

## HYDRONIC AIR HANDLER with Constant Torque ECM Motor



**1 1/2 to 5 TONS**



**HWCGxxX0A Series**– 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 Heat Controller RSG split system condensers

**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

**R-410A Factory Installed TXV**

Provides reliable refrigerant metering

**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

**3/4" Water Connections**

Assures correct water supply lines

**Multi-Speed Blower**

Direct drive blower with five speed taps and torques programmed into the motor

Shipped from the factory with disposable filter in the filter rack.

### 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

### ELECTRIC SUPPLY

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

### EVAPORATOR COIL

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

# HWCG Series Features & Benefits

Multi-position air handlers include a broad range of standard features:

- ECM constant torque blower motor has speeds and torques controlled by software embedded in the motor for enhanced comfort, energy efficiency and quiet operation
  - Freeze protection in both heat and cool modes provides the ultimate in system protection
  - Unit circulates hot water every six hours to prevent coil freeze during OFF cycle
  - Blower time delay and fan time delay provide increased efficiency
- Coils are immersion tested, pressurized with nitrogen and factory sealed before shipment; coil is totally lead-free
  - Slide-out blower assembly makes service and maintenance fast and easy
  - Full cabinet insulation prevents sweating and mold formation, foil facing encapsulates glass fibers, and stick pins lock insulation in place
  - Operation is controlled by an electronic board, which includes source connections for hot water supply

## PERFORMANCE DATA

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

## 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	900	853	797	738	673	
			TAP 1	400	381	360	339	312	
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 HWCG48X0A 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	

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## CONDENSER MATCHES

CONDENSING UNIT	AIR HANDLER	CAPACITY BTUH	SEER	EER	AIRFLOW CFM
RSG1318S1E	HWCG24X0A	17,400	13.5	10.8	600
	HWCG30X0A	18,000	14.0	11.1	600
RSG1324S1E	HWCG24X0A	24,000	13.5	10.8	800
	HWCG30X0A	24,000	14.0	11.2	800
RSG1330S1E	HWCG30X0A	30,000	14.0	11.0	950
RSG1336S1E	HWCG42X0A	36,000	13.5	11.0	1145
RSG1342S1E	HWCG42X0A	41,000	14.0	11.0	1145
	HWCG48X0A	41,000	14.0	11.0	1145
RSG1348S1E	HWCG48X0A	48,000	13.5	11.0	1585
	HWCG60X0A	48,000	13.5	11.0	1585
RSG1360S1E	HWCG60X0A	56,000	13.5	10.9	1600
RSG1418S1E	HWCG24X0A	17,400	15.0	12.2	600
	HWCG30X0A	18000	14.0	11.1	600
RSG1424S1E	HWCG24X0A	24000	13.5	10.8	800
	HWCG30X0A	24,000	14.0	11.2	800
RSG1430S1E	HWCG30X0A	30,000	14.0	11.0	950
RSG1436S1E	HWCG42X0A	36,000	13.5	11.0	1145
RSG1442S1E	HWCG42X0A	41,000	14.0	11.0	1145
	HWCG48X0A	41,000	14.0	11.0	1145
RSG1448S1E	HWCG48X0A	48,000	13.5	11.0	1585
	HWCG60X0A	48,000	13.5	11.0	1585
RSG1460S1F	HWCG60X0A	56,000	13.5	10.9	1600
RSG1624S1E	HWCG24X0A	23,400	15.5	12.8	800
	HWCG30X0A	24,000	16.0	13.3	800
RSG1630S1E	HWCG30X0A	30,000	16.0	13.0	980
RSG1636S1E	HWCG42X0A	36,000	16.0	13.0	1200
RSG1642S1E	HWCG48X0A	41,000	16.0	13.0	1250
RSG1648S1E	HWCG48X0A	47,500	16.0	13.0	1600
	HWCG60X0A	48,000	16.0	13.1	1600
RSG1660S1E	HWCG60X0A	55,500	16.0	12.5	2000

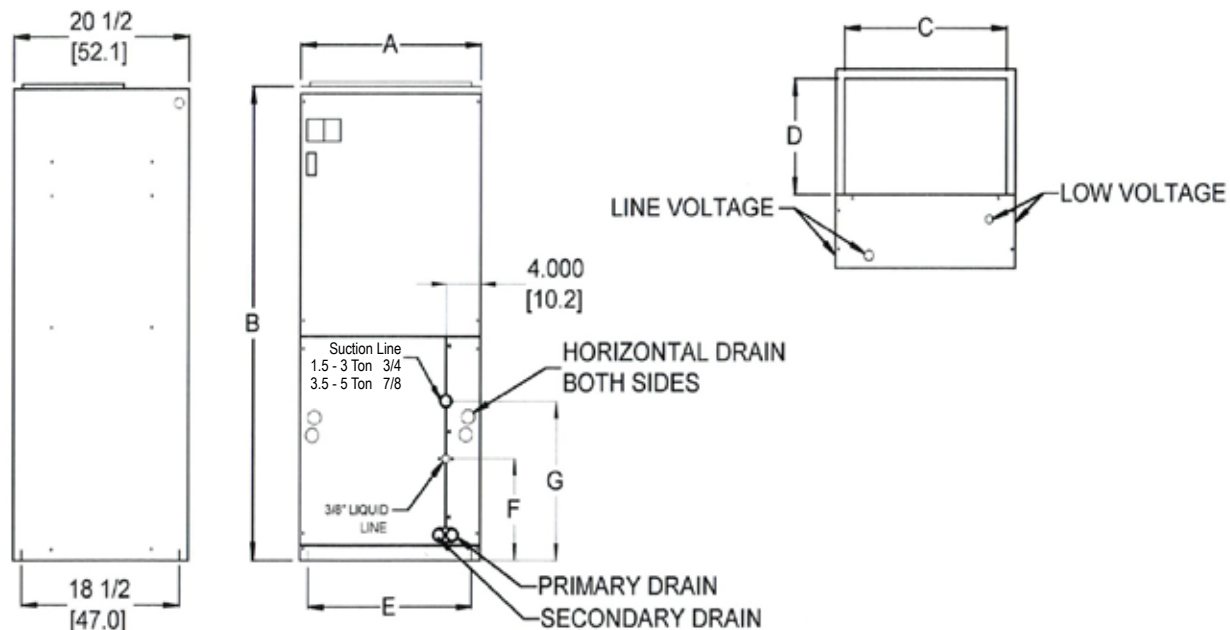
## MODEL NOMENCLATURE

H	W	C	G	18	X	0	A
H=Air Handler	W=Water Heat (Hydronic)	C=Aluminum Fin/ Copper Tube Coil	G=Green Gas (R-410A)	BTUH Capacity x 1000	X=TXV with Constant Torque Blower Motor	Voltage Code 0=115V-1-60	Revision Level



Certification applies only when complete system is listed with AHRI.

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## PHYSICAL DIMENSIONS

MODEL	A	B	C	D	E	F	G	FILTER SIZE	PISTON SIZE	SHIPPING WT LBS
HWCG24X0A	21	49 1/4	18 3/4	12	18 1/2	8 1/4	12 1/4	16 x 20	0.059	100
HWCG30X0A	21	49 1/4	18 3/4	12	18 1/2	8 1/4	14 1/4	16 x 20	0.068	118
HWCG42X0A	24 1/2	57	22 1/4	14 3/4	22	11	16	20 x 20	0.080	153
HWCG48X0A	24 1/2	57	22 1/4	14 3/4	22	13	18	20 x 20	0.084	180
HWCG60X0A	24 1/2	57	22 1/4	14 3/4	22	15	20	20 x 20	0.092	200

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 before beginning any installation preparations.

Third party incentive and rebate programs (Federal, state, utilities, etc.) 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.

# HEAT CONTROLLER

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