

## ABW SERIES WALL MOUNT HYDRONIC HEAT AIR HANDLERS

### STANDARD FEATURES

#### APPLICATION VERSATILITY

Front or bottom return air. Offset hanging brackets attach to unit and wall to allow hanging inside closet. Can be AHRI matched with most brands of air conditioners or heat pumps. ETL listed for use with either R22 or R410a when a proper metering device is used.

#### LOW LEAKAGE CABINET

Less than 2% air leakage from cabinet when tested in accordance with ASHRAE standard 193. Unit must be installed according to Aspen installation instructions. Sturdy, fully insulated galvanized steel cabinet; stick pins ensure 1/2" insulation remains in place. Unit ships with disposable filter.

#### MODULAR HYDRONIC HEAT KITS

Heat kits available with either circuit breakers or terminal blocks. Available in 2, 3 & 4 row, providing 16,000 to 59,000 BTU's of heat. Heat kits are easily installed in the field using molex plugs or can be ordered factory-installed. Freeze stat is standard, wired into circulating pump control circuit. Controls are accessible from the front for easy service. Electrical connections can be made from the top or left. Disconnect does not protrude through the wall panel. Fan time delay relay standard for increased efficiency. Heat kits are available with or without circulating pump and check valve. Units are provided with auxiliary relay for remote pump. Schrader ports are standard on water-out manifold, hose bib available as an option. Totally lead free constructed coil. Suitable for potable applications.

#### BLOWER

Direct drive multi-speed blowers circulate air quietly and efficiently. Motor speeds can be easily selected via motor terminals. Swing mounted blowers can be easily removed for service.

#### ELECTRONIC CONTROL BOARD

An electronic board controls the functioning of the system reducing moving parts. The board provides for various hot water supply source connections and the blower time delay to maximize heat/cool extraction. As an enhanced feature the pump circulates hot water every 6 hours to prevent coil freeze during off cycle.

#### DX COIL

High efficiency rifled copper tubes/enhanced aluminum fins provide maximum heat transfer. All coils immersion tested at 500 psi then nitrogen pressurized and factory sealed for maximum reliability. Liquid-line Schrader allows pre-installation pressure testing. Available with either check style flowwater or TXV metering device. Field-installable TXVs are also available. Galvanized metal drain pan with bottom primary and secondary drain connections or alternate right side primary. All connections 3/4" FPT. Access door allows for coil cleaning.

#### WARRANTY

Five-year limited parts warranty.

#### OPTIONS

See options menu.



Representative image only. Some models may vary in appearance. Due to continuous product improvement, specifications are subject to change without notice.



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\* For complete warranty details visit [www.aspenmfg.com](http://www.aspenmfg.com).

## HEATING AND COOLING PERFORMANCE AND ELECTRICAL DATA

| UNIT MODEL | PERFORMANCE DATA        |                        |              |                        |                                 |        |        | ELECTRICAL DATA                |                          |
|------------|-------------------------|------------------------|--------------|------------------------|---------------------------------|--------|--------|--------------------------------|--------------------------|
|            | HYDRONIC HEAT KIT MODEL | NOMINAL COOLING (BTUS) | HEATING COIL | Hydronic Coil Delta P. | Heating Capacity(BTU) @ 3.5 GPM |        |        | MINIMUM CIRCUIT AMPACITY (MCA) | MAX BREAKER OR FUSE SIZE |
|            |                         |                        | ROW          | Ft. Water              | ENTERING WATER TEMP             |        |        |                                |                          |
|            |                         |                        |              |                        | 120°                            | 140°   | 180°   |                                |                          |
| ABW 18     | U(C,T)2S(P,L)           | 18,000                 | 2            | 3                      | 18,800                          | 26,600 | 42,300 | 4.1                            | 15                       |
|            | U(C,T)3S(P,L)           |                        | 3            | 1.8                    | 21,600                          | 30,400 | 48,500 |                                |                          |
| ABW 24     | U(C,T)2S(P,L)           | 24,000                 | 2            | 3                      | 21,000                          | 30,100 | 48,000 | 4.1                            | 15                       |
|            | U(C,T)3S(P,L)           |                        | 3            | 1.8                    | 24,700                          | 34,800 | 55,600 |                                |                          |
| ABW 30     | U(C,T)2S(P,L)           | 30,000                 | 2            | 3                      | 23,200                          | 32,800 | 52,500 | 7.9                            | 15                       |
|            | U(C,T)3S(P,L)           |                        | 3            | 1.8                    | 27,000                          | 38,200 | 61,100 |                                |                          |
|            | U(C,T)4S(P,L)           |                        | 4            | 1.1                    | 28,300                          | 40,100 | 64,000 |                                |                          |
| ABW 36     | U(C,T)2S(P,L)           | 36,000                 | 2            | 3                      | 24,700                          | 35,000 | 56,000 | 7.9                            | 15                       |
|            | U(C,T)3S(P,L)           |                        | 3            | 1.8                    | 29,900                          | 41,000 | 65,500 |                                |                          |
|            | U(C,T)4S(P,L)           |                        | 4            | 1.1                    | 30,400                          | 43,000 | 68,800 |                                |                          |

## BLOWER DATA

| MODEL          | MOTOR SPEED | MOTOR HP | MOTOR AMPS | MOTOR VOLTAGE | CFM V. EXTERNAL STATIC * |      |      |      |      |
|----------------|-------------|----------|------------|---------------|--------------------------|------|------|------|------|
|                |             |          |            |               | 0.10                     | 0.20 | 0.30 | 0.40 | 0.50 |
| ABW18 & ABW 24 | LOW         | 1/5      | 2.8        | 120           | 772                      | 736  | 690  | 633  | 574  |
|                | HIGH        |          |            |               | 829                      | 784  | 732  | 663  | 600  |
| ABW30-36+UC2SL | LOW         | 1/3      | 5.8        |               | 850                      | 825  | 815  | 795  | 765  |
|                | MED         |          |            |               | 1085                     | 1045 | 1000 | 950  | 885  |
|                | HIGH        |          |            |               | 1220                     | 1170 | 1100 | 1030 | 965  |

\* Dry coil

## AIR HANDLER CHASSIS NOMENCLATURE

| ABW   | 18                      | F   | -001        |
|---|-------------------------|---|-------------|
| ABW = 120V PSC Motor<br>Vertical Wall Mount | Nominal tonnage (MBTUH) | <u>Metering device</u><br>4 = non-bleed A/C or H/P R410 TXV<br>B = 20% bleed A/C or H/P R22 TXV<br>F = R22 Flo-rater<br>G = R410a Flo-rater<br>X = non-bleed A/C or H/P R22 TXV | Option Code |

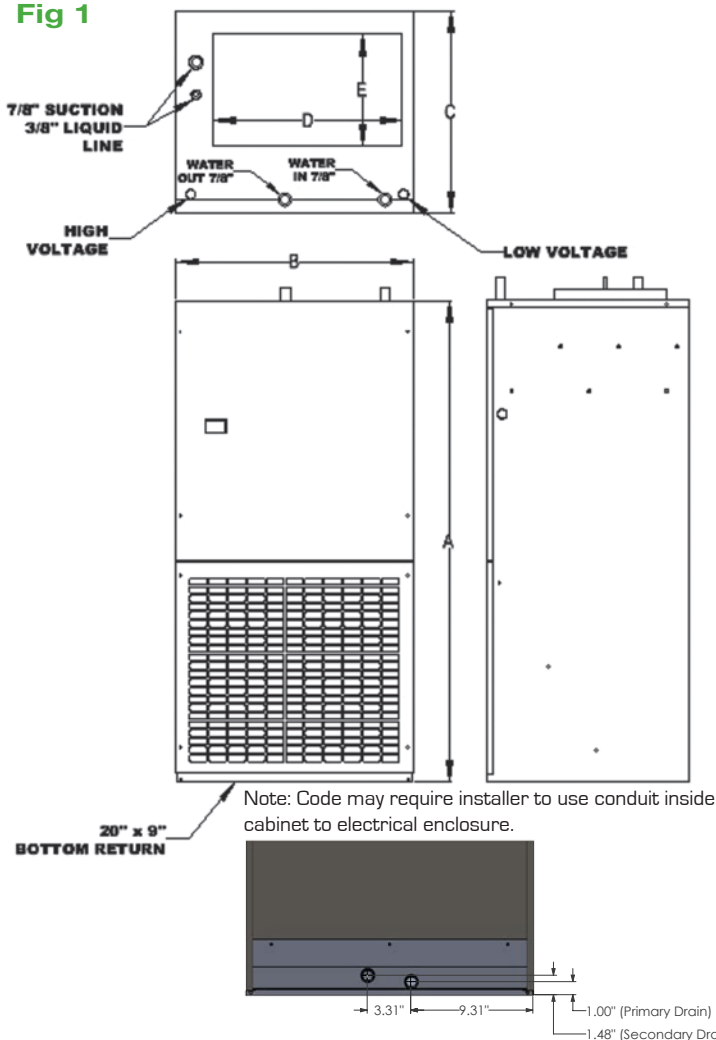
## HYDRONIC HEAT KIT NOMENCLATURE

| U                           | C  | 2  | S           | P   |
|-----------------------------|--|--|-------------|---|
| Wall Mount<br>Hydronic Heat | <u>Interruption</u><br>C = Circuit Breaker<br>T = Terminal Block | <u># of rows</u><br>2 = 2 rows<br>3 = 3 rows<br>4 = 4 rows | S = 18 - 36 | P = Taco 006 Bronze Pump<br>8 = Taco 008 Bronze Pump<br>R = with 009 Pump (kit required)<br>L = Less Pump |

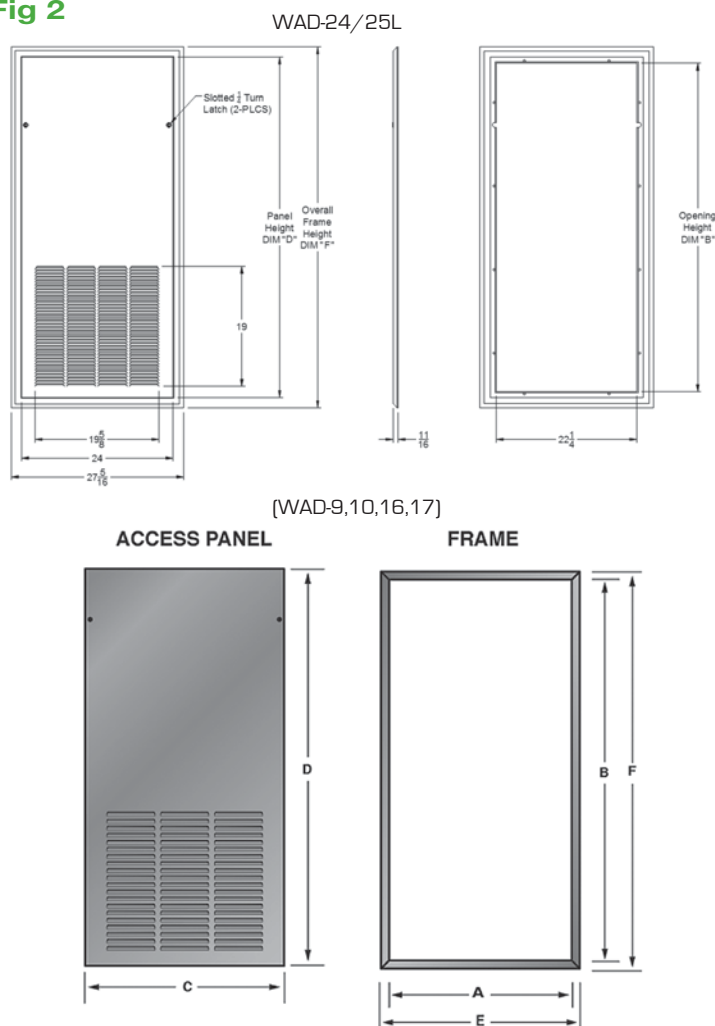
## DIMENSIONS AND SPECIFICATIONS (In. [mm]) (Fig 1)

| MODEL  | A               | B          | C              | D              | E              | FILTER SIZE | PISTON SIZE | SHIP WEIGHT [LBS] | SKID QTY |
|--------|-----------------|------------|----------------|----------------|----------------|-------------|-------------|-------------------|----------|
| ABW18* | 44-1/2<br>[113] | 22<br>[56] | 18-3/4<br>[48] | 17-5/8<br>[45] | 10-1/2<br>[27] | 20X20       | 0.055       | 110               | 4        |
| ABW24* | 44-1/2<br>[113] | 22<br>[56] | 18-3/4<br>[48] | 17-5/8<br>[45] | 10-1/2<br>[27] | 20X20       | 0.059       | 110               | 4        |
| ABW30* | 44-1/2<br>[113] | 22<br>[56] | 18-3/4<br>[48] | 17-5/8<br>[45] | 10-1/2<br>[27] | 20X20       | 0.068       | 118               | 4        |
| ABW36* | 44-1/2<br>[113] | 22<br>[56] | 18-3/4<br>[48] | 17-5/8<br>[45] | 10-1/2<br>[27] | 20X20       | 0.074       | 118               | 4        |

**Fig 1**



**Fig 2**



## DIMENSIONS AND SPECIFICATIONS (Fig 2)

| PANEL MODEL | FOR USE WITH | FINISH   | OPENING SIZE |    | PANEL DIMENSION |          | FRAME DIMENSION |        | # OF PANELS |
|-------------|--------------|----------|--------------|----|-----------------|----------|-----------------|--------|-------------|
|             |              |          | A"           | B" | C"              | D"       | E"              | F"     |             |
| WAD-9(S/L)  | ABW          | Embossed | 22 1/4       | 46 | 24 1/4          | 48       | 24 1/8          | 47 7/8 | 1           |
| WAD-10(S/L) | ABW          | Embossed | 22 1/4       | 52 | 24 1/4          | 54       | 24 1/8          | 53 7/8 | 1           |
| WAD-16(S/L) | ABW          | Smooth   | 22 1/4       | 52 | 24 1/4          | 54       | 24 1/8          | 53 7/8 | 1           |
| WAD-17(S/L) | ABW          | Smooth   | 22 1/4       | 46 | 24 1/4          | 48       | 24 1/8          | 47 7/8 | 1           |
| WAD-24L     | ABW          | Smooth   | 22 1/4       | 52 | 24              | 53 15/16 | 27 5/16         | 57 1/4 | 1           |
| WAD-25L     | ABW          | Smooth   | 22 1/4       | 46 | 24              | 47 15/16 | 27 5/16         | 51 1/4 | 1           |