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Introduction: KHG Series =

The Krueger KHG Series horizontal high capacity fan coil units are designed to maximize flexibility of selection and installation. The units are also designed to exceed the stringent quality standards of the institutional market, while remaining cost competitive in the light commercial segment of the market. Krueger horizontal fan coil units set the new standards for quality, flexibility, and competitive pricing.

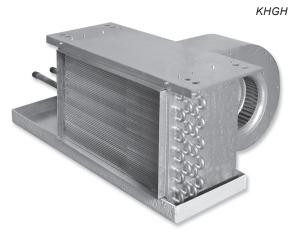
MODEL

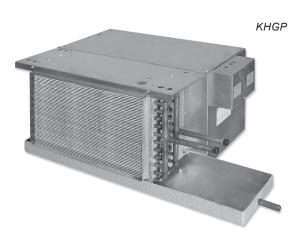
KHGE - Horizontal High Capacity Fan Coil, Exposed Cabinet

KHGH - Horizontal High Capacity Fan Coil, Concealed Ceiling

KHGP - Horizontal High Capacity Fan Coil, Concealed with Plenum







FAN COILS **E2**



KHG Series Product Description -

DESIGNED FOR MAXIMUM FLEXIBILITY

The extensive variety of standard options available on these units are where you find the versatility to fit any HVAC system designer's needs.

Options include: mixing box with linkage, rear or bottom ducted return, foil faced or elastomeric closed cell foam insulation, solid or telescoping bottom panels for unit recessing, single wall stainless steel drain pans, and electric heat with single power connection. All electric heat units are listed with ETL as an assembly and carry the cETL label.

All units comply with the latest edition of AHRI Standard 440 for testing and rating fan coil units, are certified, and display the AHRI symbol. Sizes 14 through 20 exceed the maximum airflow rate in AHRI 440 and are therefore not certified.

High efficiency motors, fan relays, disconnects and fusing mean easier coordination between mechanical and electrical trades.

Coil options allow for three, four, or six row chilled water or DX coils. One to four row hot water coils may be placed in the preheat or reheat position.

QUALITY PRODUCT

This series of fan coil units are built from galvanized steel. This metal surpasses the ASTM 125 hour salt spray test for corrosion and rust. Exposed Model KHGE cabinetry is powder coated galvannealed steel.

Standard insulation is 1/2" thick fiberglass, complying with UL 181 and NFPA 90A. Optional foil faced or elastomeric closed cell foam insulation may be specified.

All units, with or without electric heat, are cETL listed and labeled. All wiring is in compliance with NEC, assuring safety and quality for the owner.

This series of fan coil units have a removable fan assembly. The entire fan assembly can be removed from the unit and serviced easily on a workbench.

CONSTRUCTION HIGHLIGHTS

<u>Electrical Enclosure</u>: The side access electrical enclosure provides access to all electric heat and control components. Terminal strips are furnished for simple power and control wiring connections. Multiple knockouts allow wiring entries from either side of the compartment.

Mixing Box: The optional fully insulated mixing box section comes completely assembled to the KHGP unit, featuring low leakage, heavy gauge steel dampers with integral linkage. Damper positioning is field configurable and bottom filter access is standard. A factory provided and installed damper actuator is also available.

<u>Coils</u>: All fan coils are available in 2 or 4 pipe configurations. The heating coil may be placed in the reheat or preheat position. Heating and cooling coils are field reversible for right or left side connections.

<u>Drain Pan</u>: Standard drain pans are externally insulated, single wall galvanized steel with an option for stainless steel. Drain pans are available with secondary drain connection. On concealed models, the drain pan is easily removable for cleaning or reversing connections.

<u>Filters</u>: 1" throwaway filters are tight fitting to prevent air bypass. Filters are easily removable from the bottom without the need for tools. The filter rack is convertible from rear to bottom return without the need for additional parts. Optional 1" and 2" pleated filters are available for use with the KHGP unit.

<u>Powder Coated Painted Surface</u>: Exposed cabinet, model KHGE, features powder coat finish that resists scuffing, scratching, fading, and fingerprints.

CONVENIENT INSTALLATION

All units are shipped completely assembled, reducing field installation time and labor. All units are thoroughly inspected and tested prior to shipment, eliminating potential problems at startup. Motor wiring is brought to a junction box on the outside of the unit casing, reducing electrical hook-up time.

Plenum units are field reversible for either rear or bottom return without the need for special adapters and tools.

All coils and drain pans are field reversible for right or left side connections.

These fan coil units have a side access electrical enclosure, allowing easy access to all electrical components, terminal blocks and wiring.

Available factory installed control packages can greatly reduce field labor and setup time. Consisting of control transformer and all needed relays, these packages integrate seamlessly with either factory provided thermostats or field installed thermostats and controllers.

Factory furnished valve packages assure proper fit, operation and performance. Valve packages are completely assembled and shipped loose with the units.

KHG - SERIES



KHG Series Product Description

STANDARD FEATURES

Construction

All Units

- · AHRI 440 certified and labeled.
- · Galvanized steel construction.
- 1/2" thick fiberglass insulation.
- 1 1/2" duct discharge collar.
- · Four point hanger mounting brackets.

Plenum units

- · Integral filter rack with 1" throwaway filter.
- Integral rear ducted return field reversible to bottom return.

Exposed units

- · Single deflection rear return grille.
- · Double deflection discharge grille.
- · Durable powder coat paint.
- 18 gauge cabinet construction.

Coils

- Cooling 3, 4 or 6 row chilled water or DX, heat pump compatible.
- Heating 1, 2, 3 or 4 row hot water reheat or preheat position.
- 8 total rows of cooling and heating coils maximum.
- 1/2" O.D. seamless copper tubes.
- 0.016" tube wall thickness.
- High efficiency aluminum fin surface for optimizing heat transfer, pressure drop and carryover.
- Left or right hand connections field reversible (water coils only).
- · Removable for service.
- · Manual air vent.

Drain Pans

- Single wall, galvanized steel, externally insulated fire retardant and antimicrobial closed cell foam.
- · Positively sloped to drain connection.
- · Removable, field reversible.
- 7/8" O.D. primary drain connection.

Fan Assemblies

- · Forward curved, DWDI centrifugal type.
- 115 volt, single phase, three tap PSC motors.
- · Quick disconnect motor connections.
- Removable fan(s)/motor(s) for service.

Electrical

- · cETL listed for safety compliance.
- · Electrical junction box for field wiring terminations.
- · Terminal block for field connections.

Electric Heat

- cETL listed as an assembly for safety compliance.
- Integral electric heat assembly with removable elements for easy service.
- Automatic reset primary and back-up secondary thermal limits.
- Single point power connection.
- · Side-hinged electrical enclosure.

OPTIONAL FEATURES

Construction

All Units

- · Foil faced fiberglass insulation.
- · Elastomeric closed cell foam insulation.

Plenum Units

- Bottom return.
- Mixing box with top/rear or rear/bottom dampers field reversible.
- Damper actuator.
- · Spare 1" throwaway filters.
- · 1" and 2" pleated filters.

Exposed Units

- · Single deflection bottom return grille.
- · Ducted supply.
- · Ducted rear return.

Coils

- Automatic air vents.
 Stainless steel coil casings.
- 3/8" O.D. seamless copper tubes (0.012" tube wall thickness).

Drain Pans

- · Stainless steel with external insulation.
- 5/8" O.D. secondary drain connection.
- · Auxiliary drip pans.

Fan Assemblies

- 208-230 & 277 volt, single phase, three tap PSC motors.
- EC motors.

Electrical

- Side access electrical enclosure
- Silent solid state fan relays.
- · SCR fan speed controller.
- Toggle disconnect switch.
- Condensate overflow switch (drain pan).
- · Main fusing.
- Unit and remote mounted three speed fan switches.
- · Fan relay packages.
- Control power transformers.

Electric Heat

- · Door interlocking disconnect switches.
- · Main fusing.
- · Silent relay / contactor.

Piping Packages

- Factory assembled shipped loose for field installation.
- 1/2", 3/4", and 1", 2 way and 3 way normally closed, two position electric motorized valves.
- · Isolation ball valves with memory stop.
- · Fixed and adjustable flow control devices.
- Unions and P/T ports.
- Modulating control valves.
- High pressure close-off actuators (1/2" = 50 PSIG; 3/4" = 25 PSIG; 1" = 20 PSIG).

Thermostats

- Remote mounted analog, digital display or programmable.
- 2 and 4 pipe control sequences.
- · Automatic and manual changeover.
- · Integral three speed fan switches.