Solar SR

Customized air-cooled radiators

Fincoil Solar SR

Benefits

- Heavy duty coil & casing materials, resulting in a long operational product life
- Floating coil construction to compensate for thermal stress
- Plain profile fins make the coil less prone to fouling and easier to clean
- Excellent sound characteristics
- Reliable performance
- Easy-install & maintenance
- Energy efficient - low total cost of ownership
- Two units can be fitted into a single container side-by-side
- Two year full product guarantee
- Easy access to additional on-line product information (QR code)

General information & application

Air cooled radiators Fincoil Solar SR have been designed for heavy industrial cooling applications for cooling of various process liquids. Dual coil models are available for simultaneous cooling of LT/HT engine circuits. Applications include diesel and gas engine cooling, turbine cooling, oil cooling and various other processes (transformers, air compressors, etc.)

Liquids	all liquids that do not corrode copper
Capacity	customer specifications

Coil

Coil manufactured from smooth copper tubes Ø 12.7 mm and corrugated Alu-fins 0.14 mm. Standard fin spacing 2.3 mm. Flanges PN10/16 according to EN 1092.
Manual venting and draining valves.

Construction

All casing parts are of hot dip galvanized steel plates. Specifically designed for installations with several radiators installed side by side. Two casing widths (SRM=1630 mm, SRD=2400 mm). Partitions between fans for regulation of the cooler capacity by means of separate use of the fans. Adjustable mounting legs (80/425/620 mm). Fitted with header tube protection panels.

EC fan motors

Available with high efficiency axial EC fans Ø 914 mm, in a range of different fan speed executions, 1 to 14 fans. Motors with external rotor, protection class IP55, F-class insulation. Corrosion resistant fan blades and guards.

IEC fan motors

Direct driven axial fans with squirrel-caged motors for outdoor use built to IEC standards. Ø 910 or 1240 mm. Provided with condensing water outlets and shaft seals together with H-class insulation. Protection class IP55, except for the condensing water outlets. Motors pre-wired to lockable service switches. Suitable for use with frequency converters. *When designing a frequency converter system, the general guidelines for allowed cable lengths, dU/dT and/or sinus filters etc. have to be considered.*

Transport

Standard vertical transport position, fixed on a wooden pallet. Suitable for truck transportation or loading into a container.

Coil design

Design pressure 6 barg. Each heat exchanger is leak tested dry air at 9 barg. Higher design pressures on request. Design temperature -60/+110 °C. +125 °C available on request.

Certifications

The Alfa LU-VE quality system is in accordance with ISO 9001 and ISO 14001. All products are manufactured according to PED regulations.

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Mechanical options

- Coil corrosion protection:
  - epoxy coated aluminium fins (EP)
  - copper fins (CU)
  - sea water resistant aluminium fins (SWR)
- Dual coil model with LT- and HT-circuits
- Fin spacings 2.3 - 4 mm
- Fin thickness 0.18 mm
- Water spraying system (KW)
- Vibration dampers for mounting legs (VD)
- Counter flanges, flexible connection joints
- Flange dimensions acc. to ANSI
- Higher mounting legs (up to 6 m)
- Handrails & ladder
- Expansion tanks with Murphy LLS (ET)
- Packing (P=Pallet, PP=P+protection frame on top, PH= PP+hard board, PT=PH+tarpaulin, CN=Container, WB=wooden box). Seaworthy packing on request
- Casing painting RAL 7040
  - Visible surfaces painting (MU)
  - C5-H painting, all surfaces (M3)
  - Other RAL colours on request

Fan motor options

- Motors with PTC thermal control
- Motors equipped with anti-condensation heater
- Special fan motors (NEMA, UL, CSA etc.)
- Protection Rating available: IP56, IP65, IP65
- Forced draught fans (FD)
- EMC cables, glands & service switches for each fan (EMC)
- Ex motors, fans & service switches (EX)
- Arctic environment package -50 °C (AP)
- Extreme arctic environment package below -50 °C on request (AE)

Electrical options

- **Switchboards**
  - Basic switchboard for IEC fans (B)
  - Basic switchboard for IEC fans, with frequency converter and manual bypass (BFC)
  - Basic switchboard for IEC fans with frequency converter, manual bypass and temperature probe (BFCT)
  - Basic switchboard for EC fans (ECCB)
  - Basic switchboard for EC fans with exterrnal signal 4-20 mA (ECCBI)
  - Basic switchboard for EC fans with temperature probe fan speed regulation (ECCBT)
  - Basic switchboard for EC fans with temperature probe and temperature controller fan speed regulation (ECCBT+)
- **Connection boxes** (located at the end of the radiator)
  - Connection box for IEC fans - terminal box (CB)
  - Connection box for EC fans - terminal box (CBP)
  - Connection box for EC fans with external signal 4-20 mA fan speed regulation (CBPI)
  - Connection box for EC fans with temperature probe and fan speed regulation (CBPT)

Selection

Fincoil Solar SR dry coolers are customized according to customer's requests. Selection and pricing is to be performed with the Alfa LU-VE air heat exchangers specialists. They will guide you to select the best solution according to your needs. Please contact our sales organization for further details.

Documentation

For Fincoil Solar SR radiators extensive product & project documentation can be supplied (standard in English).

Code description

SR	D	6	B	09	T	N5	D	42	H	GS	P	B	-	AL	2.3	CU	132	1	x	DN65	+	66	1	x	DN80	ET
1	2	3	4	5	6	7	8	9	10	11	12	13		14	15	16	17	18		19		20	21		22	23

1 Fincoil Solar customized radiator
2 Unit width (M=narrow, D=wide)
3 No. of modules
4 Module length (A=1400 mm, B=1800 mm, C= 2100 mm)
5 Fan diameter (09=910 mm, 12=1240 mm)
6 Fan speed & type (IEC/EC: T/TE=950/1000, S/SE=720/781, L/LE=560/612, Q/QE=470/511, -/RE=-/364)
7 Power supply (N5=3/380-420/50 Hz, N6=3/440-480/60, N7=3/230/50, N8=3/690/50, NE=Special)
8 Fan motor connection (D=delta, Y=star)
9 Tube rows in air direction (LT-circuit HT-circuit)
10 Air flow (H=vertical, V=horizontal)
11 Casing material/coating (GS=unpainted, GPU=MU, GP3=M3)
12 Packaging (P=Pallet, PP=P+protection frame on top, PH=PP+hard board, PT=PH+tarpaulin, CN=Container, WB=wooden box)
13 Options (electrical/fan)
14 Fin Material (AL=standard Al, IF=industrial Al, Ep=precoated epoxy Al, CU=copper, SWR=AlMg 2.5)
15 Fin spacing (mm)
16 Tube material (CU=copper, CT=Copper with internal turbulators)
17 No. of LT circuits
18 Number of connections (1=one inlet/outlet, 2=two inlets/outlets)
19 LT connection size (e.g. DN65 or AN2.5" for ANSI dimensions)
20 Number of HT circuits (if 2-circuit application)
21 Number of HT connections (1=one in/out, 2=two in/out)
22 HT connection size (e.g. DN80 or AN3" for ANSI dimensions)
23 Options (mechanical)

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