

# HWCG\*\*XOA

## LE Series

### SPECIFICATIONS

- ECM constant torque blower motor is pre-programmed at the factory with speeds and torques controlled by software embedded in the motor for enhanced energy efficiency
- Designed for use with a boiler loop, air handlers are AHRI matched to RSG-HRG "M & P" Series split system condensers

#### Application

- **Multi-Position Design** – Shipped upflow or horizontal right from the factory, can be field converted to downflow\* or horizontal left applications
- **Line Voltage Terminal Block** – Allows fast, simple thermostat connection
- **Slide-Out Blower Assembly** – Mounted on rails to make maintenance and service fast
- **Freeze Protection for Both Heating & Cooling** – Protects the entire system year-round
- **R-410A Factory Installed TXV** – Provides reliable refrigerant metering
- 3/4" Water Connections – Assures correct water supply lines

#### Multi-Blower Speed

- Direct drive blower with five speed taps and torques programmed into the motor
- Shipped from the factory with disposable filter in the filter rack

#### Electric Supply

- 120V, 60 Hz system
- Low voltage terminal block
- Connections can be made from cabinet top or left side

#### Hydronic Heat

- Comes with hydronic heat coil installed
- Controls are accessible from the front
- Freeze stat wired into circulating pump control circuit

#### Cabinet Features

- Durable galvanized steel cabinet has painted front panels
- 1/2" faced insulation throughout protects against sweating, enhances efficiency

#### Evaporator Coil

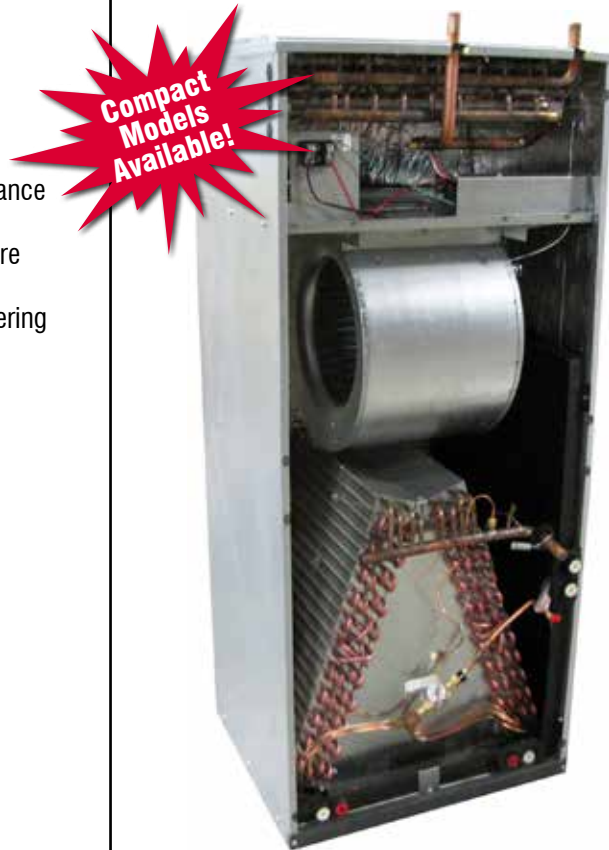
- Copper tube/enhanced aluminum fins
- Non-corrosive drain pans
- Primary and secondary drain connections with alternate right side primary

\*Downflow application requires a downflow kit for all models. See Page 4 for complete list.



### HYDRONIC AIR HANDLER

*Constant torque ECM Motor  
with RSG-HRG "M & P" Series*



1-1/2 to 5 Tons

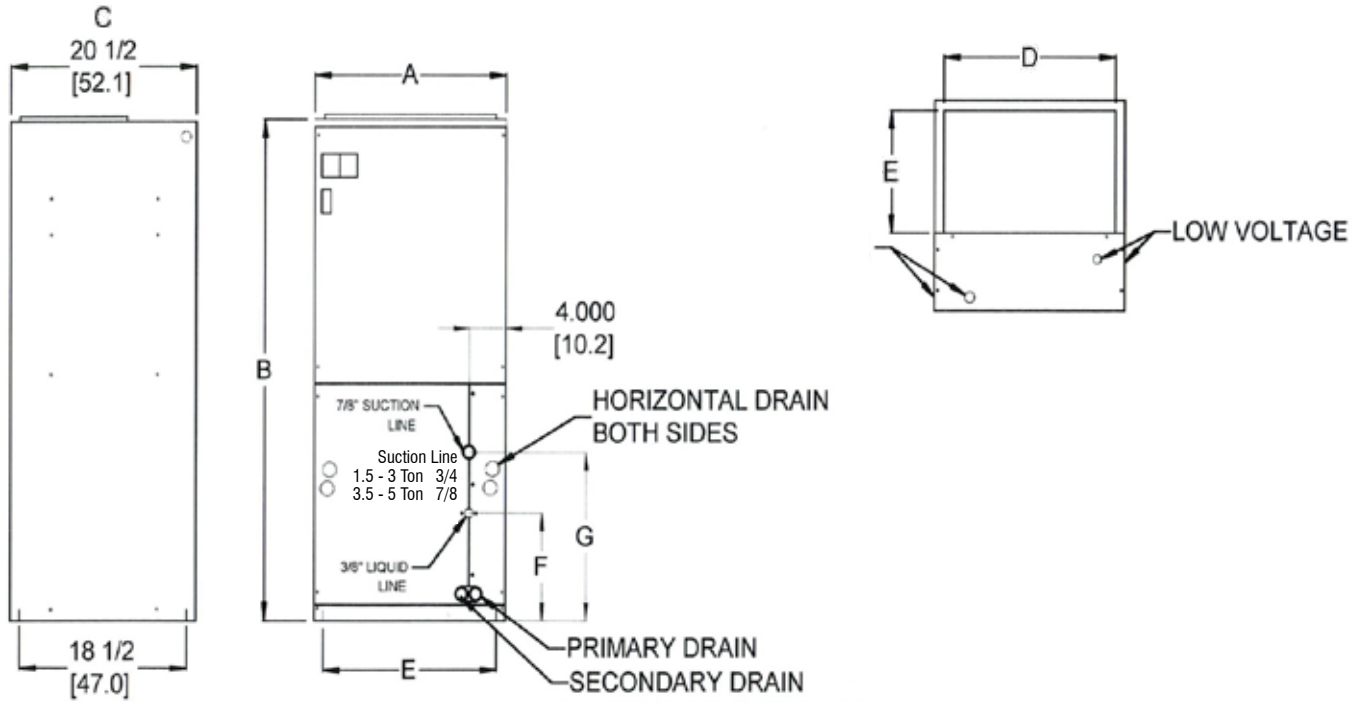


Certification applies only when complete system is listed with AHRI.

## MODEL NUMBER GUIDE

|             |                       |                                   |                       |                         |   |                             |                   |
|-------------|-----------------------|-----------------------------------|-----------------------|-------------------------|---|-----------------------------|-------------------|
| <b>H</b>    | <b>W</b>              | <b>C</b>                          | <b>G</b>              | <b>24</b>               | <b>X</b>                                    | <b>O</b>                    | <b>A</b>          |
| Air Handler | Water Heat (Hydronic) | Aluminum Fin/<br>Copper Tube Coil | 'Green' Gas<br>R-410A | BTUH Capacity<br>x 1000 | TXV with Constant<br>Torque Blower<br>Motor | Voltage Code<br>0=115V-1-60 | Revision<br>Level |

## HYDRONIC AIR HANDLER WITH CONSTANT TORQUE ECM MOTOR



## PHYSICAL DIMENSIONS

| MODEL     | A      | B      | C      | D      | E      | F     | G      | FILTER SIZE | PISTON SIZE | SHIPPING WT LBS |
|-----------|--------|--------|--------|--------|--------|-------|--------|-------------|-------------|-----------------|
| HWCG24X0A | 21     | 49 1/4 | 20 1/2 | 18 3/4 | 12     | 8 1/4 | 12 1/4 | 16 x 20     | 0.059       | 100             |
| HWCG30X0A | 21     | 49 1/4 | 20 1/2 | 18 3/4 | 12     | 8 1/4 | 12 1/4 | 16 x 20     | 0.068       | 118             |
| HWCG42X0A | 24 1/2 | 57     | 20 1/2 | 22 1/4 | 14 3/4 | 13    | 18     | 20 x 20     | 0.080       | 153             |
| HWCG48X0A | 24 1/2 | 57     | 20 1/2 | 22 1/4 | 14 3/4 | 13    | 18     | 20 x 20     | 0.084       | 180             |
| HWCG60X0A | 24 1/2 | 57     | 20 1/2 | 22 1/4 | 14 3/4 | 15    | 20     | 20 x 20     | 0.092       | 200             |

## PERFORMANCE DATA - 3.5 GPM PUMP (NOT PROVIDED MUST BE FIELD INSTALLED)

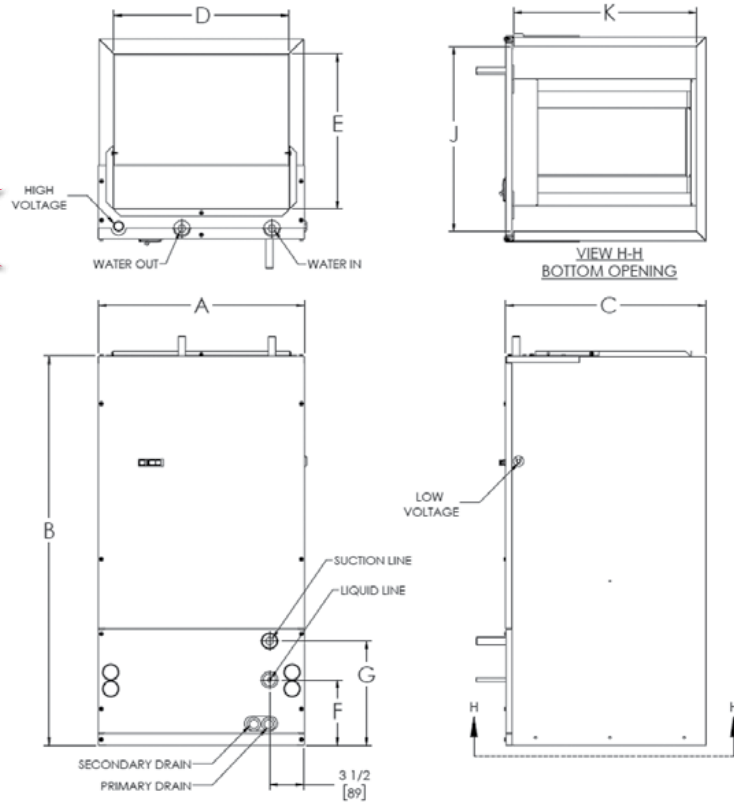
| MODEL     | PERFORMANCE DATA  |              |               |                             |            |            | ELECTRICAL DATA     |                           |
|-----------|-------------------|--------------|---------------|-----------------------------|------------|------------|---------------------|---------------------------|
|           | COOLING NOM. TONS | HEATING COIL |               | HEATING CAP BTUH @ 3.5 GPM* |            |            | MIN. CIRC. AMPACITY | MAX. FUSE/CIRCUIT BREAKER |
|           |                   | ROW          | SIZE          | 120° F EWT                  | 140° F EWT | 180° F EWT |                     |                           |
| HWCG24X0A | 1.5 - 2.0         | 3            | 18" X 12"     | 21,600                      | 37,000     | 59,300     | 6.6                 | 15A                       |
| HWCG30X0A | 2.5               | 3            | 18" X 12"     | 28,700                      | 40,900     | 65,500     | 9.1                 | 20A                       |
| HWCG42X0A | 3.0 - 3.5         | 3            | 22" X 14 1/2" | 37,800                      | 53,800     | 86,300     | 14.3                | 30A                       |
| HWCG48X0A | 4.0               | 4            | 22" X 14 1/2" | 44,400                      | 63,200     | 101,300    | 14.3                | 30A                       |
| HWCG60X0A | 5.0               | 4            | 22" X 14 1/2" | 46,600                      | 66,300     | 106,400    | 14.3                | 30A                       |

\*At high speed setting

## MODEL NUMBER GUIDE

|             |                       |                                |                    |                      |                                       |                          |                |
|-------------|-----------------------|--------------------------------|--------------------|----------------------|---------------------------------------|--------------------------|----------------|
| <b>H</b>    | <b>W</b>              | <b>C</b>                       | <b>G</b>           | <b>23</b>            | <b>X</b>                              | <b>O</b>                 | <b>A</b>       |
| Air Handler | Water Heat (Hydronic) | Aluminum Fin/ Copper Tube Coil | 'Green' Gas R-410A | BTUH Capacity x 1000 | TXV with Constant Torque Blower Motor | Voltage Code 0=115V-1-60 | Revision Level |

## HYDRONIC AIR HANDLER (23,35,47) WITH CONSTANT TORQUE ECM MOTOR



## PHYSICAL DIMENSIONS

| MODEL     | A  | B  | C      | D  | E  | F      | G      | J      | K      | FILTER SIZE | PISTON SIZE | SHIPPING WT LBS |
|-----------|----|----|--------|----|----|--------|--------|--------|--------|-------------|-------------|-----------------|
| HWCG23X0A | 21 | 40 | 20 1/2 | 18 | 16 | 6 3/4  | 10 3/4 | 18 1/2 | 18 1/2 | 16 x 20     | 0.059       | 100             |
| HWCG35X0A | 21 | 42 | 23     | 18 | 19 | 8 3/4  | 12 3/4 | 18     | 20     | 20 x 20     | 0.068       | 170             |
| HWCG47X0A | 21 | 48 | 28     | 18 | 24 | 11 3/4 | 15 3/4 | 18     | 25     | 20 x 25     | 0.084       | 200             |
| HWCG59X0A | 21 | 48 | 28     | 18 | 24 | 11 3/4 | 15 3/4 | 18     | 25     | 20 x 25     | 0.084       | 200             |

## PERFORMANCE DATA - 3.5 GPM PUMP (NOT PROVIDED MUST BE FIELD INSTALLED)

| MODEL     | PERFORMANCE DATA  |              |      |                             |            |            | ELECTRICAL DATA     |                            |
|-----------|-------------------|--------------|------|-----------------------------|------------|------------|---------------------|----------------------------|
|           | COOLING NOM. TONS | HEATING COIL |      | HEATING CAP BTUH @ 3.5 GPM* |            |            | MIN. CIRC. AMPACITY | MAX. FUSE/ CIRCUIT BREAKER |
|           |                   | ROW          | SIZE | 120° F EWT                  | 140° F EWT | 180° F EWT |                     |                            |
| HWCG23X0A | 1.5 - 2.0         | 3            | 2.1  | 25,000                      | 35,300     | 56,300     | 6.6                 | 15A                        |
| HWCG35X0A | 2.5 - 3.0         | 4            | 1.1  | 38,750                      | 54,805     | 84,820     | 9.1                 | 20A                        |
| HWCG47X0A | 3.5 - 4.0         | 4            | 0.8  | 48,200                      | 68,125     | 98,640     | 14.3                | 25A                        |
| HWCG59X0A | 3.5 - 5.0         | 4            | 0.8  | 48,200                      | 68,125     | 98,640     | 14.3                | 25A                        |

\*At high speed setting

**BLOWER DATA**

| MODEL                               | MOTOR HP | MOTOR VOLTAGE | SPEED TAP | CFM * V. EXTERNAL STATIC |      |      |      |      | AMPS |
|-------------------------------------|----------|---------------|-----------|--------------------------|------|------|------|------|------|
|                                     |          |               |           | 0.10                     | 0.20 | 0.30 | 0.40 | 0.50 |      |
| HWCG24X0A                           | 1/3      | 120-1-60      | TAP 5     | 900                      | 853  | 797  | 738  | 673  | 4.8  |
|                                     |          |               | TAP 4     | 670                      | 646  | 613  | 592  | 553  |      |
|                                     |          |               | TAP 3     | 500                      | 476  | 452  | 421  | 400  |      |
|                                     |          |               | TAP 2     | 400                      | 381  | 360  | 339  | 312  |      |
|                                     |          |               | TAP 1     | 900                      | 853  | 797  | 738  | 673  |      |
| HWCG30X0A                           | 1/2      | 120-1-60      | TAP 5     | 1150                     | 1087 | 1030 | 975  | 910  | 6.8  |
|                                     |          |               | TAP 4     | 1080                     | 1048 | 1010 | 960  | 895  |      |
|                                     |          |               | TAP 3     | 900                      | 862  | 825  | 796  | 745  |      |
|                                     |          |               | TAP 2     | 700                      | 663  | 632  | 600  | 552  |      |
|                                     |          |               | TAP 1     | 500                      | 473  | 449  | 421  | 395  |      |
| HWCG42X0A<br>HWCG48X0A<br>HWCG60X0A | 1.0      | 120-1-60      | TAP 5     | 1850                     | 1806 | 1752 | 1700 | 1652 | 10.9 |
|                                     |          |               | TAP 4     | 1704                     | 1656 | 1600 | 1532 | 1479 |      |
|                                     |          |               | TAP 3     | 1494                     | 1461 | 1426 | 1400 | 1364 |      |
|                                     |          |               | TAP 2     | 1350                     | 1310 | 1272 | 1229 | 1175 |      |
|                                     |          |               | TAP 1     | 676                      | 652  | 621  | 600  | 559  |      |

**BLOWER DATA - COMPACT MODELS**

| MODEL                  | MOTOR HP | MOTOR VOLTAGE | SPEED TAP | CFM * V. EXTERNAL STATIC |      |      |      |      | AMPS |
|------------------------|----------|---------------|-----------|--------------------------|------|------|------|------|------|
|                        |          |               |           | 0.10                     | 0.20 | 0.30 | 0.40 | 0.50 |      |
| HWCG23X0A              | 1/5      | 120-1-60      | TAP 5     | 895                      | 860  | 815  | 770  | 705  | 4.8  |
|                        |          |               | TAP 4     | 825                      | 795  | 770  | 750  | 700  |      |
|                        |          |               | TAP 3     | 770                      | 735  | 705  | 685  | 665  |      |
|                        |          |               | TAP 2     | 705                      | 675  | 655  | 615  | 595  |      |
|                        |          |               | TAP 1     | 655                      | 615  | 605  | 580  | 540  |      |
| HWCG35X0A              | 1/2      | 120-1-60      | TAP 5     | 1245                     | 1190 | 1130 | 1085 | 1020 | 5.4  |
|                        |          |               | TAP 4     | 1170                     | 1130 | 1085 | 1045 | 1000 |      |
|                        |          |               | TAP 3     | 935                      | 910  | 865  | 840  | 805  |      |
|                        |          |               | TAP 2     | 815                      | 785  | 745  | 715  | 685  |      |
|                        |          |               | TAP 1     | 685                      | 655  | 605  | 580  | 520  |      |
| HWCG47X0A<br>HWCG59X0A | 1.0      | 120-1-60      | TAP 5     | 1950                     | 1880 | 1845 | 1805 | 1780 | 10.9 |
|                        |          |               | TAP 4     | 1765                     | 1740 | 1725 | 1685 | 1660 |      |
|                        |          |               | TAP 3     | 1500                     | 1480 | 1450 | 1415 | 1385 |      |
|                        |          |               | TAP 2     | 1245                     | 1205 | 1185 | 1150 | 1105 |      |
|                        |          |               | TAP 1     | 1010                     | 900  | 825  | 765  | 705  |      |

**DOWNFLOW KITS**

| MODEL  | AIR HANDLER MATCH                          |
|--------|--|
| DFK-2  | HWCG24X0A, HWCG24T0A                       |
| DFK-3  | HWCG23X0A, HWCG23T0A                       |
| DFK-5  | HWCG30X0A                                  |
| DFK-6  | HWCG35X0A, HWCG35T0A                       |
| DFK-7  | HWCG36T0A                                  |
| DFK-9  | HWCG42X0A, HWCG48X0A, HWCG60T0A            |
| DFK-10 | HWCG47X0A, HWCG47T0A, HWCG59X0A, HWCG59T0A |
| DFK-11 | HWCG48T0A                                  |
| DFK-12 | HWCG60X0A                                  |

*Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations. Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.*

“This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65.”