



Alcoil® 
A Wholly Owned Subsidiary of EVAPCO

B Series

Multi-Purpose Coils



For:

Reheat Coils
Desuperheaters
Subcoolers
Gases



Product Guide

B Series – Coils

Microchannel Features (B Series)



Custom & Standard Sizes

Flexibility and variable dimensions are tailored to our OEM customer needs using MicroChannelSELECT Software. Custom and QuickShip sizes are available from 4"x4" to over 80"x144". Capacities range from ¼ tons to over 30 tons.

Easy OEM Mounting

The coil itself is a robust frame that provides air tight flush mounting, thereby eliminating unnecessary components and air bypass. Optional "L" brackets, ¼"-20 studs or ¼"-20 flush nuts are available for easy mounting.

High Performance Fins

A state of the art louvered fin design provides low airside pressure drop and high heat transfer.

Vertical MicroChannel Tubes

EVAPCO Alcoil's patented innovation incorporates vertical tubes that enhance condenser operation, ensure predictable performance and promote oil return. Tube wall thickness are 40% above automotive and import microchannel designs to assure long life operation.

Low Pressure Drop Headers

Unlike any HVAC/R coil, all units have ultra low pressure drop in the headers. This unique feature allows the coil to perform well many demanding applications.

Connections and More

EVAPCO Alcoil heat exchangers are available with copper sweat connections and custom orientations.



EVAPCO Alcoil's MicroChannel Coils are based on a "Next Generation" design that combines high performance flat tubes, state of the art airside fins and low PD headers. The tubes have numerous mini-ports that enhance refrigerant side performance, while the Airside achieves closer approach temperatures and lower airside pressure drops. The end result is higher overall heat transfer performance,

Typical Configurations

EVAPCO Alcoils' B Series is a multi-purpose coil designed for desuperheaters, reheat coils, subcoolers, gas cooling/heating, special fluid heating/cooling and other applications. It is available as a .83 model, 1.25V model and 1.25LV extra large header version. These three versions can be configured as B, 2B and 3B sizes.

The B Series differs from the C – Condenser Series in that it has full flow pass-through and can function as a Low, Medium or High Pressure drop coil. As a reheat coil or desuperheater, it can operate in partial condensing, with a condenser down-stream. As a gas cooler or subcooler, it can be configured for high performance.

Note: The B Series does NOT have a mini-receiver feature like the C – Condenser, and cannot be used in full condensing mode in refrigeration applications.

B Models

B Models are Single "Module" models.



B Model
w/ Elbow Connections at 3 o'clock
w/ LBrackets



w/ Straight Connections
w/ LBrackets



w/ Face Connections
w/ 1/4-20 Threaded Flush
Inserts

2B & 3B Models

"Multi-Module" versions are designated as 2B & 3B models. These models are typical for larger capacity coils and specialty coils, depending on actual design conditions, type refrigerant or gas, air flow rate and target performance.

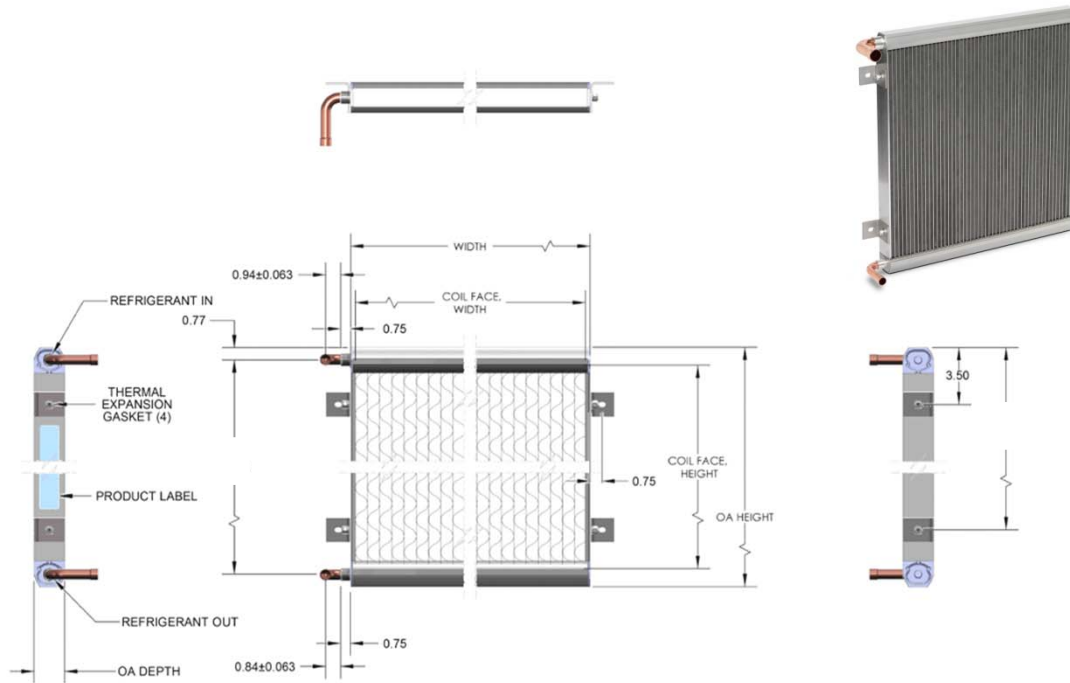


2B Model
w/ Elbow Connections
w/ LBrackets



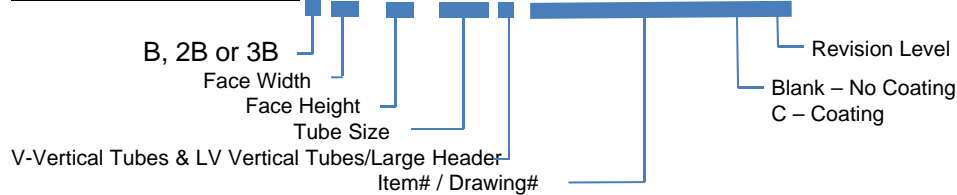
3B Model
w/ Elbow Connections
w/ LBrackets

B Series – Multi-Purpose



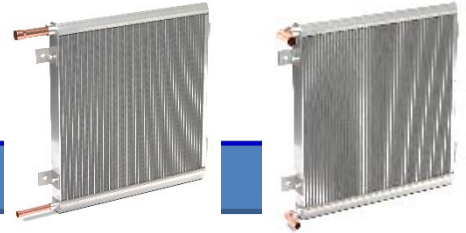
Refrigerants & Gases	R410a, R407C, R134a, R404a, R508B, R290, & others (R717 as special model), N2, He, Ar, and others	
Design Working Pressure	650psig & 450psig (.83 & 1.25 models); 450psig (1.25LV models)	
Design Working Temperature	250F	
Maximum Face Width (C model)	46.4"	
Maximum Face Width (4C model)	144" (up to 188")	
Maximum Face Height	77" (up to 96" upon request)	
Tube Sizes	1.25B" (High Performance) .83B" (Economy)	1.9" O.A. Depth 1.5" O.A. Depth
Fins	24 fpi, high performance, louvered 10 fpi, low PD (optional)	
Connection Sizes	3/8", 1/2", 5/8", 7/8", 1-1/8"	
Connection Locations	EndCap (shown) & Header Face (optional)	
Mounting	LBrackets, 1/4"-20 x 1/2" Studs, or 1/4"-20 Female Flush Nuts	
Testing	Per UL 207 at full pressure, Helium Leak tested	
Code Approvals	Underwriters Laboratories (U.L. Listed, U.S. & Canada)	

Model Nomenclature **B24x36x1.25V-15G06-R0255C-01**



Connection Options

All Condensers have options for EndCap or Face Connections for easy packaging, piping and fit-up. A full range of copper connection sizes and connection locations are shown below. All connections options are available using MicroChannelSELECT™ software, except for Specials and custom angles..



► EndCap Connections

1.25V Models	3/8", 1/2", 5/8", 7/8", & 1-1/8" IDS Copper , 3/4" Aluminum MPT, & 1" Aluminum MPT
1.25LV Models	1-5/8 ODS Copper , 1" Aluminum MPT, & 1-1/2" Aluminum MPT
.83V Models	3/8", 1/2", 5/8", 7/8", & 1-1/8" IDS Copper , 3/4" Aluminum MPT

Location

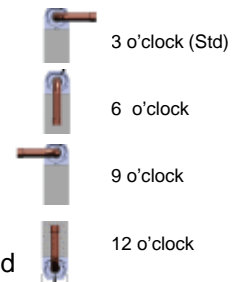
Same Side Connections (std)
Opposite Side Connections

Std



Straight Copper Copper Elbow

Same Side Connections (std)
Same Side Connections (std)
3 o'clock, 6 o'clock, 9 o'clock, 12 o'clock
Opposite Side Connections
Custom angles (w/ volume production)



Aluminum MPT

Same Side Connections (std)

Specials

1.25V – 3/4" & 1" Stainless Steel or Carbon Steel Pipe, Butt Weld
1.25LV – 1" & 1-1/2" Stainless Steel or Carbon Steel Pipe, Butt Weld

► Face Connections

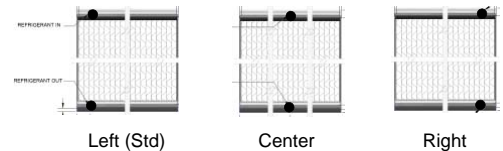
Face Connections are ideal for compact packaging where dimensions and space are critical. Standard location is Left side on the headers. Optional locations are header center or right side of headers. Straight and elbow connections, up to 7/8" IDS are available.



1.25V Models	3/8", 1/2", 5/8", 7/8" ID Solder
1.25LV Models	Not available
.83V Models	3/8", 1/2", 5/8", 7/8" ID Solder

Location

Left, Same Side (std),
Center
Right
Opposite Sides, Left/Right, Right/Left



Copper Straight (Std) Copper Elbow

Same side (Std)
3 o'clock, 6 o'clock, 9 o'clock, 12 o'clock
Opposite Side Connections
Custom angles (w/ volume production)

Aluminum MPT

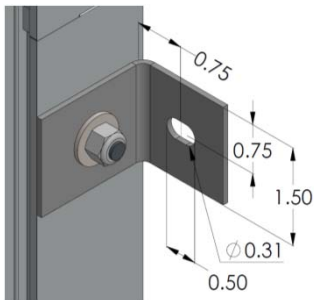
Not Available

Specials

Not Available

Mounting Options

Models have four practical options for easy mounting and fit into OEM systems.



Mounting Bracket

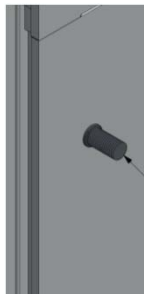
1-1/2 x 1-1/2" with 3/4" L Stud & Nut
 2 Brackets, each side up to 53" models
 3 Brackets, each side & center for 54" and taller models
 Thermal expansion gaskets included, under bracket



1/4"-20 Threaded Flush Nut Insert

1/4"-20 Threaded Flush Nut Insert

Located 3.5" from either end for compact mounting from side wall or strut, or use with customer supplied Bracket.
 2 inserts, each side up to 53" models
 3 inserts, each side & center for 54" and taller models
 5/16" maximum thread depth



1/4"-20x1/2" Stud

1/4"-20 Studs

Located 3/4"L, 3.5" from either end. For use with customer supplied Brackets or through-the-wall mounting.
 2 Studs, each side up to 53" models
 3 Studs, each side & center for 54" and taller models

None

MicroChannel Coil Family

EVAPCO Alcoil has a full line of MicroChannel coil models for cooling and heat rejection for HVAC/R systems for R410a, R134a, R404a, R717, and other refrigerants. Water and Glycol fluid models are available as both cooling coils and heating coils. Model sizes as small as 3"x 3" to 80" x 144" size.

Condensers

½ to 40 tons

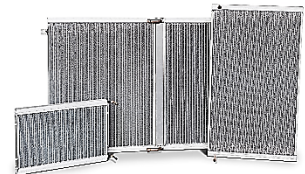
EVAPCO Alcoil manufactures a full range of refrigerant condensers from ½ ton to 40 tons for the HVAC/R industry, rated for 450 psig and 650 psig applications. The C Series Condenser is a robust design with built-in mini-receiver and numerous design options.



Evaporator/Heat Pump

½ to 30 tons

E Series Evaporator and HP Series Heat Pump represent leading edge technology as a direct expansion (DX) cooling coil and/or reverse cycle heat pump coil. With a built-in refrigerant distributor and integrally high water condensate shedding, the E and HP Series provide high performance with all the advantages of MicroChannel technology.



Fluid Coils

up to 50 gpm

For water and glycol systems, free cooling, heat recovery and other applications, EVAPCO Alcoil manufactures a high performance MicroChannel specifically for fluid to air featuring advanced water shedding as a cooling coil or high performance as a heating or cooling coil. Rated for 300psig.



Specialty Coils

up to 40 tons

EVAPCO Alcoil can configure microchannel coils for other required HVAC/R applications, including:

- Reheat & Desuperheater Coils
- Flooded & Pumped Loop Evaporators.
- Subcoolers

MicroCoils™

up to ½ ton

For electronics, medical, computer and small appliance products, EVAPCO Alcoil has a family of MicroCoils™ as condensers, evaporators and fluid coils. The MicroCoil™ is lightweight and ultra small for specialty products from 20 to 2000 watts.





Sales Support

EVAPCO Alcoil serves the U.S., Canada and Mexico with regional Sales Engineers, Applications Engineers and HDQ personnel to assist OEM customers with product selection, applications, and production delivery.

Shipping is via Freight Carriers or UPS. Freight Pre-paid or Freight Collect.

All Prices are FOB, York, Pennsylvania, USA

General Inquiries Email: Info@evapco-alcoil.com

Production Lead-times 4 weeks typical;
up to 6 weeks (seasonal)
up to 6 weeks (large qty)

Purchase Orders Email to: Orders@evapco-alcoil.com

Expedited Orders Contact your regional Sales Engineer or the Factory



EVAPCO Alcoil is leading manufacturer of Airside Microchannel Coils for the HVAC/R and process industries. Located in York, Pennsylvania, EVAPCO Alcoil employees take Pride in Workmanship, Quality and Customer Service. We sincerely appreciate the opportunity to be of service.

EVAPCO Alcoil
3627 Sandhurst Drive
York, PA 17406
Ph: 717-347-7500
Fax: 717-347-7383