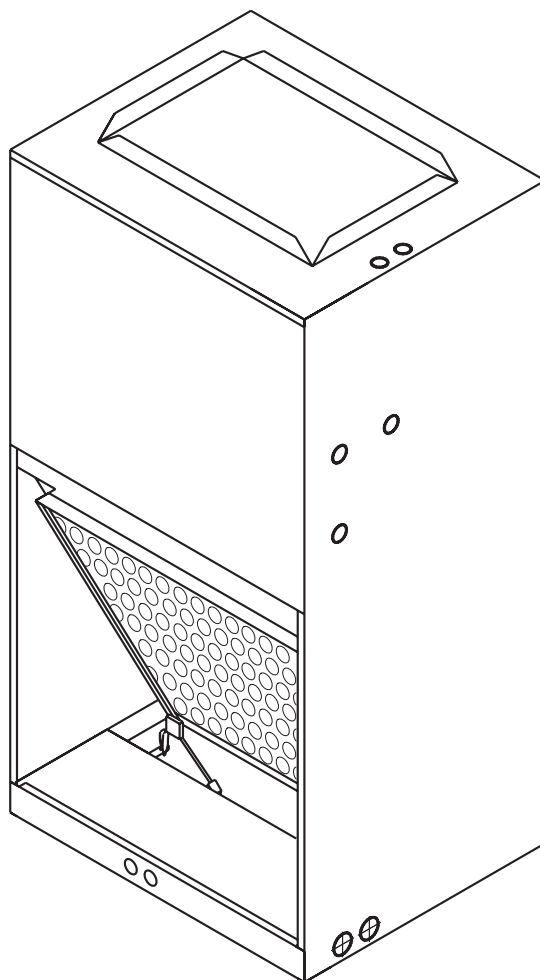


**240 THROUGH 1,160 CFM**



The **YCW** Series fan coil is designed as an upflow indoor air handler with a chilled water coil for cooling. The **YCW** 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 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** is equipped with a control board that allows 24V *3-speed fan operation from a 3-speed wall mounted thermostat*. Three compatible 3-speed thermostats are available from First Co.: manual changeover (#T420), auto changeover (#T421), and the all new "**Autospeed 24V**" (#T200 and #T201). The **T200/T201 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. (see P.4 for additional information)

**Standard Features:**

- 120V motor, 24V 3-speed fan control
- **120/24V 3-speed control board** (see description below)
- **Electrical service pullout** (not on 277V models)
- 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

**Optional Accessories:** (see Page 4)

Optional accessories include 3-speed Wall Thermostats, Wall Panels with Captive Screws (for recessed wall mounting), Condensate Overflow Switch, Closet Hanger Bracket Kit, Bottom Return Air Kit and various Chilled Water Valve Packages.

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

**The "**Autospeed 24V**"<sup>™</sup> " Control Package**

All YCW/YCW-HW/YCWE fan coils are now available with the "**Autospeed 24V**"<sup>™</sup> " control package option.

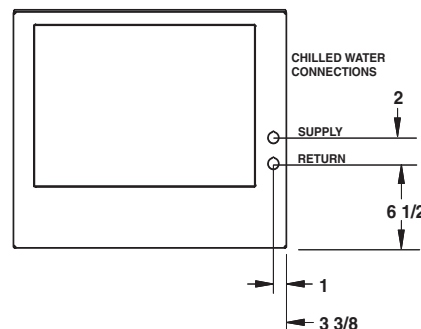
The new **Autospeed 24V**<sup>™</sup> thermostat (part #'s **T200** and **T201**) provides 24V AC single stage temperature control of 2 pipe and 4 pipe fan coil applications. The **T200/T201** thermostat offers maximum comfort and efficiency by automatically selecting the appropriate High, Medium, or Low fan speed, depending on room temperature and thermostat temperature setting. This automatic fan speed control not only brings the room temperature to the desired set point quickly, it maintains the room temperature with the most efficient fan speed selection. Once the desired room temperature is achieved the fan coil operates on low speed for extremely quiet operation.

The fan coil **control board** is a circuit board that provides control of a 3-speed line voltage (120, 208-240, or 277V), (50 or 60 cycle) fan motor. The control board allows the thermostat to control the fan motor even though, by itself, the thermostat does not have the current or voltage rating capability to control the fan motor.

With the "**Autospeed 24V**"<sup>™</sup> " option, a "Controller Enclosure" is factory installed on each fan coil, which includes the control board, transformer, and service switch. Controller enclosure for 120V line (supply) voltage applications is part # **943-1D**. Contact the factory for controllers for other line voltages.

| 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  | P.D. (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  |
| 12YCW            | 1200        | 6.0                      | 6.3             | 33.0                | 26.1 | 11.0 | 25.2                | 23.2 | 8.4  | 5.5  | 5.4                      | 34.7                | 26.7 | 12.6 | 26.5                | 23.5 | 9.6  |
|                  |             | 7.5                      | 9.5             | 36.1                | 27.3 | 9.6  | 27.6                | 24.0 | 7.4  | 7.0  | 8.4                      | 38.3                | 28.1 | 10.9 | 29.3                | 24.6 | 8.4  |
|                  |             | 9.0                      | 13.2            | 38.5                | 28.1 | 8.5  | 29.4                | 24.7 | 6.5  | 8.5  | 11.9                     | 41.1                | 29.2 | 9.7  | 31.4                | 25.5 | 7.4  |

| HEATING CAPACITY |             |     |                 |                                 |           |           |           |              |           |           |           |              |           |           |  |
|------------------|-------------|-----|-----------------|---------------------------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|--|
| UNIT MODEL       | NOMINAL CFM | GPM | P.D. (Ft. Wtr.) | HEATING DATA (70° ENTERING AIR) |           |           |           |              |           |           |           |              |           |           |  |
|                  |             |     |                 | BTUH @ 180 F                    |           | LVG AIR F |           | BTUH @ 160 F |           | LVG AIR F |           | BTUH @ 140 F |           | LVG AIR F |  |
|                  |             |     |                 | BTUH                            | LVG AIR F | BTUH      | LVG AIR F | BTUH         | LVG AIR F | BTUH      | LVG AIR F | BTUH         | LVG AIR F |           |  |
| 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       |              |           |           |  |
| 12YCW            | 1200        | 3.0 | 1.8             | 81.5                            | 133       | 66.7      | 121       | 51.9         | 110       | 37.0      | 99        |              |           |           |  |
|                  |             | 4.5 | 3.7             | 92.8                            | 142       | 75.9      | 129       | 59.1         | 116       | 42.2      | 103       |              |           |           |  |
|                  |             | 6.0 | 6.3             | 97.1                            | 145       | 79.4      | 131       | 61.8         | 118       | 44.1      | 104       |              |           |           |  |



**NOTES:**

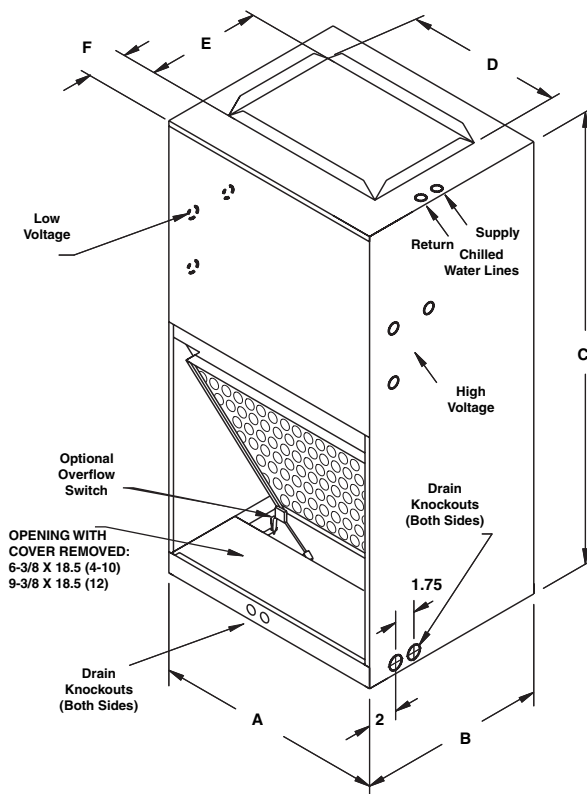
1. Above capacities are at nominal CFM conditions. Maximum discharge air temperature must not exceed 145° at actual CFM.

| 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  |
| 12YCW       | 1/4               | 3.8  | HIGH        | -                                | 1160 | 1130 | 1100 | 1070 | 1040 | 1010 | 980  |
|             |                   |      | MED-HIGH    | -                                | 1070 | 1045 | 1020 | 995  | 970  | 940  | 910  |
|             |                   |      | MED-LOW     | -                                | 1000 | 975  | 950  | 930  | 910  | 885  | 860  |

| 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.                       |
| 12YCW               | 22-1/8 | 18-1/8 | 43 | 14 | 13     | 3-5/8 | 18 X 24     | 5/8" O.D.                      |

**NOTES:**

1. Coil connections are sweat and stub out top of unit



| OPTIONAL ACCESSORIES (FIELD INSTALLED)                        |                              |                                    |                                   |
|---|------------------------------|------------------------------------|-----------------------------------|
| DESCRIPTION   | PART #                       | DIMENSIONS                         |                                   |
| WALL PANEL (1)  | <b>9PWUC01L (4-10)</b>       | 43-3/8 X 25-5/8<br>(Outside Frame) | 40-3/8 X 22-5/8<br>(Inside Frame) |
|   | <b>9PWUC02L (12)</b>         | 46-3/8 X 25-5/8<br>(Outside Frame) | 43-3/8 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 (4-10)</b>          | 19-13/16 X 22                      | ---                               |
|   | <b>90PK5 (12)</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)         | ---                                | ---                               |
| 24V WALL THERMOSTAT 3-SPD., AUTO CHANGEOVER (AUTOSPEED 24V)   | <b>T201</b><br>(24V)         | ---                                | ---                               |

| OPTIONAL VALVE CLUSTERS (Factory installed) |                                  |
|---|----------------------------------|
| PART #                                      | DESCRIPTION                      |
| <b>VALVE CLUSTER:</b>                       |                                  |
| <b>9VCWNVM</b>                              | No valves, stub kit only         |
| <b>9VCW2BVM</b>                             | 2 hand valves                    |
| <b>9VCW22BM</b>                             | 2-way, valve body, 2 hand valves |
| <b>9VCW23BM</b>                             | 3-way, valve body, 2 hand valves |
| <b>POWER HEAD:</b>                          |                                  |
| <b>911-111</b>                              | 24V                              |

**NOTES:**

All models are available with or without 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.



Unit shown with an optional valve package



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



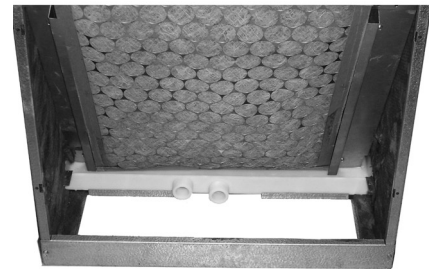
**T200/T201**  
"AUTOSPEED 24V™"  
THERMOSTAT



Optional wall panel  
(Recessed wall application)



**T420/T421**  
THERMOSTAT



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

In keeping with its policy of continuous progress and product improvement, Airside Products reserves the right to make changes without notice. Maintenance for all Airside products is available under "Product Maintenance" at [www.airsideproducts.com](http://www.airsideproducts.com)

**GUIDE SPECIFICATIONS**

Contractor shall furnish and install high quality air handling units as indicated on plans. Sizes and capacities shall be shown in the Unit Schedule included on the drawings. All units shall be the products of Airside Products (ASP) series fan coils and listed by UL or ETL (listed in accordance with UL 1995.) Units shall be designed, tested and manufactured in accordance with ARI-410, 430, 440 and 350.

**Cabinets** shall be fabricated of lock forming quality (min) steel. External and internal parts are to be made with heavy gauge galvanized steel. Large access panels shall be provided to permit full access to internal components. The structural integrity of the cabinets shall remain unaffected by the removal of any or all access panels.

**Insulation** shall be blanket-type made from glass fibers bonded with a thermosetting resin. Insulation shall be one and-one-half pound density providing effective acoustical and thermal control, fire safety, and resistance to air erosion. This insulation must meet the requirements of ASTM C 1071, ASTM G 21, ASTM G22, NFPA 90A and UL-181.

**Coils** shall be of the staggered tube type constructed with seamless copper tubes and headers, and deep corrugated aluminum fins with straight edges. Manufacturer shall supply full depth collars, drawn in the fin stock to provide accurate control of fin spacing and completely cover the copper tubes to lengthen coil life. The tubes are to be mechanically expanded into the fins for a permanent primary to secondary surface bond, assuring maximum heat transfer efficiency. The coils are to be tested at 350 PSI for operation at 300 PSI gauge. The coils provided shall be suitable for the application and comply with the required performance as described in the Unit Schedule.

**Drain pans** shall be positive drainage and shall be fabricated of non-corrosive thermoplastic or optional 304 stainless steel and coated for corrosion protection.

**Fan Wheels** shall be double width, double inlet, forward curved, centrifugal type. They shall be statically and dynamically balanced for smooth, quiet operation. The housing shall be constructed of heavy gauge steel with die-formed inlet cones.

**Motors (Direct Drive)**

Standard motors are PSC, permanently lubricated type with internal thermal overload protection and are mounted with rubber isolation bushings. Blower wheels are DWDI (double width, double inlet) centrifugal, forward curved, and dynamically balanced.

**Filters** are to be disposable type. They shall be center loading with an 85% arrestance efficiency. The filters shall be included in the units as an integral part of the cabinet with easy access provided by the manufacturer.

**Product Specifications**

Upflow Wall / Closet Fan Coils  
2-Pipe Chilled Water / Hot Water

**ACW**