

# Fincoil FBLM

## Customized auxiliary liquid coolers with ASME design

### General information & application

Air cooled auxiliary liquid coolers FBLM have been designed for heavy industrial cooling applications for cooling of various process liquids, even in the most extreme conditions. Dual coil models are available for simultaneous cooling of LT/HT engine circuits. Applications include:

- diesel and gas engine cooling
- turbine cooling
- oil cooling
- various processes (transformers, air compressors, etc.)

Liquids	all liquids that do not corrode copper
Capacities	customer specification

### Standard configuration

- FBLM\* ranges
  - FBLMS = standard unit width (2.6 m)
  - FBLMC = container unit width (2.3 m)
- Finned coil
  - copper tubes
  - corrugated Al-fins 0.18 mm, no turbulators
  - fin spacing 2.3 to 4 mm
- Direct driven axial fans, suitable for use with frequency converters. *When designing a frequency converter system, the general guidelines for allowed cable lengths, sinus filters, dU/dT filters etc. have to be considered.*
- Fan motors available for various power supplies. The motors are squirrel-cage motors for outdoor use built to IEC standards and provided with condensing water outlets and shaft seals together with H-class insulation. Protection class for motors is IP55, except for the condensing water outlets. The motors are prewired to lockable service switches.
- Fan diameters 1.2 or 1.8 meter.
- All casing parts are hot dip galvanized steel or pre-coated galvanized sheet steel.
- Specifically designed for multiple installations with several radiators installed side by side.
- Fitted with header tube protection panels.
- Manual venting and draining valves.



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- Partitions between fans for regulation of the cooler capacity by means of separate use of the fans.
- Transportation either in wooden seaworthy packing or standard 40'/45' container. Also suitable for truck transportation.

### Benefits

- Factory tested plug & play units, easily connectable.
- Short assembly time on site.
- Heavy duty coil & casing materials.
- The close tube spacing and the specially corrugated fins make the heat transfer section extremely efficient.
- Plain profile fins without turbulators make the coil less prone to fouling and easier to clean.
- Motors built to IEC standards facilitate spare part service all over the world.
- Robust construction, no service platform required.
- Energy efficient - low total cost of ownership.
- One full year product guarantee.



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## Options

- Coil corrosion protection
  - epoxy coated aluminium fins (EP)
  - copper fins (CU)
  - sea water resistant aluminium fins (SWR)
- Dual coil models with LT- and HT-circuits
- Higher design pressures
- Mounting legs (up to 6m)
- Handrails and ladder for radiator group
- Flexible connection joints
- Epoxy painted casing (RAL colours)
- Fan speed control
  - step control (SC)
  - frequency control (SVC)
- Common terminal box located in the end of radiator
- Motor protective switch panel
- Special fan motors (EX-classed, NEMA etc.)
- Motors equipped with
  - anti-condensation heaters
  - klixon
  - PTC thermistors
  - vibration sensor



## Design pressure

Design pressure 10 barg. Each heat exchanger is leak tested with dry air at 16 barg.

## Selection

FBLM auxiliary liquid coolers are always selected and customized on customer request. Please contact Alfa LU-VE for selections.

## Documentation

For FBLM liquid coolers extensive product & project documentation can be supplied (standard in English).

- Mechanical & electrical configuration
- Quality, test & material certificates
- Project reports & documentation
- Installation, operation & maintenance manuals

## Code description

<b>FBLM</b>	<b>C</b>	<b>1200</b>	<b>12</b>	<b>6</b>	<b>A</b>	<b>8</b>	<b>128</b>	<b>DN100</b>	<b>S</b>	<b>4</b>	<b>+</b>	<b>96</b>	<b>DN80</b>	<b>S</b>	<b>2</b>	<b>Ep3</b>
1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16

- 1 Customized auxiliary liquid cooler
- 2 S=standard coil width 2520 mm, C=container coil width 2240 mm
- 3 Coil length
- 4 Fan diameter (12=1240 mm, 18=1840 mm)
- 5 No. of fans
- 6 Power supply (A=3/380-420V/50Hz, B=3/440-480V/60Hz, C=3/380V/30Hz, D=other)
- 7 No. of motor poles
- 8 No. of LT circuits
- 9 LT connection size
- 10 LT connections (S=same end, D=different ends, A=all at one end)
- 11 LT coil size
- 12 No. of HT circuits
- 13 HT connection size
- 14 HT connections (S=same end, D=different ends, A=all at one end)
- 15 HT coil size
- 16 Coil code (coil configuration+coating+fin spacing)

## Certifications

The Alfa LU-VE quality system is in accordance with ISO 9001 and ISO 14001. Design in accordance with the rules of ASME code section VIII, division 1, without U stamp. Manufacturing according to PED 97/23/EC art 3.3.



## How to contact Alfa LU-VE

Up-to-date Alfa LU-VE contact details for all countries are always available on our website at [alfa.luvegroup.com](http://alfa.luvegroup.com)