

Introduction: KHF Series

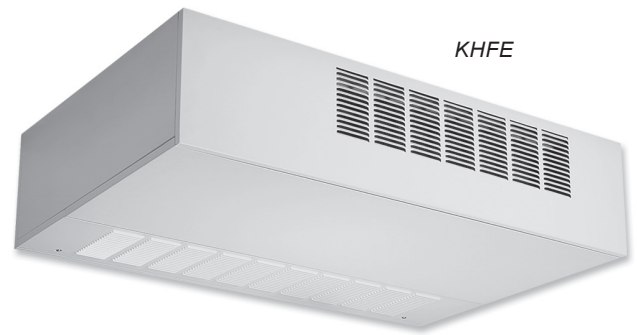
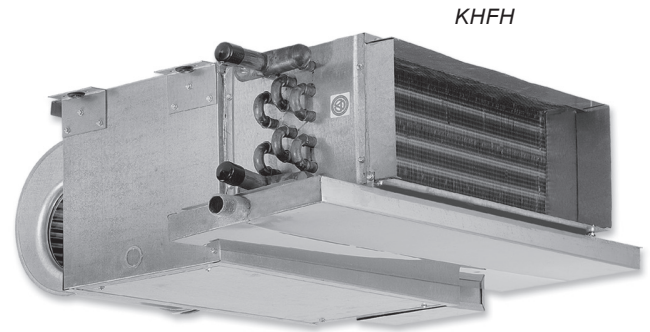
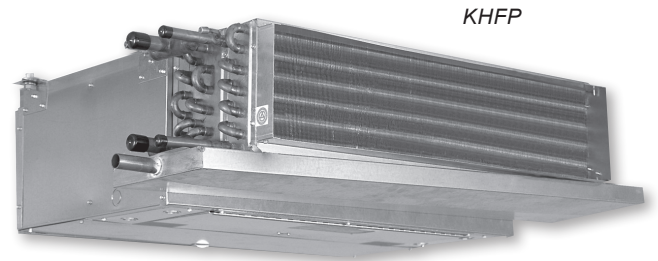
Krueger KHF series of horizontal low profile fan coil units are designed to maximize flexibility of selection and installation. The units are also designed to exceed the stringent quality standards of the institutional market, while remaining cost competitive in the light commercial segment of the market.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

MODEL

KHFE - Horizontal Fan Coil, Exposed Cabinet

KHFH - Horizontal Fan Coil, Concealed Ceiling

KHFP - Horizontal Fan Coil, Concealed with Plenum


KHFE

KHFH

KHFP

FAN COILS

K H F - S E R I E S

KHF 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: 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 point 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.

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

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

Silent solid state relays are available for fan and electric heat control in sound sensitive environments.

QUALITY PRODUCT

These concealed fan coil units are built from galvanized steel, which surpasses the ASTM 125 hour salt spray test for corrosion and rust. Exposed unit cabinetry is powder coated galvanized 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

Electrical Enclosure

The bottom hinged electrical enclosure provides access to a spacious electrical compartment. This compartment houses 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.

Filters: 1" throwaway filters are tight fitting to prevent air bypass. Filters are easily removable from the bottom through the access panel or plenum.

Coils: All units are available in 2 or 4 pipe configurations. The heating coil may be placed in the reheat or preheat position. On concealed models, heating and cooling coils are available with right, left, or opposite side connections.

Drain Pan: 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.

Telescoping Bottom Panel: The telescoping bottom panel allows for fully recessing the unit while permitting service access into the ceiling plenum. The architectural ceiling panel is finished with a durable powder coat paint.

Fan Deck: The fan assembly is easily removed without disconnecting the ductwork for service access to motors and blowers at or away from the unit.

CONVENIENT INSTALLATION

All fan coil units in this series 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 special adapters, tools, or additional parts.

All units have the option of a hinged cover electrical enclosure in the bottom of the unit. The expansive compartment allows for easy access to all electrical components, terminal blocks, and wiring.

Factory furnished valve packages assure proper fit, operation, and performance.

KHF 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

- Stamped louver supply and return air grilles.
- Durable powder coat paint.
- 18 gauge bottom panel construction.

Coils

- Cooling - 3 or 4 row chilled water or DX, heat pump compatible.
- Heating - 1 or 2 row hot water – reheat or preheat position.
- 6 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, same or opposite side connections.
- Access to entering and leaving air sides for cleaning.
- Removable for service.
- Manual air vents.

Drain Pans

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

Fan Assemblies

- Forwardly curved, DWDI centrifugal type.
- 115 volt, single phase, three tap PSC motors.
- Quick disconnect motor connections.
- Removable fan/motor deck for service.

Electrical

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

Electric Heat

- ETL 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.
- Bottom hinged electrical enclosure.

OPTIONAL FEATURES

Construction

All Units

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

Plenum Units

- Bottom return.
- 1" pleated filters (MERV 8).
- Spare 1" throwaway filters.
- Telescoping Bottom Panels.

Exposed Units

- 1" pleated filters (MERV 8).
- Double deflection discharge grille.
- Ducted supply and/or 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 construction with external insulation.
- 5/8" O.D. secondary drain connection.
- Auxiliary drip pans, galvanized or stainless steel.

Fan Assemblies

- 208-230, 220 & 277 volt, 1-phase, 3-tap PSC motors.
- EC motors (not available on KHFH).

Electrical

- Bottom hinged cover electrical enclosure.
- SCR fan speed controller.
- Fan relay packages.
- Silent solid state fan relays.
- Toggle disconnect switch.
- Condensate overflow switch (drain pan).
- Main fusing.
- Unit and remote mounted three speed fan switches.

Electric Heat

- Manual reset secondary thermal limits.
- Door interlocking disconnect switches.
- Main fusing.
- Silent relay/contactors.

Piping Packages

- Factory assembled – shipped loose for field installation.
- 1/2" and 3/4", 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.
- Floating point modulating control valves.
- High pressure close-off actuators (1/2" = 50 PSIG; 3/4" = 25 PSIG).

Thermostats

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