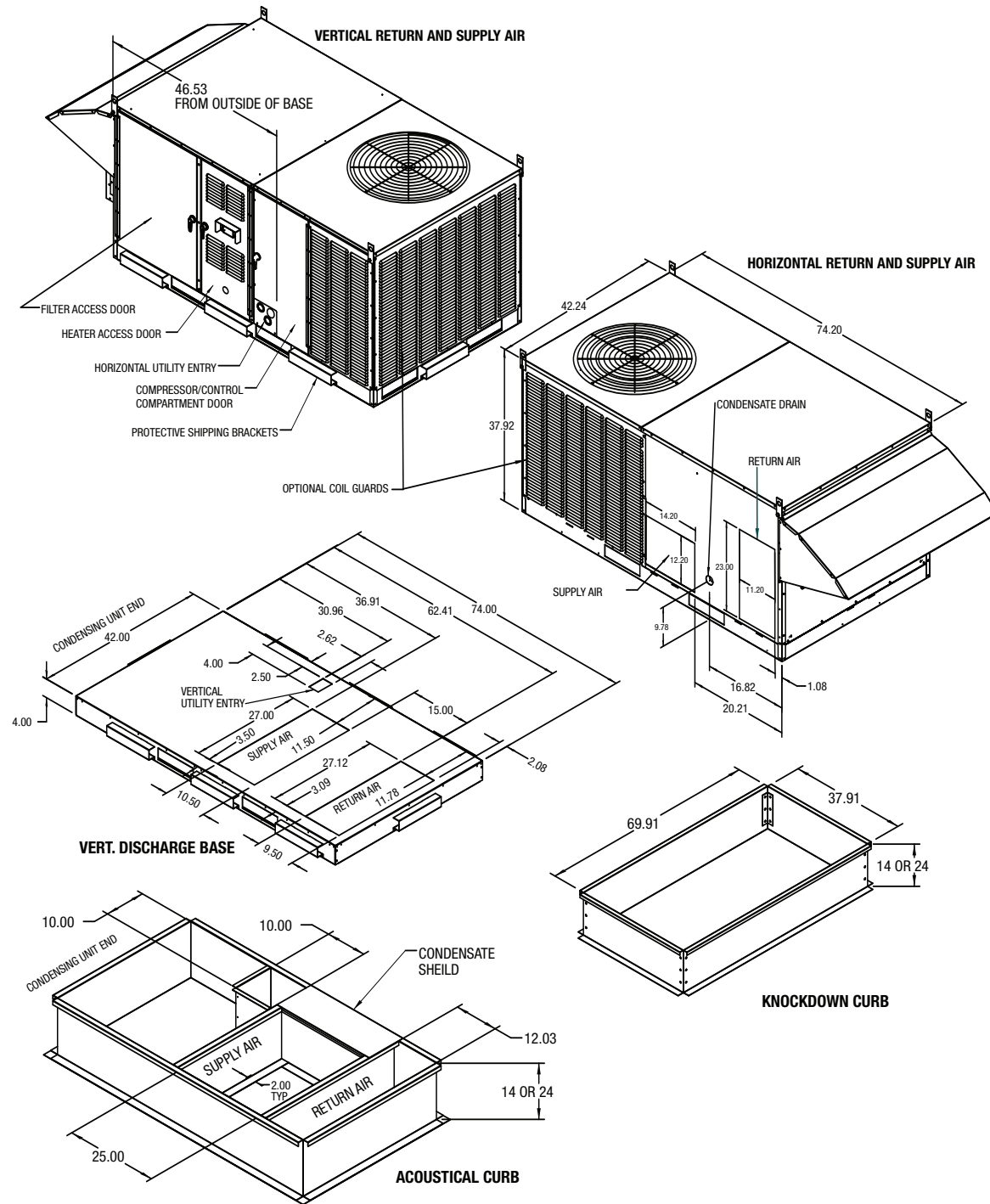


# HB



## Details and Dimensions



The Name To Remember.

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It is the intent of AAON to provide accurate up-to-date specification data. However, in the interest of ongoing product improvement, AAON, Inc. reserves the right to change specifications and/or design of any product without notice, obligation, or liability.  
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The Name To Remember.

# HB SERIES

## LIGHT COMMERCIAL ROOFTOP UNIT - AIR HANDLER



HB Horizontal/Vertical Discharge Unit



Quick and Easy Access to filters, cooling coil, heating section and compressor/control compartment



### 2 to 5 Ton Packaged Units

#### Superior Features

- Controls and scroll compressor are located in a compartment that is isolated from the air stream for easy service.
- Direct drive backward inclined plenum fan with multiple speed motor provides the air flow needed with no belts to service or replace.
- Double wall galvanized cabinet construction with an inner wall that protects the insulation from moisture and mechanical damage and is much easier to clean than fiberglass construction. Double wall doors provide better thermal and acoustic insulation, and will remain flatter, allowing a better seal against door frame gaskets.
- Easy access doors are hinged with stainless steel piano hinges and use quick release latches.
- Energy Efficient 13 SEER or better performance.
- Polyurethane paint exceeds a 2500 hour salt spray test - over 5 times the industry standard of 500 hours.
- R-410A environment friendly refrigerant.
- Sloped stainless steel drain pan eliminates standing water that can support microbial growth and the stainless steel construction ensures that pan itself will not corrode leading to contaminants in the air stream.
- Thermostatic expansion valve on DX coil performs more efficiently than a fixed orifice design.
- Unit specific color-coded wiring diagrams provided in point to point and ladder form and are laminated and permanently affixed inside control compartment.

#### Premiere Options

- Chilled water cooling coil to allow unit to tie into existing chilled water system.
- Convenience outlet for ease of service at the unit.
- Hot gas bypass.
- Louvered condenser coil guard for extended condenser coil life.
- Modulating hot gas reheat for precise humidity control and occupant comfort.
- Natural gas, electric or hot water heating.
- Outside air economizer for energy efficiency; gear driven economizers for improved reliability over linkage operated systems.
- Polymer coated coils to extend the life of the coils and protect them against corrosive environment.
- Return air bypass dampers for humidity control and occupant comfort.
- Smoke detectors.
- Two-step compressor for improved dehumidification at part load and improved energy efficiency.

## A LIGHT COMMERCIAL UNIT WITH BREAKTHROUGH CONSTRUCTION & PERFORMANCE

### AAON Innovation

The AAON light commercial HB Series is the solution for the lower cost high volume market with many standard and factory installed features unavailable from other manufacturers. Save time on installation and startup since the unit can be ordered and delivered to exactly meet the customer's requirements. Some of the standard features include the double wall, high performance composite panel construction, R410A refrigerant, SEER at 13 or higher, high thermal performance condenser coil. The 2 row coil on the larger models has a continuous fin with no fin gap between the rows to collect dirt and debris.

### Friendly to the Environment

R410A refrigerant is standard on every HB unit. AAON is ahead of the curve when it comes to phasing out the use of R22 refrigerant. The phase out started in January 2004, and R22 will no longer be used in the production of equipment in 2010.

### High Performance Composite Panels

AAON is again setting a new standard for performance and features with the double wall construction using closed cell polyurethane foam insulation. Not only does it have more than twice the insulating value, it is a far more rigid and stronger assembly with minimum air leakage than fiberglass insulated panels. In addition, all the panels have a thermal break that provides no metal path from the inside conditioned air to the outside ambient conditions. As a result, any external condensation is held to an absolute minimum.

### Feature Options

The factory installed feature options are those that customers expect from AAON: modulating hot gas reheat; return air bypass; a 2-stage compressor that offers a cost effective solution to humidity control and significantly improved efficiency at reduced capacity; a convenience outlet; polymer coated coils; a full economizer; and all features are factory installed.

### Double Wall Energy Efficient Performance



- Metal on both the internal and external of the cabinet.
- Thermal break between external and internal metal.
- Foam construction.
- R value exceeds 2 inch fiberglass cabinet.
- Painted G90 galvanized will pass 2,500-hour salt spray.



### Cooling

Tons	Model	Power	SEER	MBH	MCA	Weights (lbs.)
2	HB-002-A	208-230V / 1 / 60	13.5	28.1	21	492
3	HB-003-A		13.2	35.4	24	495
4	HB-004-A		13.3	49.3	34	535
5	HB-005-A		13.0	61.5	42	546
2	HB-002-B		208-230V / 3 / 60	13.5	28.1	17
3	HB-003-B	13.2		35.4	19	495
4	HB-004-B	13.3		49.3	26	535
5	HB-005-B	13.0		61.5	31	546
2	HB-002-3	460V / 3 / 60		13.5	28.1	8
3	HB-003-3		13.2	35.4	9	495
4	HB-004-3		13.3	49.3	12	535
5	HB-005-3		13.0	61.5	14	546

Cabinet Size: 38" Height x 42-1/4" Width x 74-1/4" Length

### Heating

Natural Gas Heat (MBH Input)	Electric Heat (KW)	Hot Water (2 row coil)
45	10	Single Serpentine
60	20	Half Serpentine
75	30	
100		
125		

### Light Commercial Air Handling Unit 600 to 3,000 Nominal CFM

#### COOLING

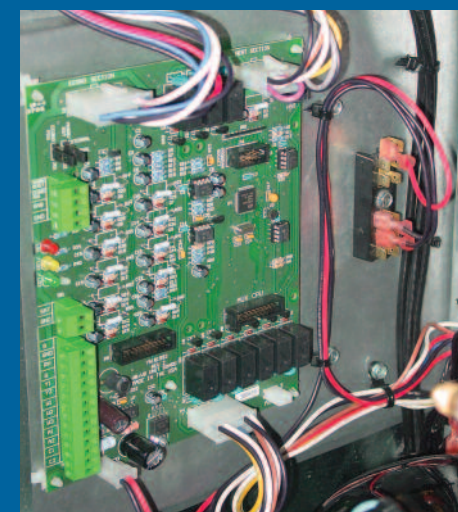
- Chilled Water
- DX for R410A Refrigerant
- No Cooling

#### HEATING

- Electric
- Natural Gas
- Hot Water
- No Heating
- With or Without Preheat



All the great features of the HB rooftop plus the flexibility you need in the air handler



The control board provides the additional logic for optional features including Modulating Hot Gas Reheat and Return Air Bypass, as well as, connection to other building controls. It becomes the central point for the wiring and operation of all the unit components.



Standard 2 inch filters with easy slide out

All condenser coils have continuous fins and no air gaps between rows that can trap dust and dirt causing increased energy consumption.