



A JOHNSON CONTROLS COMPANY

# UPFLOW WALL / CLOSET FAN COIL AIR CONDITIONERS ENGINEERING GUIDE

Models: YCW, YCWE and YCW-HW



Standard unit shown  
(Closet application - Front Return Air)



Unit shown with louvered wall panel  
(Recessed wall application)

00773VIP



# Table of Contents

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|  |    |   |    |
|--|----|---|----|
| Description . . . . .                        | .2 | YCWE Series Wall / Closet Fan Coils . . . . .   | .5 |
| Nomenclature . . . . .                       | .3 | YCW-HW Series Wall / Closet Fan Coils . . . . . | .6 |
| General Description . . . . .                | .3 | Accessories . . . . .                           | .7 |
| YCW Series Wall / Closet Fan Coils . . . . . | .4 | Valve Packages . . . . .                        | .8 |

## Description

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### YORK UPFLOW / WALL CLOSET FAN COIL UNITS

YCW



#### MODEL YCW – 2-Pipe Chilled Water Cooling

The **YCW** series fan coil is designed as an upflow indoor air handler with a chilled water coil for cooling. The unit to the left is shown with the bottom return air kit for bottom return air in a closet application.

(240-1075 CFM)

YCWE



#### MODEL YCWE – 2-Pipe with Electric Heat

The **YCWE** series fan coil is designed as an upflow indoor air handler with a chilled water coil for cooling, and electric heat. The unit to the left is the standard unit shown with front return air for closet application.

(195-1120 CFM – Chilled Water Cooling)  
(Up to 10kW – Electric Heat)

YCW-HW

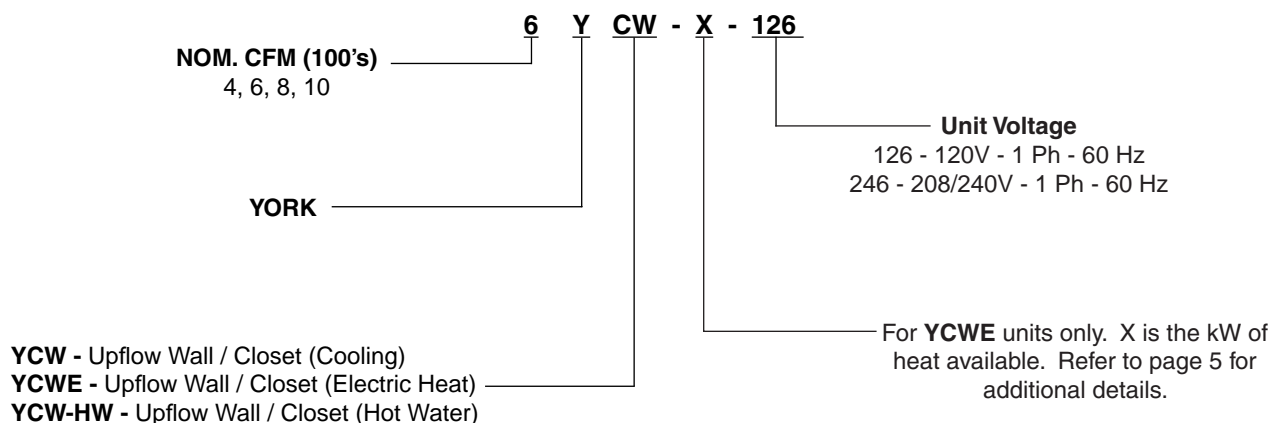


#### MODEL YCW-HW – 4-Pipe Chilled Water – Hot Water

The **YCW-HW** series fan coil is designed as an upflow indoor air handler with a chilled water coil for cooling and hot water coil for heating.

(190-1085 CFM)

# Nomenclature



## General Description

The **YCW** Series units can be installed on a closet platform, hung on a closet wall, or recessed in a wall between the studs. All models are 22" wide to allow standard stud spacing for all sizes.

The cabinet is made of embossed galvanized steel and is fully insulated. The condensate pan is sloped to ensure proper drainage. For installation flexibility, drain piping can come from the bottom, front, left, or right side of the cabinet.

The **YCW** series units come factory equipped with a control board that allows a 24V *control signal from a YORK or 3rd party thermostat to select low, medium, or high fan speed*. Three compatible 3-speed thermostats are available from YORK: manual changeover (#T420), auto changeover (#T421), and the all new "**Autospeed 24V**" (#T200). The **T200 Autospeed 24V** provides maximum comfort and efficiency by *automatically varying the fan speed between High, Medium, and Low speeds*, depending on room temperature and desired thermostat setting.

**Optional Accessories:** See Page 7

### Standard Features:

- 120V motor\*, 24V 3-speed fan control
- **120/24V 3-speed control board** (240/24V for YCWE)
- **Electrical service pullout** (YCW & YCWE only)
- Non-corrosive thermoplastic drain pan, sloped for positive drainage
- Separate compartment for drain connections (allows the use of PVC drain piping)
- Drain pan has female primary and secondary fittings
- Easily accessible 1" filter
- Various optional factory installed valve packages
- Coil connections stub out top of unit

### YCWE Models:

- Have 240V motors and factory installed electric heat
- 240/24V 3-speed control board

### YCW-HW Models:

- Chilled water coil for cooling and hot water coil for heating

\*YCW models with other motor voltages may be available. (Contact factory)

## Wall / Closet Fan Coils—2-Pipe Chilled Water Cooling

| COOLING CAPACITY |             |                          |                 |                     |      |      |                     |      |      |      |                          |                     |      |      |                     |      |      |
|------------------|-------------|--------------------------|-----------------|---------------------|------|------|---------------------|------|------|------|--------------------------|---------------------|------|------|---------------------|------|------|
| UNIT MODEL       | NOMINAL CFM | 45 DEGREE ENTERING WATER |                 |                     |      |      |                     |      |      |      | 42 DEGREE ENTERING WATER |                     |      |      |                     |      |      |
|                  |             | GPM                      | P.D. (Ft. Wtr.) | 80F D.B. / 67F W.B. |      |      | 75F D.B. / 63F W.B. |      |      | GPM  | GPM (Ft. Wtr.)           | 80F D.B. / 67F W.B. |      |      | 75F D.B. / 63F W.B. |      |      |
|                  |             |                          |                 | TH                  | SH   | TR   | TH                  | SH   | TR   |      |                          | TH                  | SH   | TR   | TH                  | SH   | TR   |
| 4YCW             | 400         | 1.5                      | 4.3             | 9.7                 | 8.8  | 13.0 | 7.8                 | 7.8  | 10.4 | 1.5  | 4.3                      | 10.6                | 9.1  | 14.1 | 8.6                 | 8.6  | 11.4 |
|                  |             | 2.5                      | 10.5            | 12.0                | 9.6  | 9.6  | 9.2                 | 8.5  | 7.4  | 2.5  | 10.5                     | 13.1                | 10.0 | 10.5 | 10.0                | 8.8  | 8.0  |
|                  |             | 3.5                      | 19.0            | 13.1                | 10.0 | 7.5  | 10.0                | 8.8  | 5.7  | 3.5  | 19.0                     | 14.2                | 10.5 | 8.1  | 10.9                | 9.2  | 6.2  |
| 6YCW             | 600         | 3.0                      | 5.0             | 17.3                | 13.1 | 11.5 | 13.2                | 11.5 | 8.8  | 3.5  | 6.7                      | 20.0                | 14.1 | 11.4 | 15.3                | 12.3 | 8.7  |
|                  |             | 4.0                      | 8.6             | 19.2                | 13.8 | 9.6  | 14.7                | 12.1 | 7.3  | 4.5  | 10.7                     | 21.7                | 14.8 | 9.6  | 16.6                | 12.8 | 7.4  |
|                  |             | 5.0                      | 13.0            | 20.4                | 14.3 | 8.2  | 15.6                | 12.5 | 6.2  | 5.5  | 15.5                     | 22.8                | 15.2 | 8.3  | 17.4                | 13.2 | 6.3  |
| 8YCW             | 800         | 6.5                      | 11.4            | 23.2                | 17.1 | 7.1  | 17.7                | 15.0 | 5.4  | 6.0  | 9.8                      | 24.6                | 17.6 | 8.2  | 18.8                | 15.4 | 6.3  |
|                  |             | 7.5                      | 14.8            | 24.2                | 17.4 | 6.5  | 18.5                | 15.3 | 4.9  | 7.0  | 13.1                     | 25.8                | 18.1 | 7.4  | 19.7                | 15.8 | 5.6  |
|                  |             | 8.5                      | 18.7            | 25.0                | 17.7 | 5.9  | 19.1                | 15.5 | 4.5  | 8.0  | 16.7                     | 26.8                | 18.4 | 6.7  | 20.5                | 16.1 | 5.1  |
| 10YCW            | 1000        | 6.5                      | 5.7             | 29.0                | 21.6 | 8.9  | 22.2                | 19.0 | 6.8  | 6.0  | 4.6                      | 30.7                | 22.2 | 10.2 | 23.5                | 19.4 | 7.8  |
|                  |             | 8.0                      | 8.2             | 31.0                | 22.3 | 7.8  | 23.7                | 19.5 | 5.9  | 8.0  | 8.2                      | 33.8                | 23.4 | 8.5  | 25.8                | 20.4 | 6.5  |
|                  |             | 9.5                      | 11.0            | 32.5                | 22.9 | 6.8  | 24.8                | 20.0 | 5.2  | 10.0 | 12.1                     | 35.8                | 24.1 | 7.2  | 27.3                | 20.9 | 5.5  |

| HEATING CAPACITY |             |     |                 |                                 |         |                 |         |              |         |                 |         |  |
|------------------|-------------|-----|-----------------|---------------------------------|---------|-----------------|---------|--------------|---------|-----------------|---------|--|
| UNIT MODEL       | NOMINAL CFM | GPM | P.D. (Ft. Wtr.) | HEATING DATA (70° ENTERING AIR) |         |                 |         |              |         |                 |         |  |
|                  |             |     |                 | BTUH @ 180 F                    |         | LVG AIR @ 160 F |         | BTUH @ 140 F |         | LVG AIR @ 120 F |         |  |
|                  |             |     |                 | BTUH                            | LVG AIR | BTUH            | LVG AIR | BTUH         | LVG AIR | BTUH            | LVG AIR |  |
| 4YCW             | 400         | 1.0 | 2.1             | 26.0                            | 130     | 21.3            | 119     | 16.6         | 108     | 11.8            | 97      |  |
|                  |             | 2.0 | 7.1             | 30.2                            | 140     | 24.7            | 127     | 19.2         | 114     | 13.7            | 102     |  |
|                  |             | 3.0 | 14.5            | 31.8                            | 144     | 26.1            | 130     | 20.3         | 117     | 14.5            | 104     |  |
| 6YCW             | 600         | 1.0 | 0.7             | 35.7                            | 125     | 29.2            | 115     | 22.7         | 105     | 16.2            | 95      |  |
|                  |             | 2.0 | 2.4             | 44.7                            | 139     | 36.5            | 126     | 28.4         | 114     | 20.3            | 101     |  |
|                  |             | 3.0 | 5.0             | 48.4                            | 145     | 39.6            | 131     | 30.8         | 118     | 22.0            | 104     |  |
| 8YCW             | 800         | 3.5 | 3.6             | 56.8                            | 136     | 46.5            | 124     | 36.1         | 112     | 25.8            | 100     |  |
|                  |             | 5.0 | 7.0             | 60.2                            | 140     | 49.3            | 127     | 38.3         | 114     | 27.4            | 102     |  |
|                  |             | 6.5 | 11.4            | 62.6                            | 142     | 51.2            | 129     | 39.8         | 116     | 28.5            | 103     |  |
| 10YCW            | 1000        | 4.0 | 2.4             | 73.0                            | 138     | 59.7            | 125     | 46.4         | 113     | 33.2            | 101     |  |
|                  |             | 6.0 | 4.9             | 78.2                            | 142     | 64.0            | 129     | 49.8         | 116     | 35.6            | 103     |  |
|                  |             | 8.0 | 8.2             | 81.5                            | 145     | 66.7            | 132     | 51.9         | 118     | 37.1            | 104     |  |



### NOTES:

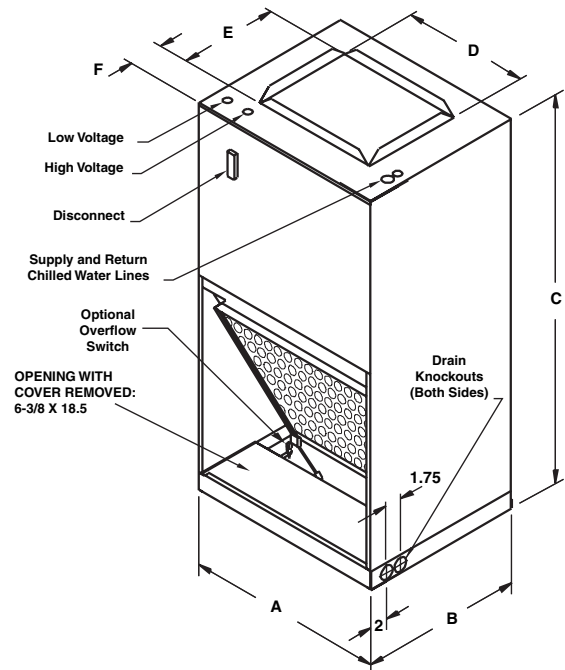
- Above capacities are at nominal CFM conditions. Maximum discharge air temperature must not exceed 145° at actual CFM.

| BLOWER DATA |                   |      |             |                                  |      |      |      |      |      |      |      |
|-------------|-------------------|------|-------------|----------------------------------|------|------|------|------|------|------|------|
| UNIT MODEL  | MOTOR H.P. (120V) | AMPS | MOTOR SPEED | CFM VS. EXTERNAL STATIC PRESSURE |      |      |      |      |      |      |      |
|             |                   |      |             | 0.05                             | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 |
| 4YCW        | 1/6               | 2.1  | MED. HIGH   | 520                              | 500  | 485  | 470  | 450  | 430  | 415  | ---  |
|             |                   |      | MED. LOW    | 380                              | 370  | 360  | 350  | 340  | 330  | 310  | ---  |
|             |                   |      | LOW         | 300                              | 290  | 280  | 270  | 260  | 250  | 240  | ---  |
| 6YCW        | 1/6               | 2.1  | HIGH        | 620                              | 615  | 610  | 600  | 585  | 570  | 555  | ---  |
|             |                   |      | MED. HIGH   | 410                              | 400  | 390  | 380  | 370  | 360  | 350  | ---  |
|             |                   |      | MED. LOW    | 300                              | 290  | 280  | 270  | 260  | 250  | 240  | ---  |
| 8YCW        | 1/6               | 3.2  | HIGH        | 855                              | 840  | 820  | 800  | 775  | 750  | 730  | 710  |
|             |                   |      | MEDIUM      | 710                              | 700  | 685  | 670  | 655  | 640  | 625  | 610  |
|             |                   |      | LOW         | 580                              | 570  | 560  | 550  | 540  | 530  | 515  | 500  |
| 10YCW       | 1/4               | 4.6  | HIGH        | 1075                             | 1050 | 1025 | 1000 | 980  | 960  | 930  | 900  |
|             |                   |      | MEDIUM      | 875                              | 860  | 845  | 830  | 815  | 800  | 780  | 760  |
|             |                   |      | LOW         | 705                              | 700  | 690  | 680  | 670  | 660  | 645  | 630  |

| PHYSICAL DIMENSIONS |        |        |    |    |        |       |             |                                |
|---------------------|--------|--------|----|----|--------|-------|-------------|--------------------------------|
| UNIT MODEL          | A      | B      | C  | D  | E      | F     | FILTER SIZE | CHILLED WATER COIL CONNECTIONS |
| 4 - 10YCW           | 22-1/8 | 15-1/8 | 40 | 14 | 10-1/2 | 3-5/8 | 18 X 18     | 5/8 O.D.                       |

### NOTES:

- Coil connections are sweat and stub out top of unit



## Wall / Closet Fan Coils—2-Pipe Chilled Water with Electric Heat

| COOLING CAPACITY |             |                          |                 |                     |      |      |                     |      |      |      |                          |                     |      |      |                     |      |      |
|------------------|-------------|--------------------------|-----------------|---------------------|------|------|---------------------|------|------|------|--------------------------|---------------------|------|------|---------------------|------|------|
| UNIT MODEL       | NOMINAL CFM | 45 DEGREE ENTERING WATER |                 |                     |      |      |                     |      |      |      | 42 DEGREE ENTERING WATER |                     |      |      |                     |      |      |
|                  |             | GPM                      | P.D. (Ft. Wtr.) | 80F D.B. / 67F W.B. |      |      | 75F D.B. / 63F W.B. |      |      | GPM  | GPM (Ft. Wtr.)           | 80F D.B. / 67F W.B. |      |      | 75F D.B. / 63F W.B. |      |      |
|                  |             |                          |                 | TH                  | SH   | TR   | TH                  | SH   | TR   |      |                          | TH                  | SH   | TR   | TH                  | SH   | TR   |
| 4YCWE            | 400         | 1.5                      | 4.3             | 9.7                 | 8.8  | 13.0 | 7.8                 | 7.8  | 10.4 | 1.5  | 4.3                      | 10.6                | 9.1  | 14.1 | 8.6                 | 8.6  | 11.4 |
|                  |             | 2.5                      | 10.5            | 12.0                | 9.6  | 9.6  | 9.2                 | 8.5  | 7.4  | 2.5  | 10.5                     | 13.1                | 10.0 | 10.5 | 10.0                | 8.8  | 8.0  |
|                  |             | 3.5                      | 19.0            | 13.1                | 10.0 | 7.5  | 10.0                | 8.8  | 5.7  | 3.5  | 19.0                     | 14.2                | 10.5 | 8.1  | 10.9                | 9.2  | 6.2  |
| 6YCWE            | 600         | 3.0                      | 5.0             | 17.3                | 13.1 | 11.5 | 13.2                | 11.5 | 8.8  | 3.5  | 6.7                      | 20.0                | 14.1 | 11.4 | 15.3                | 12.3 | 8.7  |
|                  |             | 4.0                      | 8.6             | 19.2                | 13.8 | 9.6  | 14.7                | 12.1 | 7.3  | 4.5  | 10.7                     | 21.7                | 14.8 | 9.6  | 16.6                | 12.8 | 7.4  |
|                  |             | 5.0                      | 13.0            | 20.4                | 14.3 | 8.2  | 15.6                | 12.5 | 6.2  | 5.5  | 15.5                     | 22.8                | 15.2 | 8.3  | 17.4                | 13.2 | 6.3  |
| 8YCWE            | 800         | 6.5                      | 11.4            | 23.2                | 17.1 | 7.1  | 17.7                | 15.0 | 5.4  | 6.0  | 9.8                      | 24.6                | 17.6 | 8.2  | 18.8                | 15.4 | 6.3  |
|                  |             | 7.5                      | 14.8            | 24.2                | 17.4 | 6.5  | 18.5                | 15.3 | 4.9  | 7.0  | 13.1                     | 25.8                | 18.1 | 7.4  | 19.7                | 15.8 | 5.6  |
|                  |             | 8.5                      | 18.7            | 25.0                | 17.7 | 5.9  | 19.1                | 15.5 | 4.5  | 8.0  | 16.7                     | 26.8                | 18.4 | 6.7  | 20.5                | 16.1 | 5.1  |
| 10YCWE           | 1000        | 6.5                      | 5.7             | 29.0                | 21.6 | 8.9  | 22.2                | 19.0 | 6.8  | 6.0  | 4.6                      | 30.7                | 22.2 | 10.2 | 23.5                | 19.4 | 7.8  |
|                  |             | 8.0                      | 8.2             | 31.0                | 22.3 | 7.8  | 23.7                | 19.5 | 5.9  | 8.0  | 8.2                      | 33.8                | 23.4 | 8.5  | 25.8                | 20.4 | 6.5  |
|                  |             | 9.5                      | 11.0            | 32.5                | 22.9 | 6.8  | 24.8                | 20.0 | 5.2  | 10.0 | 12.1                     | 35.8                | 24.1 | 7.2  | 27.3                | 20.9 | 5.5  |

| BLOWER DATA |                   |             |                                  |      |      |      |      |      |      |      |
|-------------|-------------------|-------------|----------------------------------|------|------|------|------|------|------|------|
| UNIT MODEL  | MOTOR H.P. (240V) | MOTOR SPEED | CFM VS. EXTERNAL STATIC PRESSURE |      |      |      |      |      |      |      |
|             |                   |             | 0.05                             | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 |
| 4YCWE       | 1/6               | MED. HIGH   | 520                              | 500  | 480  | 460  | 430  | 410  | 390  | ---  |
|             |                   | MED. LOW    | 390                              | 370  | 355  | 340  | 325  | 310  | 290  | ---  |
|             |                   | LOW         | 310                              | 290  | 270  | 250  | 235  | 220  | 195  | ---  |
| 6YCWE       | 1/6               | HIGH        | 610                              | 600  | 590  | 580  | 570  | 560  | 545  | ---  |
|             |                   | MED.HIGH    | 470                              | 460  | 450  | 440  | 430  | 420  | 405  | ---  |
|             |                   | MED. LOW    | 355                              | 340  | 325  | 310  | 300  | 290  | 280  | ---  |
| 8YCWE       | 1/6               | HIGH        | 860                              | 840  | 820  | 800  | 780  | 760  | 740  | 720  |
|             |                   | MEDIUM      | 715                              | 700  | 685  | 670  | 655  | 640  | 620  | 600  |
|             |                   | LOW         | 590                              | 580  | 565  | 550  | 540  | 530  | 515  | 500  |
| 10YCWE      | 1/4               | HIGH        | 1120                             | 1100 | 1075 | 1050 | 1025 | 1000 | 970  | 940  |
|             |                   | MEDIUM      | 910                              | 900  | 880  | 860  | 845  | 830  | 810  | 790  |
|             |                   | LOW         | 730                              | 720  | 710  | 700  | 690  | 680  | 665  | 650  |



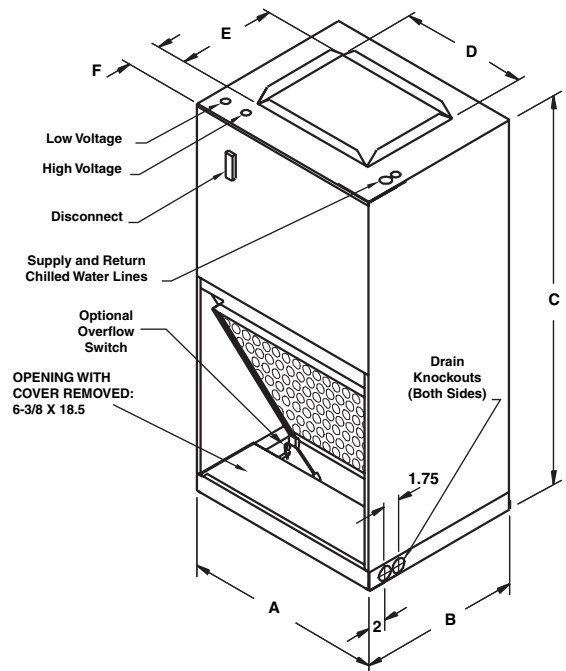
In keeping with its policy of continuous progress and product improvement, YORK reserves the right to make changes without notice.

| ELECTRICAL DATA |                        |      |      |       |            |      |                    |      |                             |      |    |
|-----------------|------------------------|------|------|-------|------------|------|--------------------|------|-----------------------------|------|----|
| UNIT MODEL      | ELECTRIC HEAT CAPACITY |      |      |       | TOTAL AMPS |      | MIN. CIR. AMPACITY |      | MAX. OVERCURRENT PROTECTION |      |    |
|                 | KW                     |      | BTUH |       | 240V       | 208V | 240V               | 208V | 240V                        | 208V |    |
|                 | 240V                   | 208V | 240V | 208V  |            |      |                    |      |                             |      |    |
| 4YCWE           | 0                      | 0    | 0    | 0     | 1.1        | ---  | ---                | ---  | ---                         | ---  |    |
|                 | 1                      | 1    | 0.8  | 3400  | 5.3        | 4.7  | 7                  | 6    | 15                          | 15   |    |
|                 | 2                      | 2    | 1.5  | 6800  | 9.4        | 8.3  | 12                 | 11   | 15                          | 15   |    |
|                 | 3                      | 3    | 2.3  | 10200 | 13.6       | 11.9 | 17                 | 15   | 20                          | 15   |    |
|                 | 4                      | 4    | 3.0  | 13600 | 17.8       | 15.5 | 23                 | 20   | 25                          | 20   |    |
| 6YCWE           | 0                      | 0    | 0    | 0     | 1.1        | ---  | ---                | ---  | ---                         | ---  |    |
|                 | 2                      | 2    | 1.5  | 6800  | 9.4        | 8.3  | 12                 | 11   | 15                          | 15   |    |
|                 | 3                      | 3    | 2.3  | 10200 | 13.6       | 11.9 | 17                 | 15   | 20                          | 15   |    |
|                 | 4                      | 4    | 3.0  | 13600 | 17.8       | 15.5 | 23                 | 20   | 25                          | 20   |    |
|                 | 5                      | 5    | 3.8  | 17000 | 21.9       | 19.1 | 28                 | 24   | 30                          | 25   |    |
|                 | 6                      | 6    | 4.5  | 20500 | 26.1       | 22.7 | 33                 | 29   | 35                          | 30   |    |
| 8YCWE           | 0                      | 0    | 0    | 0     | 1.7        | ---  | ---                | ---  | ---                         | ---  |    |
|                 | 3                      | 3    | 2.3  | 10200 | 7.700      | 14.2 | 12.5               | 18   | 16                          | 20   | 20 |
|                 | 4                      | 4    | 3.0  | 13600 | 18.4       | 16.1 | 23                 | 21   | 25                          | 25   |    |
|                 | 5                      | 5    | 3.8  | 17000 | 22.5       | 19.7 | 29                 | 25   | 30                          | 25   |    |
|                 | 6                      | 6    | 4.5  | 20500 | 26.7       | 23.3 | 34                 | 30   | 35                          | 30   |    |
| 10YCWE          | 0                      | 0    | 0    | 0     | 2.7        | ---  | ---                | ---  | ---                         | ---  |    |
|                 | 3                      | 3    | 2.3  | 10200 | 7.700      | 15.2 | 13.5               | 19   | 17                          | 20   | 20 |
|                 | 5                      | 5    | 3.8  | 17000 | 12800      | 23.5 | 20.7               | 30   | 26                          | 30   | 30 |
|                 | 6                      | 6    | 4.5  | 20500 | 27.7       | 24.3 | 35                 | 31   | 35                          | 35   |    |
|                 | 8                      | 8    | 6.0  | 27300 | 36.0       | 31.5 | 45                 | 40   | 50                          | 40   |    |
|                 | 10                     | 10   | 7.5  | 34100 | 44.4       | 38.8 | 56                 | 49   | 60                          | 50   |    |

| PHYSICAL DIMENSIONS |        |        |    |    |        |       |             |                                |
|---------------------|--------|--------|----|----|--------|-------|-------------|--------------------------------|
| UNIT MODEL          | A      | B      | C  | D  | E      | F     | FILTER SIZE | CHILLED WATER COIL CONNECTIONS |
| 4 - 10YCWE          | 22-1/8 | 15-1/8 | 40 | 14 | 10-1/2 | 3-5/8 | 18 X 18     | 5/8 O.D.                       |

### NOTES:

- Coil connections are sweat and stub out top of unit



# YCW-HW Series

FORM 115.20-EG5 (106)

## Wall / Closet Fan Coils—4-Pipe Chilled Water - Hot Water

| COOLING CAPACITY |             |                          |                 |                     |      |      |                     |      |      |      |                          |                     |      |      |                     |      |      |
|------------------|-------------|--------------------------|-----------------|---------------------|------|------|---------------------|------|------|------|--------------------------|---------------------|------|------|---------------------|------|------|
| UNIT MODEL       | NOMINAL CFM | 45 DEGREE ENTERING WATER |                 |                     |      |      |                     |      |      |      | 42 DEGREE ENTERING WATER |                     |      |      |                     |      |      |
|                  |             | GPM                      | P.D. (Ft. Wtr.) | 80F D.B. / 67F W.B. |      |      | 75F D.B. / 63F W.B. |      |      | GPM  | GPM (Ft. Wtr.)           | 80F D.B. / 67F W.B. |      |      | 75F D.B. / 63F W.B. |      |      |
|                  |             |                          |                 | TH                  | SH   | TR   | TH                  | SH   | TR   |      |                          | TH                  | SH   | TR   | TH                  | SH   | TR   |
| 4YCW-HW          | 400         | 1.5                      | 4.3             | 9.7                 | 8.8  | 13.0 | 7.8                 | 7.8  | 10.4 | 1.5  | 4.3                      | 10.6                | 9.1  | 14.1 | 8.6                 | 8.6  | 11.4 |
|                  |             | 2.5                      | 10.5            | 12.0                | 9.6  | 9.6  | 9.2                 | 8.5  | 7.4  | 2.5  | 10.5                     | 13.1                | 10.0 | 10.5 | 10.0                | 8.8  | 8.0  |
|                  |             | 3.5                      | 19.0            | 13.1                | 10.0 | 7.5  | 10.0                | 8.8  | 5.7  | 3.5  | 19.0                     | 14.2                | 10.5 | 8.1  | 10.9                | 9.2  | 6.2  |
| 6YCW-HW          | 600         | 3.0                      | 5.0             | 17.3                | 13.1 | 11.5 | 13.2                | 11.5 | 8.8  | 3.5  | 6.7                      | 20.0                | 14.1 | 11.4 | 15.3                | 12.3 | 8.7  |
|                  |             | 4.0                      | 8.6             | 19.2                | 13.8 | 9.6  | 14.7                | 12.1 | 7.3  | 4.5  | 10.7                     | 21.7                | 14.8 | 9.6  | 16.6                | 12.8 | 7.4  |
|                  |             | 5.0                      | 13.0            | 20.4                | 14.3 | 8.2  | 15.6                | 12.5 | 6.2  | 5.5  | 15.5                     | 22.8                | 15.2 | 8.3  | 17.4                | 13.2 | 6.3  |
| 8YCW-HW          | 800         | 6.5                      | 11.4            | 23.2                | 17.1 | 7.1  | 17.7                | 15.0 | 5.4  | 6.0  | 9.8                      | 24.6                | 17.6 | 8.2  | 18.8                | 15.4 | 6.3  |
|                  |             | 7.5                      | 14.8            | 24.2                | 17.4 | 6.5  | 18.5                | 15.3 | 4.9  | 7.0  | 13.1                     | 25.8                | 18.1 | 7.4  | 19.7                | 15.8 | 5.6  |
|                  |             | 8.5                      | 18.7            | 25.0                | 17.7 | 5.9  | 19.1                | 15.5 | 4.5  | 8.0  | 16.7                     | 26.8                | 18.4 | 6.7  | 20.5                | 16.1 | 5.1  |
| 10YCW-HW         | 1000        | 6.5                      | 5.7             | 29.0                | 21.6 | 8.9  | 22.2                | 19.0 | 6.8  | 6.0  | 4.6                      | 30.7                | 22.2 | 10.2 | 23.5                | 19.4 | 7.8  |
|                  |             | 8.0                      | 8.2             | 31.0                | 22.3 | 7.8  | 23.7                | 19.5 | 5.9  | 8.0  | 8.2                      | 33.8                | 23.4 | 8.5  | 25.8                | 20.4 | 6.5  |
|                  |             | 9.5                      | 11.0            | 32.5                | 22.9 | 6.8  | 24.8                | 20.0 | 5.2  | 10.0 | 12.1                     | 35.8                | 24.1 | 7.2  | 27.3                | 20.9 | 5.5  |

| HEATING CAPACITY |             |     |                 |                                 |           |              |           |              |           |              |     |
|------------------|-------------|-----|-----------------|---------------------------------|-----------|--------------|-----------|--------------|-----------|--------------|-----|
| UNIT MODEL       | NOMINAL CFM | GPM | P.D. (Ft. Wtr.) | HEATING DATA (70° ENTERING AIR) |           |              |           |              |           |              |     |
|                  |             |     |                 | BTUH @ 180 F                    |           | BTUH @ 160 F |           | BTUH @ 140 F |           | BTUH @ 120 F |     |
|                  |             |     |                 | LVG AIR F                       | LVG AIR F | LVG AIR F    | LVG AIR F | LVG AIR F    | LVG AIR F |              |     |
| 4YCW-HW          | 400         | 2.0 | 1.3             | 30.0                            | 139       | 24.6         | 127       | 19.1         | 114       | 13.6         | 102 |
|                  |             | 4.0 | 4.5             | 33.3                            | 147       | 27.3         | 133       | 21.2         | 119       | 15.1         | 105 |
|                  |             | 6.0 | 9.6             | 34.9                            | 151       | 28.5         | 136       | 22.2         | 121       | 15.9         | 107 |
| 6YCW-HW          | 600         | 2.0 | 1.3             | 38.5                            | 129       | 31.5         | 119       | 24.5         | 108       | 17.5         | 97  |
|                  |             | 4.0 | 4.5             | 43.4                            | 137       | 35.5         | 125       | 27.6         | 113       | 19.7         | 100 |
|                  |             | 6.0 | 9.6             | 45.7                            | 141       | 37.4         | 128       | 29.1         | 115       | 20.8         | 102 |
| 8YCW-HW          | 800         | 4.0 | 4.5             | 52.0                            | 130       | 42.6         | 119       | 33.1         | 108       | 23.6         | 97  |
|                  |             | 5.5 | 8.0             | 54.5                            | 133       | 44.6         | 122       | 34.7         | 110       | 24.8         | 99  |
|                  |             | 7.0 | 12.5            | 55.9                            | 135       | 45.8         | 123       | 35.6         | 111       | 25.4         | 99  |
| 10YCW-HW         | 1000        | 4.0 | 4.5             | 59.4                            | 125       | 48.6         | 115       | 37.8         | 105       | 27.0         | 95  |
|                  |             | 5.5 | 8.0             | 62.5                            | 128       | 51.2         | 117       | 39.8         | 107       | 28.4         | 96  |
|                  |             | 7.0 | 12.5            | 64.3                            | 130       | 52.6         | 119       | 40.9         | 108       | 29.2         | 97  |

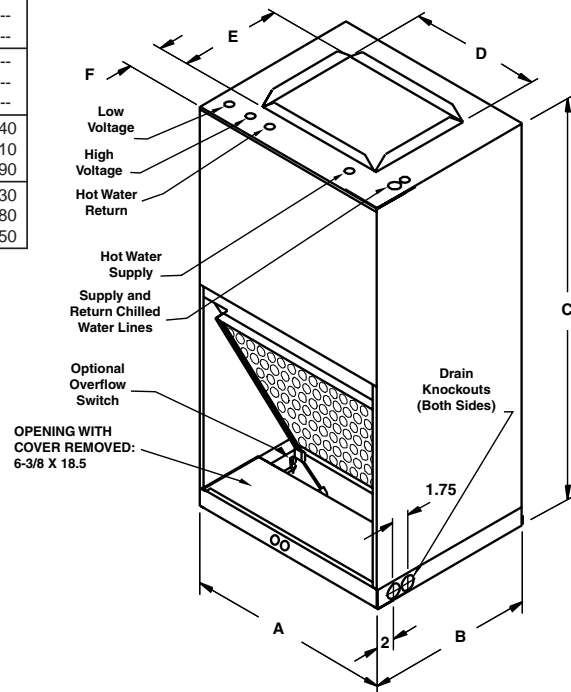


| BLOWER DATA |                   |      |             |                                  |      |      |      |      |      |      |      |
|-------------|-------------------|------|-------------|----------------------------------|------|------|------|------|------|------|------|
| UNIT MODEL  | MOTOR H.P. (120V) | AMPS | MOTOR SPEED | CFM VS. EXTERNAL STATIC PRESSURE |      |      |      |      |      |      |      |
|             |                   |      |             | 0.05                             | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 |
| 4YCW-HW     | 1/15              | 1.1  | HIGH        | 485                              | 470  | 455  | 440  | 410  | 380  | 350  | ---  |
|             |                   |      | MEDIUM      | 395                              | 380  | 365  | 350  | 325  | 300  | 275  | ---  |
|             |                   |      | LOW         | 300                              | 280  | 265  | 250  | 230  | 210  | 190  | ---  |
| 6YCW-HW     | 1/4               | 2.9  | HIGH        | 730                              | 710  | 685  | 660  | 640  | 620  | 595  | ---  |
|             |                   |      | MEDIUM      | 600                              | 580  | 565  | 550  | 530  | 510  | 490  | ---  |
|             |                   |      | LOW         | 465                              | 450  | 435  | 420  | 405  | 390  | 375  | ---  |
| 8YCW-HW     | 1/3               | 5.8  | HIGH        | 890                              | 870  | 845  | 820  | 800  | 780  | 760  | 740  |
|             |                   |      | MED. LOW    | 715                              | 700  | 685  | 670  | 655  | 640  | 625  | 610  |
|             |                   |      | LOW         | 575                              | 560  | 550  | 540  | 525  | 510  | 500  | 490  |
| 10YCW-HW    | 1/2               | 8.0  | HIGH        | 1085                             | 1060 | 1070 | 1020 | 995  | 970  | 950  | 930  |
|             |                   |      | MED. LOW    | 910                              | 890  | 870  | 850  | 835  | 820  | 800  | 780  |
|             |                   |      | LOW         | 745                              | 730  | 715  | 700  | 690  | 680  | 665  | 650  |

| PHYSICAL DIMENSIONS |        |        |    |    |        |       |             |                            |
|---------------------|--------|--------|----|----|--------|-------|-------------|----------------------------|
| UNIT MODEL          | A      | B      | C  | D  | E      | F     | FILTER SIZE | CW AND HW COIL CONNECTIONS |
| 4 - 10YCW-HW        | 22-1/8 | 15-1/8 | 43 | 18 | 12-1/2 | 3-5/8 | 18 X 18     | 5/8 O.D.                   |

**NOTES:**

- Coil connections are sweat and stub out top of unit



# Accessories

| OPTIONAL ACCESSORIES (FIELD INSTALLED)                        |                              |                                    |                                   |
|---|------------------------------|------------------------------------|-----------------------------------|
| DESCRIPTION   | PART #                       | DIMENSIONS                         |                                   |
| WALL PANEL (1)  | <b>9PWUC03L</b>              | 49-3/8 X 25-5/8<br>(Outside Frame) | 46-3/8 X 22-5/8<br>(Inside Frame) |
| HANGER BRKT. SET  | <b>90PK3</b>                 | 1-1/2 X 22-1/8                     | ---                               |
| RETURN AIR COVER  | <b>90PK4</b>                 | 21-5/8 X 22                        | ---                               |
| CONDENSATE OVERFLOW SWITCH                                    | <b>SS3</b>                   | ---                                | ---                               |
| WALL THERMOSTAT 3-SPD., MANUAL CHANGEOVER                     | <b>T420</b><br>(120/240/277) | ---                                | ---                               |
| WALL THERMOSTAT 3-SPD., AUTO CHANGEOVER                       | <b>T421</b><br>(120/240/277) | ---                                | ---                               |
| 24V WALL THERMOSTAT 3-SPD., MANUAL CHANGEOVER (AUTOSPEED 24V) | <b>T200</b><br>(24V)         | ---                                | ---                               |



Optional wall panel  
(Recessed wall application)



**T420 - T421**  
THERMOSTAT

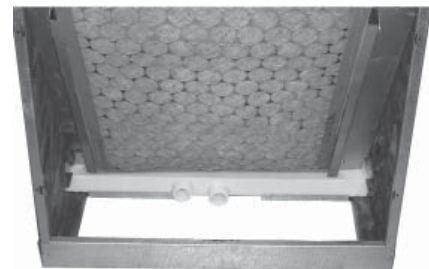


Unit shown with optional bottom return air kit  
(#90PK4)



**T200**  
"AUTOSPEED 24V™"  
THERMOSTAT

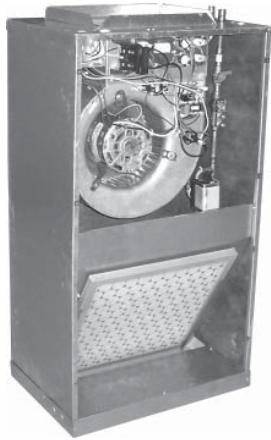
See Form 115.20-S1  
for more details.



Condensate drain connections  
(With drain cover removed)  
(Thermoplastic pan shown)

# Valve Packages

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(Unit shown with an optional valve package)

| OPTIONAL VALVE CLUSTERS (Factory installed)             |                                  |
|---|----------------------------------|
| PART #  | DESCRIPTION                      |
| <b>VALVE CLUSTER</b>                                    |                                  |
| 9VCWNV-M  | No valves, stub kit only         |
| 9VCW2BV-M   | 2 hand valves                    |
| 9VCW22B-M   | 2-way, valve body, 2 hand valves |
| 9VCW23B-M   | 3-way, valve body, 2 hand valves |
| <b>POWER HEAD (one required for each valve cluster)</b> |                                  |
| 911-111   | 24V                              |

**NOTES:**

All models are available without valves or with factory installed valve clusters. Above are "standard" 2-way and 3-way valve clusters. Contact the factory for other options such as circuit setters, strainers, auto-flow valves, etc.

