |                           |  |  |  |  |  |  |



| To:       |           | Project:  |              |
|-----------|-----------|-----------|--------------|
| Date:     |           | Customer: |              |
| From:     |           | Location: |              |
| Contact:  |           | Engineer: |              |
| _         |           | Unit Tag# |              |
| For Your: | Reference | Approval  | Construction |

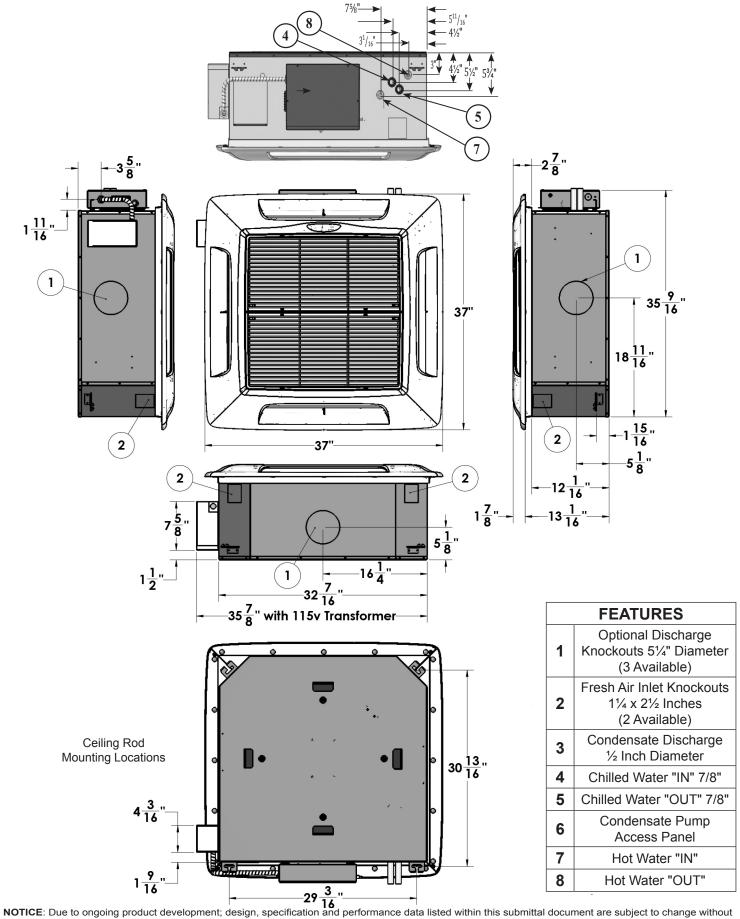
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P/N 240011050, Rev A (03/20/2015)

<sup>\*</sup> Refrigerant Piping Outside Diameter

<sup>\*\*</sup> Measured from interior face of drop-ceiling

#### 18,000 Btuh Hydronic Fan Coil Ceiling Cassette Air Handler



## CAW\_18 Ceiling Cassette Air Handler Performance Data Tables

| Entering | ntering CFM 80° F DB / 67° F WB |                |                   |            |           | WB      |          |               |      |
|----------|---------------------------------|----------------|-------------------|------------|-----------|---------|----------|---------------|------|
| Water    | Low                             | Total Capacity | Sensible Capacity | Water Flow | Pressure  | Leaving | Air Temp | Leaving Water | ΔΤ   |
| Temp     | High                            | (Btuh)         | (Btuh)            | Rate (GPM) | Drop (Ft) | DB °F   | WB °F    | Temp (°F)     | (°F) |
|          | 550                             | 33,200         | 20,600            | 11.0       | 11.99     | 46.1    | 45.9     | 46.0          | 6.0  |
|          | 650                             | 38,600         | 24,000            | 12.8       | 15.9      | 46.5    | 46.4     | 46.0          | 6.0  |
|          | 550                             | 28,000         | 18,200            | 7.0        | 5.1       | 50.0    | 49.8     | 48.0          | 8.0  |
|          | 650                             | 34,000         | 21,900            | 8.5        | 7.3       | 49.4    | 49.2     | 48.0          | 8.0  |
| 40°F     | 550                             | 20,300         | 15,000            | 4.0        | 1.7       | 55.3    | 55.2     | 50.0          | 10.0 |
| 40 1     | 650                             | 24,000         | 17,700            | 4.8        | 2.5       | 55.3    | 55.2     | 50.0          | 10.0 |
|          | 550                             | 14,300         | 12,300            | 2.4        | 0.6       | 59.8    | 58.9     | 52.0          | 12.0 |
|          | 650                             | 18,900         | 15,500            | 3.2        | 1.0       | 58.4    | 57.9     | 52.0          | 12.0 |
|          | 550                             | 13,100         | 11,500            | 1.9        | 0.4       | 61.0    | 59.7     | 54.0          | 14.0 |
|          | 650                             | 14,200         | 13,200            | 2.0        | 0.4       | 61.7    | 60.3     | 54.0          | 14.0 |
|          | 550                             | 31,900         | 20,000            | 10.6       | 11.1      | 47.1    | 46.9     | 47.0          | 6.0  |
|          | 650                             | 37,000         | 23,300            | 12.3       | 14.7      | 47.5    | 47.4     | 47.0          | 6.0  |
|          | 550                             | 26,200         | 17,400            | 6.5        | 4.5       | 51.3    | 51.1     | 49.0          | 8.0  |
|          | 650                             | 32,100         | 21,000            | 8.0        | 6.5       | 50.7    | 50.5     | 49.0          | 8.0  |
| 41°F     | 550                             | 19,200         | 14,500            | 3.9        | 1.6       | 56.0    | 55.9     | 50.9          | 9.9  |
| 41°F     | 650                             | 22,400         | 17,000            | 4.5        | 2.1       | 56.3    | 56.0     | 51.0          | 10.0 |
|          | 550                             | 13,600         | 11,900            | 2.3        | 0.5       | 60.3    | 59.4     | 53.0          | 12.0 |
|          | 650                             | 17,400         | 14,700            | 2.9        | 0.8       | 59.4    | 58.7     | 53.0          | 12.0 |
|          | 550                             | 12,500         | 11,200            | 1.8        | 0.4       | 61.6    | 60.0     | 55.0          | 14.0 |
|          | 650                             | 13,500         | 12,700            | 1.9        | 0.4       | 62.3    | 60.6     | 55.0          | 14.0 |
|          | 550                             | 30,500         | 19,300            | 10.1       | 10.2      | 48.1    | 48.0     | 48.0          | 6.0  |
|          | 650                             | 35,400         | 22,600            | 11.8       | 13.5      | 48.6    | 48.4     | 48.0          | 6.0  |
|          | 550                             | 24,100         | 16,500            | 6.0        | 3.8       | 52.8    | 52.6     | 50.0          | 8.0  |
|          | 650                             | 30,000         | 20,100            | 7.5        | 5.8       | 51.9    | 51.7     | 50.0          | 8.0  |
| 42°F     | 550                             | 19,000         | 14,300            | 3.8        | 1.5       | 56.4    | 56.0     | 52.0          | 10.0 |
| 42°F     | 650                             | 22,300         | 16,900            | 4.5        | 2.1       | 56.5    | 56.1     | 52.0          | 10.0 |
|          | 550                             | 13,100         | 11,600            | 2.2        | 0.5       | 60.9    | 59.7     | 54.1          | 12.1 |
|          | 650                             | 14,300         | 13,400            | 2.4        | 0.6       | 61.3    | 60.2     | 54.0          | 12.0 |
|          | 550                             | 11,900         | 11,100            | 1.7        | 0.3       | 61.7    | 60.3     | 56.0          | 14.0 |
|          | 650                             | 12,900         | 12,200            | 1.8        | 0.4       | 62.9    | 60.9     | 56.0          | 14.0 |
|          | 550                             | 29,100         | 18,700            | 9.7        | 9.3       | 49.2    | 49.0     | 49.0          | 6.0  |
|          | 650                             | 33,800         | 21,800            | 11.2       | 12.4      | 49.6    | 49.4     | 49.0          | 6.0  |
|          | 550                             | 23,300         | 16,100            | 5.8        | 3.6       | 53.4    | 53.2     | 51.0          | 8.0  |
|          | 650                             | 27,800         | 19,200            | 6.9        | 5.0       | 53.2    | 53.0     | 51.0          | 8.0  |
| 43°F     | 550                             | 17,800         | 13,800            | 3.6        | 1.3       | 57.3    | 56.8     | 53.0          | 10.0 |
| - 43°F   | 650                             | 21,000         | 16,300            | 4.2        | 1.9       | 57.3    | 56.8     | 53.0          | 10.0 |
|          | 550                             | 12,600         | 11,300            | 2.1        | 0.5       | 61.3    | 60.0     | 55.0          | 12.0 |
|          | 650                             | 15,000         | 13,400            | 2.5        | 0.6       | 61.3    | 59.9     | 55.0          | 12.0 |
|          | 550                             | 11,400         | 10,700            | 1.6        | 0.3       | 62.4    | 60.7     | 57.0          | 14.0 |
|          | 650                             | 12,200         | 11,800            | 1.7        | 0.3       | 63.6    | 61.3     | 57.0          | 14.0 |

## CAW\_18 Ceiling Cassette Air Handler Performance Data Tables - Continued

| Entering | CFM  |                |                   | 80° F DB / | 67° F WB - | Continued |          |               |      |
|----------|------|----------------|-------------------|------------|------------|-----------|----------|---------------|------|
| Water    | Low  | Total Capacity | Sensible Capacity | Water Flow | Pressure   | Leaving   | Air Temp | Leaving Water | ΔΤ   |
| Temp     | High | (Btuh)         | (Btuh)            | Rate (GPM) | Drop (Ft)  | DB °F     | WB °F    | Temp (°F)     | (°F) |
|          | 550  | 27,700         | 18,100            | 9.2        | 8.5        | 50.2      | 50.1     | 50.0          | 6.0  |
|          | 650  | 32,100         | 21,100            | 10.7       | 11.2       | 50.6      | 50.4     | 50.0          | 6.0  |
|          | 550  | 21,200         | 15,400            | 5.3        | 3.0        | 54.6      | 54.6     | 52.0          | 8.0  |
|          | 650  | 26,700         | 18,700            | 6.7        | 4.6        | 53.9      | 53.6     | 52.0          | 8.0  |
| 44°F     | 550  | 16,400         | 13,400            | 3.3        | 1.1        | 58.0      | 57.6     | 54.0          | 10.0 |
| 77 1     | 650  | 19,400         | 15,800            | 3.9        | 1.6        | 58.0      | 57.6     | 54.0          | 10.0 |
|          | 550  | 12,000         | 11,200            | 2.0        | 0.4        | 61.5      | 60.3     | 56.0          | 12.0 |
|          | 650  | 13,000         | 12,400            | 2.2        | 0.5        | 62.7      | 60.9     | 56.0          | 12.0 |
|          | 550  | 10,800         | 10,300            | 1.5        | 0.3        | 63.0      | 61.0     | 58.0          | 14.0 |
|          | 650  | 11,600         | 11,300            | 1.7        | 0.3        | 64.2      | 61.6     | 58.0          | 14.0 |
|          | 550  | 26,300         | 17,500            | 8.7        | 7.7        | 51.2      | 51.1     | 51.0          | 6.0  |
|          | 650  | 30,500         | 20,400            | 10.1       | 10.2       | 51.6      | 51.4     | 51.0          | 6.0  |
|          | 550  | 19,200         | 14,600            | 4.8        | 2.5        | 56.0      | 55.9     | 53.0          | 8.0  |
|          | 650  | 24,500         | 18,000            | 6.1        | 3.9        | 55.0      | 54.9     | 53.0          | 8.0  |
| 45°F     | 550  | 15,100         | 12,800            | 3.0        | 0.9        | 58.9      | 58.4     | 55.0          | 10.0 |
| 40 F     | 650  | 18,000         | 15,100            | 3.6        | 1.3        | 58.9      | 58.4     | 55.0          | 10.0 |
|          | 550  | 11,400         | 10,800            | 1.9        | 0.4        | 62.2      | 60.7     | 57.0          | 12.0 |
|          | 650  | 12,300         | 12,000            | 2.0        | 0.4        | 63.3      | 61.2     | 57.0          | 12.0 |
|          | 550  | 10,200         | 9,900             | 1.5        | 0.3        | 63.7      | 61.3     | 59.0          | 14.0 |
|          | 650  | 11,300         | 10,900            | 1.6        | 0.3        | 64.8      | 61.7     | 59.0          | 14.0 |
|          | 550  | 18,900         | 14,400            | 6.2        | 4.0        | 56.2      | 56.1     | 56.1          | 6.1  |
|          | 650  | 22,100         | 17,000            | 7.4        | 5.5        | 56.3      | 56.2     | 56.0          | 6.0  |
|          | 550  | 13,700         | 12,200            | 3.4        | 1.2        | 59.8      | 59.3     | 58.0          | 8.0  |
|          | 650  | 16,200         | 14,400            | 4.1        | 1.8        | 59.9      | 59.3     | 58.0          | 8.0  |
| 50°F     | 550  | 9,900          | 9,900             | 2.0        | 0.4        | 63.7      | 61.5     | 60.0          | 10.0 |
| - 30 F   | 650  | 10,900         | 10,900            | 2.2        | 0.5        | 64.8      | 61.9     | 60.0          | 10.0 |
|          | 550  | 8,800          | 8,800             | 1.5        | 0.3        | 65.4      | 62.1     | 62.0          | 12.0 |
|          | 650  | 9,600          | 9,600             | 1.6        | 0.3        | 66.6      | 62.5     | 62.0          | 12.0 |
|          | 550  | 7,900          | 7,900             | 1.1        | 0.2        | 66.9      | 62.6     | 64.0          | 14.0 |
|          | 650  | 8,600          | 8,600             | 1.2        | 0.2        | 68.0      | 63.0     | 64.0          | 14.0 |

| Р                     | Propylene Glycol Solution Corrections (40°F EWT) |                        |   |  |  |  |  |  |  |  |  |
|-----------------------|--|------------------------|---|--|--|--|--|--|--|--|--|
| Propylene<br>Glycol % | Capacity<br>Factor                               | Freezing<br>Point (°F) | Tubeside Pressure Increase = 100% Capacity Factor | GPM Adjustment = 100%<br>Capacity Factor |  |  |  |  |  |  |  |
| 10%                   | 0.85   | 26                     | 1.3   | 1.6                                      |  |  |  |  |  |  |  |
| 20%                   | 0.75   | 18                     | 1.6   | 2.6                                      |  |  |  |  |  |  |  |
| 30%                   | 0.71   | 7                      | 2.4   | 5.3                                      |  |  |  |  |  |  |  |
| 40%                   | 0.68   | -8                     | 3.8   | 13.7                                     |  |  |  |  |  |  |  |
| 50%                   | 0.66   | -29                    | 4.9   | 25.1                                     |  |  |  |  |  |  |  |

## CAW\_18 Ceiling Cassette Air Handler Performance Data Tables

| Entering | CFM  |                |                   | 75° F      | DB / 62.55° | F WB      |          |               |      |
|----------|------|----------------|-------------------|------------|-------------|-----------|----------|---------------|------|
| Water    | Low  | Total Capacity | Sensible Capacity | Water Flow | Pressure    | Leaving . | Air Temp | Leaving Water | ΔΤ   |
| Temp     | High | (Btuh)         | (Btuh)            | Rate (GPM) | Drop (Ft)   | DB °F     | WB °F    | Temp (°F)     | (°F) |
|          | 550  | 23,700         | 16,900            | 7.85       | 6.37        | 47        | 46.9     | 46.0          | 6.0  |
|          | 650  | 28,300         | 20,100            | 9.4        | 8.9         | 46.8      | 46.6     | 46.0          | 6.0  |
|          | 550  | 18,500         | 14,500            | 4.6        | 2.3         | 51.0      | 50.7     | 48.0          | 8.0  |
|          | 650  | 22,200         | 17,300            | 5.5        | 3.3         | 50.8      | 50.5     | 48.0          | 8.0  |
| 40°F     | 550  | 12,500         | 11,800            | 2.5        | 0.6         | 55.6      | 54.8     | 50.0          | 10.0 |
| 40°F     | 650  | 15,900         | 14,300            | 3.2        | 1.0         | 55.0      | 54.2     | 50.0          | 10.0 |
|          | 550  | 11,200         | 10,700            | 1.9        | 0.4         | 57.2      | 55.7     | 52.0          | 12.0 |
|          | 650  | 12,300         | 11,900            | 2.1        | 0.5         | 58.4      | 56.2     | 52.0          | 12.0 |
|          | 550  | 10,100         | 9,900             | 1.4        | 0.3         | 58.7      | 56.4     | 54.0          | 14.0 |
|          | 650  | 11,100         | 11,100            | 1.6        | 0.3         | 59.5      | 56.8     | 54.0          | 14.0 |
|          | 550  | 22,600         | 16,400            | 7.5        | 5.8         | 47.9      | 47.7     | 47.0          | 6.0  |
|          | 650  | 26,500         | 19,300            | 8.8        | 7.9         | 48.0      | 47.8     | 47.0          | 6.0  |
|          | 550  | 17,200         | 14,100            | 4.3        | 1.9         | 51.7      | 51.6     | 49.0          | 8.0  |
|          | 650  | 20,200         | 16,500            | 5.0        | 2.8         | 51.9      | 51.7     | 49.0          | 8.0  |
| 41°F     | 550  | 11,900         | 11,300            | 2.4        | 0.6         | 56.3      | 55.2     | 51.0          | 10.0 |
| 41°F     | 650  | 15,200         | 13,800            | 3.0        | 0.9         | 55.7      | 54.6     | 51.0          | 10.0 |
|          | 550  | 10,600         | 10,300            | 1.8        | 0.4         | 57.9      | 56.1     | 53.0          | 12.0 |
|          | 650  | 11,800         | 11,400            | 2.0        | 0.4         | 59.0      | 56.5     | 53.0          | 12.0 |
|          | 550  | 9,900          | 9,500             | 1.4        | 0.3         | 59.3      | 56.5     | 55.0          | 14.0 |
|          | 650  | 10,600         | 10,600            | 1.5        | 0.3         | 60.2      | 57.1     | 55.0          | 14.0 |
|          | 550  | 21,200         | 15,700            | 7.1        | 5.2         | 49.0      | 48.7     | 48.0          | 6.0  |
|          | 650  | 25,400         | 18,700            | 8.4        | 7.2         | 48.8      | 48.5     | 48.0          | 6.0  |
|          | 550  | 16,100         | 13,500            | 4.0        | 1.7         | 52.7      | 52.4     | 50.0          | 8.0  |
|          | 650  | 19,000         | 15,900            | 4.7        | 2.4         | 52.7      | 52.4     | 50.0          | 8.0  |
| 42°F     | 550  | 11,200         | 10,900            | 2.2        | 0.5         | 57.0      | 55.6     | 52.0          | 10.0 |
| 42°F     | 650  | 14,000         | 13,300            | 2.8        | 0.7         | 56.4      | 55.3     | 52.0          | 10.0 |
|          | 550  | 10,300         | 10,000            | 1.7        | 0.3         | 58.5      | 56.3     | 54.0          | 12.0 |
|          | 650  | 11,100         | 11,100            | 1.9        | 0.4         | 59.4      | 56.8     | 54.0          | 12.0 |
|          | 550  | 9,300          | 9,300             | 1.3        | 0.2         | 59.7      | 56.9     | 56.0          | 14.0 |
|          | 650  | 10,100         | 10,100            | 1.4        | 0.3         | 60.9      | 57.4     | 56.0          | 14.0 |
|          | 550  | 19,500         | 15,100            | 6.5        | 4.4         | 50.0      | 50.0     | 49.0          | 6.0  |
|          | 650  | 23,500         | 18,000            | 7.8        | 6.3         | 49.8      | 49.7     | 49.0          | 6.0  |
|          | 550  | 14,900         | 12,900            | 3.7        | 1.4         | 53.6      | 53.2     | 51.0          | 8.0  |
|          | 650  | 17,600         | 15,200            | 4.4        | 2.0         | 53.7      | 53.2     | 51.0          | 8.0  |
| 420E     | 550  | 10,900         | 10,500            | 2.2        | 0.5         | 57.6      | 55.9     | 53.0          | 10.0 |
| 43°F     | 650  | 11,900         | 11,900            | 2.4        | 0.5         | 58.4      | 56.4     | 53.0          | 10.0 |
|          | 550  | 9,700          | 9,700             | 1.6        | 0.3         | 58.9      | 56.6     | 55.0          | 12.0 |
|          | 650  | 10,600         | 10,600            | 1.8        | 0.4         | 60.2      | 57.1     | 55.0          | 12.0 |
|          | 550  | 8,800          | 8,800             | 1.3        | 0.2         | 60.4      | 57.2     | 57.0          | 14.0 |
|          | 650  | 9,500          | 9,500             | 1.4        | 0.2         | 61.6      | 57.7     | 57.0          | 14.0 |

## CAW\_18 Ceiling Cassette Air Handler Performance Data Tables - Continued

| Entering | CFM  |                |                   | 75° F DB / 6 | 2.55° F WB | - Continue | ed       |               |      |
|----------|------|----------------|-------------------|--------------|------------|------------|----------|---------------|------|
| Water    | Low  | Total Capacity | Sensible Capacity | Water Flow   | Pressure   | Leaving A  | Air Temp | Leaving Water | ΔΤ   |
| Temp     | High | (Btuh)         | (Btuh)            | Rate (GPM)   | Drop (Ft)  | DB °F      | WB °F    | Temp (°F)     | (°F) |
|          | 550  | 18,800         | 14,700            | 6.3          | 4.1        | 50.7       | 50.5     | 50.0          | 6.0  |
|          | 650  | 22,400         | 17,500            | 7.4          | 5.6        | 50.6       | 50.4     | 50.0          | 6.0  |
|          | 550  | 13,700         | 12,300            | 3.4          | 1.2        | 54.6       | 54.0     | 52.0          | 8.0  |
|          | 650  | 16,200         | 14,500            | 4.0          | 1.7        | 54.6       | 54.0     | 52.0          | 8.0  |
| 44°F     | 550  | 10,300         | 10,300            | 2.1          | 0.4        | 58.0       | 56.2     | 54.0          | 10.0 |
| 44°F     | 650  | 11,300         | 11,300            | 2.3          | 0.5        | 59.2       | 56.7     | 54.0          | 10.0 |
|          | 550  | 9,300          | 9,300             | 1.5          | 0.3        | 59.7       | 56.9     | 56.0          | 12.0 |
|          | 650  | 10,100         | 10,100            | 1.7          | 0.3        | 60.9       | 57.4     | 56.0          | 12.0 |
|          | 550  | 8,300          | 8,300             | 1.2          | 0.2        | 61.2       | 57.5     | 58.0          | 14.0 |
|          | 650  | 9,000          | 9,000             | 1.3          | 0.2        | 62.4       | 57.9     | 58.0          | 14.0 |
|          | 550  | 17,600         | 14,100            | 5.9          | 3.6        | 51.6       | 51.3     | 51.0          | 6.0  |
|          | 650  | 21,100         | 16,900            | 7.0          | 5.1        | 51.4       | 51.2     | 51.0          | 6.0  |
|          | 550  | 13,000         | 11,900            | 3.2          | 1.1        | 55.3       | 54.5     | 53.0          | 8.0  |
|          | 650  | 15,300         | 14,000            | 3.8          | 1.5        | 55.4       | 54.5     | 53.0          | 8.0  |
| 45°F     | 550  | 9,800          | 9,800             | 2.0          | 0.4        | 58.8       | 56.6     | 55.0          | 10.0 |
| 45°F     | 650  | 10,700         | 10,700            | 2.1          | 0.5        | 60.0       | 57.0     | 55.0          | 10.0 |
|          | 550  | 8,800          | 8,800             | 1.5          | 0.3        | 60.5       | 57.2     | 57.0          | 12.0 |
|          | 650  | 9,500          | 9,500             | 1.6          | 0.3        | 61.7       | 57.7     | 57.0          | 12.0 |
|          | 550  | 7,900          | 7,900             | 1.1          | 0.2        | 62.0       | 57.8     | 59.0          | 14.0 |
|          | 650  | 8,500          | 8,500             | 1.2          | 0.2        | 63.1       | 58.2     | 59.0          | 14.0 |
|          | 550  | 11,700         | 11,500            | 3.9          | 1.6        | 56.1       | 55.4     | 56.0          | 6.0  |
|          | 650  | 13,900         | 13,600            | 4.6          | 2.3        | 56.0       | 55.3     | 56.0          | 6.0  |
|          | 550  | 8,400          | 8,400             | 2.1          | 0.4        | 61.1       | 57.5     | 58.0          | 8.0  |
|          | 650  | 10,600         | 10,600            | 2.7          | 0.7        | 60.2       | 57.1     | 58.0          | 8.0  |
| 50°F     | 550  | 7,300          | 7,300             | 1.5          | 0.3        | 62.9       | 58.1     | 60.0          | 10.0 |
|          | 650  | 8,000          | 8,000             | 1.6          | 0.3        | 63.8       | 58.5     | 60.0          | 10.0 |
|          | 550  | 6,400          | 6,400             | 1.1          | 0.2        | 64.4       | 58.7     | 62.0          | 12.0 |
|          | 650  | 7,000          | 7,000             | 1.2          | 0.2        | 65.3       | 59.0     | 62.0          | 12.0 |
|          | 550  | 5,600          | 5,600             | 0.8          | 0.1        | 65.7       | 59.2     | 64.0          | 14.0 |
|          | 650  | 6,000          | 6,000             | 0.9          | 0.1        | 66.5       | 59.5     | 64.0          | 14.0 |

## CAW\_18 Ceiling Cassette Air Handler Performance Data Tables

| Entering | CFM  |                |                   | 72° F      | DB / 60.1° | F WB      |          |               |      |
|----------|------|----------------|-------------------|------------|------------|-----------|----------|---------------|------|
| Water    | Low  | Total Capacity | Sensible Capacity | Water Flow | Pressure   | Leaving A | Air Temp | Leaving Water | ΔΤ   |
| Temp     | High | (Btuh)         | (Btuh)            | Rate (GPM) | Drop (Ft)  | DB °F     | WB °F    | Temp (°F)     | (°F) |
|          | 550  | 19,300         | 15,000            | 6.4        | 4.3        | 47.1      | 46.9     | 46.0          | 6.0  |
|          | 650  | 22,600         | 17,700            | 7.5        | 5.9        | 47.2      | 47.1     | 46.0          | 6.0  |
|          | 550  | 14,400         | 12,600            | 3.6        | 1.3        | 51.1      | 50.6     | 48.0          | 8.0  |
|          | 650  | 17,000         | 14,900            | 4.2        | 1.9        | 51.1      | 50.6     | 48.0          | 8.0  |
| 40°F     | 550  | 10,800         | 10,400            | 2.1        | 0.5        | 54.8      | 53.1     | 50.0          | 10.0 |
| 40°F     | 650  | 11,800         | 11,800            | 2.4        | 0.6        | 55.5      | 53.7     | 50.0          | 10.0 |
|          | 550  | 9,700          | 9,700             | 1.6        | 0.3        | 56.0      | 53.8     | 52.0          | 12.0 |
|          | 650  | 10,600         | 10,600            | 1.8        | 0.4        | 57.2      | 54.4     | 52.0          | 12.0 |
|          | 550  | 8,800          | 8,800             | 1.3        | 0.2        | 57.5      | 54.5     | 54.0          | 14.0 |
|          | 650  | 9,500          | 9,500             | 1.4        | 0.3        | 58.7      | 54.9     | 54.0          | 14.0 |
|          | 550  | 18,100         | 14,500            | 6.0        | 3.9        | 48.1      | 47.8     | 47.0          | 6.0  |
|          | 650  | 21,700         | 17,200            | 7.2        | 5.4        | 47.8      | 47.6     | 47.0          | 6.0  |
|          | 550  | 13,100         | 12,000            | 3.3        | 1.1        | 52.1      | 51.5     | 49.0          | 8.0  |
|          | 650  | 15,500         | 14,200            | 3.9        | 1.5        | 52.1      | 51.5     | 49.0          | 8.0  |
| 41°F     | 550  | 10,300         | 10,000            | 2.1        | 0.5        | 55.5      | 53.4     | 51.0          | 10.0 |
| 417      | 650  | 11,200         | 11,200            | 2.2        | 0.5        | 56.3      | 54.0     | 51.0          | 10.0 |
|          | 550  | 9,200          | 9,200             | 1.5        | 0.3        | 56.7      | 54.2     | 53.0          | 12.0 |
|          | 650  | 10,000         | 10,000            | 1.7        | 0.3        | 58.0      | 54.7     | 53.0          | 12.0 |
|          | 550  | 8,300          | 8,300             | 1.2        | 0.2        | 58.2      | 54.8     | 55.0          | 14.0 |
|          | 650  | 9,000          | 9,000             | 1.3        | 0.2        | 59.4      | 55.2     | 55.0          | 14.0 |
|          | 550  | 16,800         | 13,900            | 5.6        | 3.3        | 48.9      | 48.9     | 48.0          | 6.0  |
|          | 650  | 20,400         | 16,600            | 6.8        | 4.8        | 48.8      | 48.5     | 48.0          | 6.0  |
|          | 550  | 12,500         | 11,900            | 3.1        | 1.0        | 52.4      | 51.9     | 50.0          | 8.0  |
|          | 650  | 14,800         | 13,700            | 3.7        | 1.4        | 52.8      | 51.9     | 50.0          | 8.0  |
| 42°F     | 550  | 9,700          | 9,700             | 1.9        | 0.4        | 55.9      | 53.8     | 52.0          | 10.0 |
| 72 '     | 650  | 10,700         | 10,700            | 2.1        | 0.5        | 57.1      | 54.3     | 52.0          | 10.0 |
|          | 550  | 8,700          | 8,700             | 1.5        | 0.3        | 57.5      | 54.5     | 54.0          | 12.0 |
|          | 650  | 9,500          | 9,500             | 1.6        | 0.3        | 58.7      | 54.9     | 54.0          | 12.0 |
|          | 550  | 7,900          | 7,900             | 1.1        | 0.2        | 59.0      | 55.1     | 56.0          | 14.0 |
|          | 650  | 8,500          | 8,500             | 1.2        | 0.2        | 60.1      | 55.5     | 56.0          | 14.0 |
|          | 550  | 15,400         | 13,300            | 5.1        | 2.9        | 50.0      | 49.8     | 49.0          | 6.0  |
|          | 650  | 18,900         | 16,000            | 6.3        | 4.1        | 49.6      | 49.4     | 49.0          | 6.0  |
|          | 550  | 11,500         | 11,200            | 2.9        | 0.8        | 53.5      | 52.6     | 51.0          | 8.0  |
|          | 650  | 13,700         | 13,200            | 3.4        | 1.2        | 53.5      | 52.6     | 51.0          | 8.0  |
| 43°F     | 550  | 9,200          | 9,200             | 1.8        | 0.4        | 56.7      | 54.1     | 53.0          | 10.0 |
|          | 650  | 10,100         | 10,100            | 2.0        | 0.4        | 57.8      | 54.6     | 53.0          | 10.0 |
|          | 550  | 8,300          | 8,300             | 1.4        | 0.3        | 58.3      | 54.8     | 55.0          | 12.0 |
|          | 650  | 9,000          | 9,000             | 1.5        | 0.3        | 59.4      | 55.3     | 55.0          | 12.0 |
|          | 550  | 7,400          | 7,400             | 1.1        | 0.2        | 59.7      | 55.4     | 57.0          | 14.0 |
|          | 650  | 8,000          | 8,000             | 1.1        | 0.2        | 60.8      | 55.8     | 57.0          | 14.0 |

#### CAW\_18 Ceiling Cassette Air Handler Performance Data Tables - Continued

| Entering | CFM  |                |                   | 72° F DB / ( | 60.1° F WB | - Continue       | d        |               |      |
|----------|------|----------------|-------------------|--------------|------------|------------------|----------|---------------|------|
| Water    | Low  | Total Capacity | Sensible Capacity | Water Flow   | Pressure   | Leaving <i>i</i> | Air Temp | Leaving Water | ΔΤ   |
| Temp     | High | (Btuh)         | (Btuh)            | Rate (GPM)   | Drop (Ft)  | DB °F            | WB °F    | Temp (°F)     | (°F) |
|          | 550  | 14,100         | 12,600            | 4.7          | 2.4        | 51.1             | 50.8     | 50.0          | 6.0  |
|          | 650  | 17,400         | 15,200            | 5.8          | 3.6        | 50.7             | 50.4     | 50.0          | 6.0  |
|          | 550  | 10,900         | 10,600            | 2.7          | 0.7        | 54.5             | 53.0     | 52.0          | 8.0  |
|          | 650  | 12,900         | 12,500            | 3.2          | 1.0        | 54.4             | 53.0     | 52.0          | 8.0  |
| 44ºF     | 550  | 8,700          | 8,700             | 1.7          | 0.4        | 57.5             | 54.5     | 54.0          | 10.0 |
| 44°F     | 650  | 9,600          | 9,600             | 1.9          | 0.4        | 58.6             | 54.9     | 54.0          | 10.0 |
|          | 550  | 7,800          | 7,800             | 1.3          | 0.2        | 59.1             | 55.1     | 56.0          | 12.0 |
|          | 650  | 8,500          | 8,500             | 1.4          | 0.3        | 60.2             | 55.5     | 56.0          | 12.0 |
|          | 550  | 6,900          | 6,900             | 1.0          | 0.2        | 60.5             | 55.7     | 58.0          | 14.0 |
|          | 650  | 7,500          | 7,500             | 1.1          | 0.2        | 61.5             | 56.0     | 58.0          | 14.0 |
|          | 550  | 13,100         | 12,100            | 4.3          | 2.0        | 52.0             | 51.5     | 51.1          | 6.1  |
|          | 650  | 15,600         | 14,300            | 5.2          | 2.9        | 51.9             | 51.4     | 51.0          | 6.0  |
|          | 550  | 10,100         | 10,100            | 2.5          | 0.6        | 55.4             | 53.6     | 53.0          | 8.0  |
|          | 650  | 12,000         | 12,000            | 3.0          | 0.9        | 55.3             | 53.6     | 53.0          | 8.0  |
| 45°F     | 550  | 8,300          | 8,300             | 1.7          | 0.3        | 58.3             | 54.8     | 55.0          | 10.0 |
| 45°F     | 650  | 9,000          | 9,000             | 1.8          | 0.4        | 59.4             | 55.2     | 55.0          | 10.0 |
|          | 550  | 7,300          | 7,300             | 1.2          | 0.2        | 59.9             | 55.4     | 57.0          | 12.0 |
|          | 650  | 7,900          | 7,900             | 1.3          | 0.2        | 60.9             | 55.8     | 57.0          | 12.0 |
|          | 550  | 6,500          | 6,500             | 0.9          | 0.1        | 61.2             | 56.0     | 59.0          | 14.0 |
|          | 650  | 7,000          | 7,000             | 1.0          | 0.2        | 62.2             | 56.3     | 59.0          | 14.0 |
|          | 550  | 9,400          | 9,400             | 3.1          | 1.0        | 56.5             | 54.1     | 56.0          | 6.0  |
|          | 650  | 11,000         | 11,000            | 3.7          | 1.4        | 56.5             | 54.1     | 56.0          | 6.0  |
|          | 550  | 6,800          | 6,800             | 1.7          | 0.3        | 60.7             | 55.7     | 58.0          | 8.0  |
|          | 650  | 7,500          | 7,500             | 1.9          | 0.4        | 61.6             | 56.1     | 58.0          | 8.0  |
| E00E     | 550  | 5,900          | 5,900             | 1.2          | 0.2        | 62.3             | 56.3     | 60.0          | 10.0 |
| 50°F     | 650  | 6,400          | 6,400             | 1.3          | 0.2        | 63.1             | 56.7     | 60.0          | 10.0 |
|          | 550  | 5,100          | 5,100             | 0.8          | 0.1        | 63.6             | 56.9     | 62.0          | 12.0 |
|          | 650  | 5,400          | 5,400             | 0.9          | 0.1        | 64.4             | 57.2     | 62.0          | 12.0 |
|          | 550  | 4,300          | 4,300             | 0.6          | 0.1        | 64.9             | 57.4     | 64.0          | 14.0 |
|          | 650  | 4,600          | 4,600             | 0.7          | 0.1        | 65.6             | 57.6     | 64.0          | 14.0 |



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| C   | CAW HOT WATER 4-PIPE CASSETTE CAPACITIES  HOT WATER ENTERING TEMPERATURE 180°F           |        |     |        |     |  |  |  |  |  |
|---|--|--------|-----|--------|-----|--|--|--|--|--|
| Model Room Conditions Heating Capacity Btuh Water Flow GPM Leaving Water Temperature P.D. Ft. |  |        |     |        |     |  |  |  |  |  |
| CAW 18  | 70 °F DB   | 29,800 | 3.2 | 160 °F | 2.8 |  |  |  |  |  |
| CAVV_18 50% RH 22,500 1.2 140 °F 0.2  |  |        |     |        |     |  |  |  |  |  |
| * 140°F Leaving   | * 140°F Leaving water temperature data is in accordance with ANSI/AHRI Standard 440-2008 |        |     |        |     |  |  |  |  |  |